

**REMOVAL PROGRAM
PRELIMINARY ASSESSMENT/
SITE INVESTIGATION REPORT
FOR THE
CREATIVE PACKAGING AND PAPER SITE
WORCESTER, WORCESTER COUNTY, MASSACHUSETTS
27 FEBRUARY AND 18 THROUGH 20 MARCH 2013**

Prepared For:

U.S. Environmental Protection Agency
Region I
Emergency Planning and Response Branch
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912

CONTRACT NO. EP-W-05-042

TDD NO. 01-13-02-0004

TASK NO. 0862

DC NO. R-7434

Submitted By:

Weston Solutions, Inc.
Region I
Superfund Technical Assessment and Response Team (START)
3 Riverside Drive
Andover, MA 01810

June 2013

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I. Preliminary Assessment/Site Investigation Forms

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**EPA REGION I
REMOVAL PRELIMINARY ASSESSMENT**

Site Name and Location

Name: Creative Packaging and Paper **Location:** 175 James Street
Town: Worcester **County:** Worcester **State:** Massachusetts

Site Status: NPL NON-NPL RCRA TSCA
 ACTIVE ABANDONED OTHER

Attached USGS Map of Location Site I.D. No.:
Latitude: 42° 13 ' 45" North **Longitude:** 71° 51' 01" West

Referral

Citizen City/Town State Preremedial RCRA
 Other:

Name of referring party: Worcester Fire Department **Telephone:** (774) 248-2697
Address: 25 Meade Street

Contacts Identified

1) Peter Strand **Telephone:** (774) 229-7314
2) John Tapia **Telephone:** ()

Source of Information

Verbal:
 Report:
 Other: Memorandum from the Worcester Fire Department.
Newspaper Article, "Creative Packaging Mired in One Big Pulpy Mess", *Worcester Telegram and Gazette*, date 22 January 2012.

Potential Responsible Parties

Owner: R&J Realty Limited Liability Partnership (LLP) **Telephone:**()
Address: 175 James Street, Worcester, Massachusetts
Operator: Peter Strand **Telephone:**(774) 229-7314
Address:

REMOVAL PRELIMINARY ASSESSMENT

Site Access

Authorizing Person: Peter Strand

Date: February 2013 **Obtained** **Verbal**

Telephone: (774) 229-7314 **Not Obtained** **Written**

Historical Preservation

Site is Historically Significant or Eligible for Historic Preservation

Contacts Identified

1) State Historical Preservation Officer (SHPO)

Name: Ms. Brona Simon **Telephone:** (617) 727-8470

2) Tribal Historical Preservation Officer (THPO)

Name: **Telephone:** ()

Comments:

Physical Site Characterization

Background Information:

The current owner of the site is R & J Realty, LLP according to Worcester Assessor Department records. The building, built in 1955, was formerly used for cardboard recycling from the 1980s through 2011. Presently, the site is non-operational, and equipment and materials remain. According to Assessor Department records, the address of the property is 261 Clover Street.

In 2011, Creative Packaging and Paper, Inc. ceased operations. The Worcester Fire Department (WFD) contacted the EPA with concerns regarding the chemicals remaining in the building. In January 2012, a portion of the roof collapsed and all utilities were shut off, including water for fire suppression.

Description of Substances Possibly Present, Known or Alleged:

The information from the Fire Department indicated the presence of multiple 55-gallon containers of ferric sulfate, diesel fuel, and unlabeled/unknown materials. Materials used in paper processing may include sodium sulfide, sodium hydroxide, and chlorine dioxide. Additionally, a review of EPA's database systems, Enforcement and Compliance Online (ECHO), and Online Tracking Information System (OTIS), indicated that volatile organic compounds (VOCs) were stored or emitted at the site and therefore may currently remain at the site.

Existing Analytical Data

Real-Time Monitoring Data:

Sampling Data:

REMOVAL PRELIMINARY ASSESSMENT

Potential Threat

Description of potential hazards to environment and/or population-identify any of the criteria for a Removal Action (from NCP) that may be met by the site under 40 CFR 300.415 [b].

- i. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants.
- ii. Actual or potential contamination of drinking water supplies or sensitive ecosystems.
- iii. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.
- iv. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.
- v. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.
- vi. Threat of fire or explosion.
- vii. The availability of other appropriate federal or state response mechanisms to respond to the release.
- viii. Other situations or factors that may pose threats to public health or welfare or the environment.

Prior Response Activities

PRP STATE FEDERAL OTHER

Brief Description: The potentially responsible party (PRP) arranged for the removal and disposal of the Beta particle radiation sources used in the paper thickness gauges. The PRP stated that they have also arranged for the disposal of several transformers located on the southeast loading dock.

Priority for Site Investigation

High Medium Low None

Comments: The chemicals and materials in the building may pose a health risk to the population in the case of fire.

Report Generation

Originator:	Chris Dupree	Date:	3 April 2013
Affiliation:	Weston Solutions (START)	Telephone:	978-552-2104
TDD No.:	01-13-02-0004	Task No.:	0862



**EPA REGION I
REMOVAL SITE INVESTIGATION**

Inspection Information

Site Name: Creative Packaging and Paper **Address:** 175 James Street
Town: Worcester **County:** Worcester **State:** Massachusetts
Date of Inspection: 27 February 2013 **Time of Inspection:** 0900 hours
Weather Conditions: 35 ° Fahrenheit, Rain
Date of Inspection: 18 and 20 March 2013 **Time of Inspection:** 0800 hours
Weather Conditions: 35 ° Fahrenheit
Site Status at Time of Inspection: () ACTIVE (X) INACTIVE
Comments:

Agencies/Personnel Performing Inspection

	<u>Names</u>	<u>Program</u>
(X) EPA:	Allen Jarrell	U.S. Environmental Protection Agency (EPA) Region I, Emergency Planning and Response Branch (EPRB), On-Scene Coordinator (OSC)
(X) EPA Contractor:	Chris Dupree Eric Ackerman Jon Saylor John Burton	Weston Solutions, Inc. (WESTON), Superfund Technical Assessment and Response Team III (START)
(X) State:	John Kronopolus Nick Childs	Massachusetts Department of Environmental Protection (MassDEP), Bureau of Waste Prevention MassDEP Emergency Response
(X) Other:	Bob Mansfield John Carlson Peter Strand John Tapia	City of Worcester Fire Department Creative Packaging and Paper, Inc/ Repapers Corporation, Former maintenance manager Former maintenance worker

Current Owner Based on Field Interview: R&J Realty, Limited Liability Partnership (LLP)

REMOVAL SITE INVESTIGATION

Physical Site Characteristics

Parameter	Quantities/Extent
(X) Cylinders:	Several empty Freon and propane cylinders were observed throughout the building.
(X) Drums:	Over 60 drums were observed throughout the building; additional empty drums were also noted.
(X) Lagoons:	Two water treatment pools are located in the southern portion of the building, near the collapsed roof. According to Mr. Strand, the water has been sampled and approved for discharge when it thaws.
(X) Tanks: (X) Above:	A portable fuel oil tank was relocated to the interior loading bays by the maintenance crew.
	() Below:
(X) Asbestos:	Suspected asbestos-containing pipe wrap was observed in two locations in the building by START personnel.
() Piles:	
() Stained Soil:	
() Sheens:	
() Stressed Vegetation:	
() Landfill:	
(X) Population in Vicinity:	There are residences located immediately adjacent to the Creative Packaging and Paper property on all sides.
() Wells: () Drinking:	
	() Monitoring:
(X) Other:	In addition to the drums noted above, approximately thirty 5-gallon containers were documented. Several totes, and approximately 200 containers smaller than 5 gallons were also observed.

Physical Site Observations

The site is a 5.03-acre parcel, with a 2.85-acre (124,100-square-foot) building. The remainder of the property is paved, and several loading docks, sheds, outbuildings, and semi-trailers were observed on the property.

Field Sampling and Analysis

Matrix/Analytical Parameter	Field Instrumentation				
	CGI/O ₂	RAD	PID	FID	Other
Background Readings:	0	15-20	0	N/A	
Air:	0	15-20	0	N/A	
Soil:	N/A	N/A	N/A	N/A	
Surface:	N/A	N/A	N/A	N/A	
Water:	N/A	N/A	N/A	N/A	
Tanks:	N/A	N/A	N/A	N/A	
Drums:	8	15-20	370	N/A	CO = 17
Vats:	N/A	N/A	N/A	N/A	
Lagoons:	0	15-20	0	N/A	

REMOVAL SITE INVESTIGATION

Matrix/Analytical Parameter	Field Instrumentation				
	CGI/O ₂	RAD	PID	FID	Other
Spillage:	N/A	N/A	N/A	N/A	
Run Off:	N/A	N/A	N/A	N/A	
Piles:	N/A	N/A	N/A	N/A	
Sediments:	N/A	N/A	N/A	N/A	
Groundwater:	N/A	N/A	N/A	N/A	
Other:	N/A	N/A	N/A	N/A	

Field Quality Control Procedures

(X) SOP Followed

() Deviation From SOP

Comments: START followed the protocol outlined in the document entitled *Sampling and Analysis Plan for the Creative Paper Site, Worcester, Worcester County, Massachusetts*, dated 20 March 2013.

Description of Sampling Conducted

START personnel collected four product/waste samples from drums and containers for Ahura First Defender (Ahura FD) Raman Spectrometry analysis, and 17 product/waste samples for full-suite laboratory analyses and Ahura FD screening. Two samples of suspected asbestos-containing material (ACM) were also collected.

Analyses

Analytical Parameter	Media	Laboratory
(X) VOC	() AIR	(X) NERL
(X) PCB	() WATER	() CLP
() PESTICIDE	() SOIL	() PRIVATE
(X) METALS	() SOURCE	() DAS
(X) CYANIDE	() SEDIMENT	() SOW
(X) SVOC	() SOIL GAS	(X) FIELD
() TOXICITY	(X) DRUM/PRODUCT	
() DIOXIN	(X) BULK ASBESTOS	
(X) ASBESTOS		
(X) OTHER (Ahura First Defender)		

Analytical results: [see attached]

Receptors

Comments

() **Drinking Water:**

() **Private:**

() **Municipal:**

() **Groundwater:**

() **Unrestricted Access:**

(X) **Population in Proximity:** The site is bordered on all sides by residences.

REMOVAL SITE INVESTIGATION

Sensitive Ecosystem:

Other:

Additional Procedures for Site Determination

Biological Evaluation

ATSDR

To be determined by the OSC

Site Determination

Depending on further information, criteria that may be met by the site include 40 CFR 300.415 [b] [2], parts:

- i. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants.
- ii. Actual or potential contamination of drinking water supplies or sensitive ecosystems.
- iii. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.
- iv. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.
- v. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.
- vi. Threat of fire or explosion.
- vii. The availability of other appropriate federal or state response mechanisms to respond to the release.
- viii. Other situations or factors that may pose threats to public health or welfare or the environment.

Report Generation

Originator:	Chris Dupree	Date:	3 April 2013
Affiliation:	Weston Solutions (START)	Telephone:	978-552-2104
TDD No.:	01-13-02-0004	Task No.:	0862

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II. Narrative Chronology

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Narrative Chronology

Introduction

The Creative Packaging and Paper site (the site) is located at 175 James Street, Worcester, Worcester County, Massachusetts (MA) (see Appendix A, Figure 1) [1,2]. The geographic coordinates at the approximate center of the site are 42° 13' 45" north latitude and 71° 51' 01" west longitude. The site consists of a 124,100-square-foot (ft²) one-story building situated on a 5.03-acre parcel, located at the intersections of James Street, Clover Street, and South Ludlow Street [3].

In 2011, Creative Packaging and Paper, Inc. ceased operations. The Worcester Fire Department (WFD) contacted the U.S. Environmental Protection Agency (EPA) with concerns regarding the chemicals remaining in the building. The information from the WFD also indicated the presence of multiple 55-gallon containers of ferric sulfate, diesel fuel, and unlabeled/unknown materials. In January 2012, a portion of the roof collapsed, and all utilities were shut off, including water for fire suppression [4].

At the request of the Massachusetts Department of Environmental Protection (MassDEP), EPA and Weston Solutions, Inc. (WESTON®) Superfund Technical Assessment and Response Team III (START) personnel mobilized to the site to conduct field activities to identify unknown materials and to determine if further actions, including removal activities, may be warranted at the site. Activities included conducting air monitoring; compiling a container inventory; and collecting drum and container samples for field screening and laboratory analysis.

Site Description

The current owner of the site is R&J Realty, Limited Liability Partnership (LLP), according to Worcester Assessor Department records. The building, built in 1955, was formerly used for cardboard recycling from the 1980s through 2011. Presently, the site is non-operational, and equipment and materials remain. According to Assessor Department records, the address of the property is 261 Clover Street [5].

Site Activities

On 27 February 2013, EPA On-Scene Coordinator (OSC) Allen Jarrell and START Site Leader (SL) Chris Dupree conducted a site reconnaissance. The business owner was not available for the reconnaissance; however, the owner did arrange for a representative to be on site to unlock the building and attend the reconnaissance.

During the reconnaissance, personnel discussed the site history and current status. Personnel observed a second, previously unknown roof collapse in the eastern portion of the building. Peter Strand, the owner's representative, informed OSC Jarrell that the radiation sources from the thickness gauges had been "shipped" (disposed of). Site personnel documented the presence of nine drums of ferric sulfate, totes of kerosene, de-foamer, sodium hydroxide solution, and other processing chemicals. Two large vats labeled 'caustic' were also observed. According to Mr. Strand, one of the vats had been pulled from service, and the second vat had replaced it.

The section of the building where the January 2012 roof collapse occurred has been boarded by the owner to restrict access to the area. The decommissioned 'caustic' vat is located in this section of the building. Other than the two collapsed areas, personnel did not observe any other major structural concerns. The remaining roof, second floor/mezzanine, and stairwells appeared to be in good condition. START SL Dupree photodocumented site conditions and containers (see Appendix C, Photodocumentation Log) [6].

On 18 March 2013, OSC Jarrell and START personnel SL Dupree, Project Leader (PL) Eric Ackerman, John Burton, and Jon Saylor mobilized to the site to conduct a container inventory and sampling activities. WFD personnel Lieutenant (Lt.) Bob Mansfield and John Carlson, and MassDEP representatives John Kronopolus and Nick Childs were also on site to discuss the site history and building contents.

Personnel conducted a tailgate Health and Safety meeting. Topics included low lighting, trip hazards, chemical hazards, and overhead/structural hazards. Personnel signed the Health and Safety Plan (HASP) and tailgate meeting sign-in sheet. The site HASP was prepared as a separate document, entitled *Site Health and Safety Plan for the Creative Paper Preliminary Assessment/Site Investigation, Worcester, Massachusetts*.

EPA, START, WFD, MassDEP, and site personnel entered the building through the entrance at the northwest corner. Personnel briefly discussed the history and background of the building and former business, and the current disposition of processing equipment and machinery. According to Mr. Strand, some portions of the processing machinery have been moved by the company that purchased the equipment from Creative Packaging and Paper when it closed in 2011.

Personnel conducted photodocumentation of the building and containers during the walk-through.

Personnel proceeded to the interior loading bays, identified on WFD diagrams as Room Number (No.) 5, located on the south side of the southeast portion of the building (see Appendix A, Figure 3). Mr. Strand stated that copper and other costly items were stored in the semi-trailer located in the westernmost loading bay. The easternmost loading bay was separate and used as storage space and for small engine maintenance. Several drums and containers were observed throughout the interior loading bay area, including antifreeze, oil, and lubricants.

Personnel then inspected the garage and storage space adjacent to the exterior loading docks, in the southwest corner of the building. The loading dock garage is located in the same section of the building as the January 2012 roof collapse, designated Room No. 6. The work room adjacent to the loading dock garage has offices on the southern wall, with storage space in a mezzanine above the offices.

Personnel observed the section of the roof collapse from the workroom doorway, and determined that it was safe to enter the section, to the edge of the treatment pools. According to Mr. Strand and Mr. John Tapia, the water in the treatment pools has been sampled and approved for discharge into the municipal sewer system.

The site walk continued into the large space in the center of the building (Room No. 2). The large tank labeled 'caustic' was discussed. Mr. Strand stated that the tank contains a 50% solution of sodium hydroxide. Mr. Strand could not identify the contents of the drums or totes staged next to the tank. Room No. 2 also contained four black polyethylene (poly) drums located along the southern wall, east of the caustic tank, and several other containers and drums were observed throughout the room.

Personnel continued to the northern section of the building, where several totes had previously been observed. Mr. Strand stated that the totes most likely contained water, not what the labels specified. Mr. Strand stated that if the contents were not water, then the contents were unknown.

Site personnel proceeded to the boiler room in the northwest corner of the building, and then to Room No. 7, in the southwest portion of the building. Room No. 7 contained machinery, and spare parts and equipment.

At the completion of the walk-through, MassDEP and WFD personnel discussed the site with OSC Jarrell. WFD Lt. Mansfield offered to procure temporary lighting from the WFD. START personnel prepared materials for inventory activities.

The WFD Chief arrived on site to discuss lighting requirements with SL Dupree and Lt. Mansfield. A ladder truck was dispatched to the site with a portable generator and small light units.

START personnel Burton and Ackerman were assigned inventory numbers D-001 through D-099, and began inventory activities in the interior loading bay on the south side of the building (Room No. 5). START personnel Dupree and Saylor were assigned inventory numbers D-100 through D-199, and began inventory activities in Room No. 3. START personnel also documented an approximate count of empty containers, and containers less than 5 gallons in size (see Appendix A, Figure 3, and Appendix B, Table 1).

START personnel conducted a full inventory of the building, documenting container numbers D-1 through D-11, and D-100 through D-184. In addition, approximately 200 small containers and 150 aerosol cans were counted. Lighting for the darker sections of the building was provided by the WFD.

START personnel conducted an exterior inspection of the building, documenting several additional drums and containers stored in an attached shed, and under a semi-trailer on the southern property border.

On 20 March 2013, OSC Jarrell and START personnel Dupree, Ackerman, Burton, and Saylor met Mr. Tapia on site to conduct sampling activities. START personnel first conducted a walk-through to identify the drums, totes, and containers that would be investigated. Personnel prepared a MultiRAE Plus [with carbon monoxide (CO), hydrogen sulfide (H₂S), volatile organic compound (VOC), oxygen (O₂), and lower explosive level (LEL) sensors] for air monitoring. Background levels were recorded as follows: LEL = 0%; O₂ = 20.9%; CO = 0 parts per million (ppm); and H₂S = 0 ppm. No readings above background were observed in ambient air.

START personnel began investigation activities of open containers in Modified Level D personal protective equipment (PPE). Open containers were monitored with the MultiRAE Plus. Personnel then obtained physical characteristics of the contents, including pH and state (liquid or solid/frozen) (see Appendix B, Table 1). Personnel collected samples for Ahura FD analysis from the following containers: D-143; D-146; D-151; and D-163. In addition, samples were collected for full-suite laboratory analyses from the following containers: D-4; D-144; D-147 through D-149; D-152; and D-167.

START personnel Ackerman, Burton, and Saylor then donned Level B PPE to conduct closed container investigation and sampling. Unlabeled containers, and containers with unknown contents, were opened and monitored with the MultiRAE Plus. Physical characteristics such as color, viscosity, and state (liquid or solid/frozen) were observed (see Appendix B, Table 1). Personnel then obtained pH readings, and collected samples based on MultiRAE Plus readings, pH results, and physical characteristics. Samples were collected for full-suite laboratory analyses from the following containers: D-11; D-103; D-117 through D-120; D-123; D-135; and D-187.

All samples that were collected were prepared for Ahura FD analysis. Approximately 2 milliLiter (mL) aliquots were put into vials and placed into the Ahura FD vial port. Due to fluorescence, color, and other characteristics, most samples were not identifiable by the Ahura FD. The Ahura FD identified the sample from D-163 as cyclohexylamine.

START personnel Ackerman and Saylor collected two samples of suspected asbestos-containing material (ACM) from the northwest portion of the building, where suspected asbestos pipe wrap had been observed. The samples were designated as ASB-01 and ASB-02.

START SL Dupree prepared a Chain-of-Custody record for the samples (see Appendix D, Chain-of-Custody Records). Drum and container samples were delivered to the EPA Office of Environmental Measurement and Evaluation (OEME) Laboratory in North Chelmsford, Massachusetts. Samples were submitted for VOC, semivolatile organic compound (SVOC), polychlorinated biphenyl (PCB), metals, mercury, and cyanide analyses. The two ACM samples were submitted for bulk asbestos analysis.

Between 26 March and 30 April 2013, START received analytical results from the OEME Laboratory. These data are included in Appendix E, Analytical Data.

Analytical Data Summaries

The following VOCs were detected in one or more of the product/waste samples collected from the drums and containers [container number(s) in parentheses]: 1,2,4-trimethylbenzene (D-4, D-135, D-152); 1,3,5-trimethylbenzene (D-4, D-152); naphthalene (D-135, D-152); n-butylbenzene (D-4, D-135, D-152); n-propylbenzene (D-152); para-isopropyltoluene (D-4, D-11, D-135, D-152); and sec-butylbenzene (D-4, D-152) (see Appendix B, Table 2) [7].

The following SVOCs were detected in one or more of the product/waste samples collected from the drums and containers [container number(s) in parentheses]: 1-methylnaphthalene (D-152); 2-

methylnaphthalene (D-152); bis(2-ethylhexyl)phthalate (D-4); di-n-butylphthalate (D-4); and naphthalene (D-135, D-152) (see Appendix B, Table 3) [8].

No metals were detected in any of the product/waste samples submitted for analysis [9].

Cyanide was detected in two samples, D-147 and D-152 (see Appendix B, Table 4) [10]. Cyanide analysis was not performed on some samples due to physical characteristics.

No PCBs were detected in any of the product/waste samples submitted for analysis [11].

Two types of asbestos, amosite and chrysotile, were found in the two ACM samples. Both samples contained 4% amosite asbestos and 2% chrysotile asbestos (see Appendix B, Table 5) [12].

REFERENCES

- [1] U.S. Geologic Service (USGS). 7.5 minute topographic map. Worcester, North Quadrangle. 1983
- [2] U.S. Geologic Service (USGS). 7.5 minute topographic map. Worcester, South Quadrangle. 1983
- [3] Microsoft, Inc., Bing Maps. 2012. 1:5,000 Color Digital Orthophoto Imagery, RE: Worcester, Massachusetts. Accessed 1 March 2013.
- [4] Mansfield, R. 14 January 2013. Lieutenant, Worcester Fire Department, Massachusetts. Re: Creative Paper. Fax Transmittal to Wallace, L., U.S. EPA.
- [5] Nicodemus, A. 22 January 2012. "Creative Packaging mired in one big pulpy mess." *Worcester Telegram & Gazette*.
- [6] Weston Solutions, Inc. START. Personal Logbook No. 00522-A. Pages 69-78.
- [7] U.S. Environmental Protection Agency. 3 April 2013. Office of Environmental Measurement and Evaluation. Laboratory Report. Project No. 13030015. VOAs in Soil High Level Method. Creative Paper, Worcester, MA.
- [8] U.S. Environmental Protection Agency. 27 March 2013. Office of Environmental Measurement and Evaluation. Laboratory Report. Project No. 13030015. BNAs in Product. Creative Paper, Worcester, MA.
- [9] U.S. Environmental Protection Agency. 5 April 2013. Office of Environmental Measurement and Evaluation. Laboratory Report. Project No. 13030015. Metals by XRF. Creative Paper, Worcester, MA.
- [10] U.S. Environmental Protection Agency. 10 April. Office of Environmental Measurement and Evaluation. Laboratory Report. Project No. 13030015. Total Cyanide in Soil. Creative Paper, Worcester, MA.
- [11] U.S. Environmental Protection Agency. 10 April 2013. Office of Environmental Measurement and Evaluation. Laboratory Report. Project No. 13030015. PCBs in Oils. Creative Paper, Worcester, MA.
- [12] U.S. Environmental Protection Agency. 22 March 2013. Office of Environmental Measurement and Evaluation. Laboratory Report. Project No. 13030015. Bulk Asbestos Analysis by PLM. Creative Paper, Worcester, MA.

III. Appendices

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Appendix A

Figures

Figure 1 – Site Location Map

Figure 2 – Site Map

Figure 3 – Container Inventory Map

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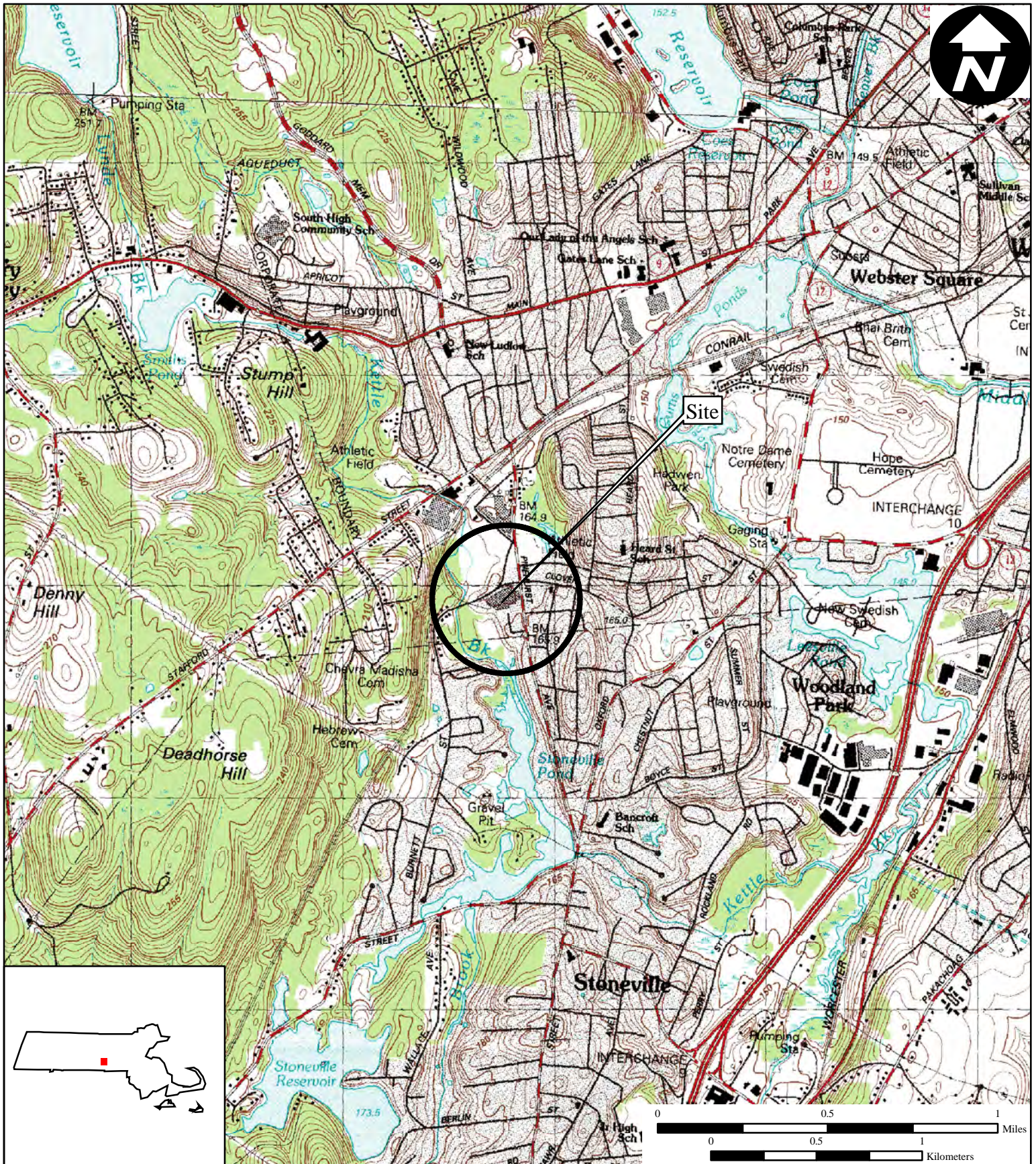


Figure 1

Site Location Map

**Creative Packaging and Paper
175 James Street
Worcester, Massachusetts**

**EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042**

TDD Number: 13-02-0004
 Created by: C. Dupree
 Created on: 28 February 2013
 Modified by: C. Dupree
 Modified on: 7 June 2013

Data Sources:
 Topos: MicroPath/USGS, Quadrangle Name(s):
 Worcester North, Worcester South
 All other data: START



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Figure 2



Site Map

**Creative Packaging and Paper
175 James Street
Worcester, Massachusetts**

**EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042**

TDD Number: 13-02-0004
Created by: C. Dupree
Created on: 1 March 2013
Modified by: C. Dupree
Modified on: 7 June 2013

Legend

-  Site Boundary
-  Building Outline

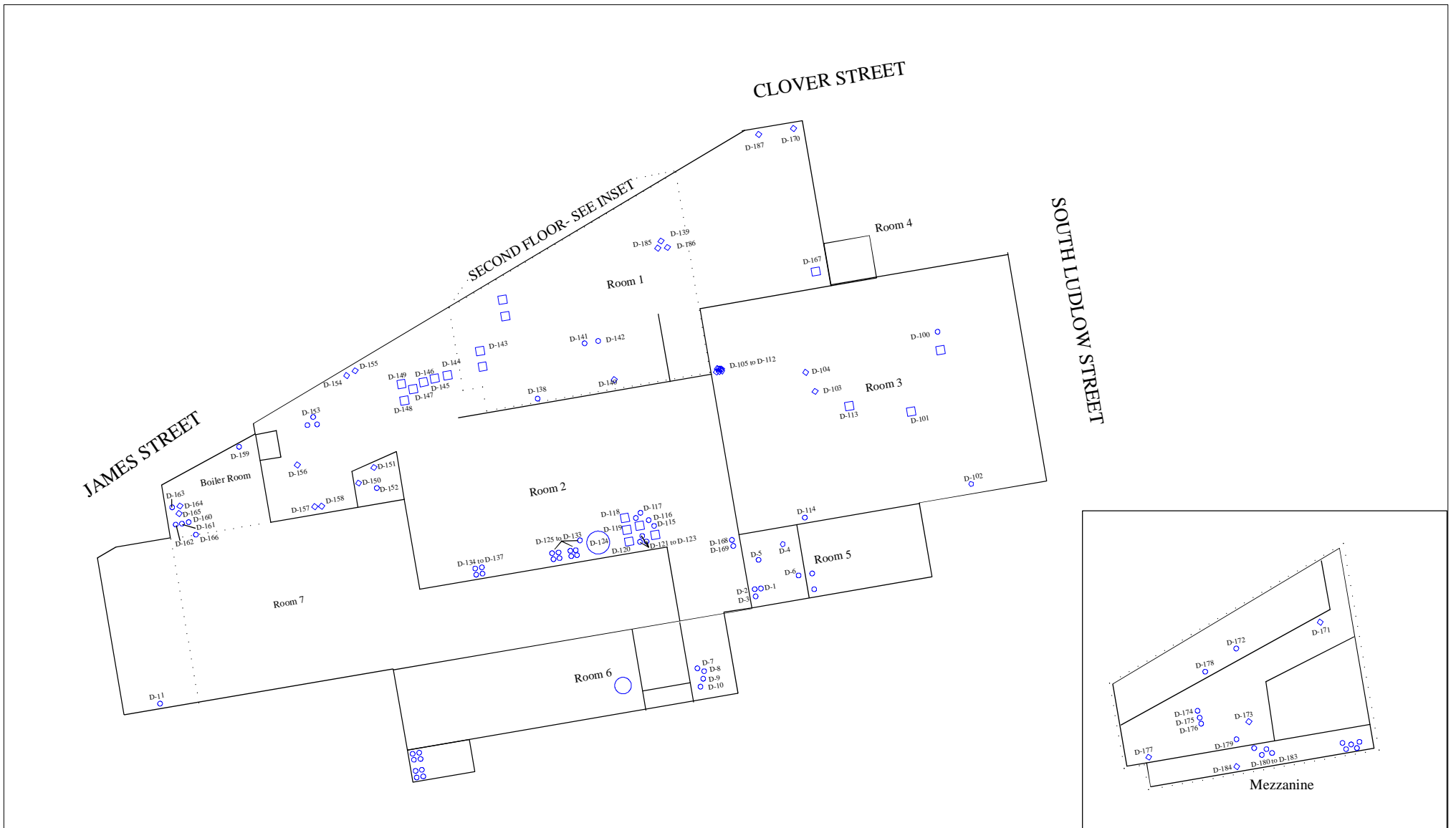


0 25 50 100 150 200 250 300
Feet

Data Sources:

Imagery: Bing Maps
All other data: START





LEGEND



- Drum (steel, poly, or fiberboard)
- Tote (250 gallon)
- ◇ 5 gallon bucket or carboy

Figure 3

Container Inventory Map

**Creative Packaging
and Paper
175 James Street
Worcester, Massachusetts**

**EPA Region I
Superfund Technical Assessment
and Response Team (START) III
Contract No. EP-W-05-042**

TDD Number: 13-02-0004
Created By: C. Dupree
Created On: 4 March 2013
Modified By: C. Dupree
Modified On: 7 June 2013

Data Sources:
 Imagery:
 Topos:
 All other data: START



Appendix B

Tables

Table 1 – Container Inventory

Table 2 – Volatile Organic Compounds Results Summary

Table 3 – Semivolatile Organic Compounds Results Summary

Table 4 – Cyanide Results Summary

Table 5 – Summary of Bulk Asbestos Sample Results

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TABLE 1

**CONTAINER INVENTORY
CREATIVE PACKAGING AND PAPER
WORCESTER, MASSACHUSETTS**

Container No.	Container Type	Contents ¹	Size ²	Location	pH ⁴	Ahura Sample ⁵	Lab Sample ⁶ (Sample No.)	VOCs ⁷ (ppm)	CO ⁸ (ppm)	LEL ⁹ (%)	Comments
D-1	Drum, Poly	Antifreeze	55 gallon	Room 5	--						
D-2	Drum, Poly	Turbo Power	55 gallon	Room 5	--						
D-3	Drum, Poly	Pennzoil 80W90	55 gallon	Room 5	--						
D-4	Drum, Poly	Parts Washer	55 gallon	Room 5	7	Y	(0001)	135	0	0	Odor noted.
D-5	Drum, Poly	Lubriplate	55 gallon	Room 5	--						
D-6	Drum, Poly	Gear Oil	20 gallon	Room 5	--						
D-7	Drum, Poly	Morlina Oil SD-320	55 gallon	Room 6	--						
D-8	Drum, Poly	Grease Drum	20 gallon	Room 6	--						
D-9	Drum, Poly	Diesel Not for Loader	55 gallon	Room 6	--						
D-10	Drum, Poly	Starflex 2" Grease	20 gallon	Room 6	--						
D-11	Drum, Poly	Unlabeled	30 gallon	Room 7	--	Y	(0002)	167	112	0	Yellow/white liquid; O ₂ ¹⁰ = 18.8%.
D-100	Drum, Poly	Likely H ₂ O - Open Container, 1/2 Full	55 gallon	Room 1	--						
D-101	Tote	1/4 Full	250 gallon	Room 1 - Near collapse	--						
D-102	Fiber Box	Blackman & Uhler, LLC Basic Brown, Dye	5 gallon	Office (adjacent to Room 1)	--						
D-103	Bucket	Fry Clean"	5 gallon	Room 1	14	Y	(0003)	5.1	0	0	Red liquid.
D-104	Bucket	Michem Coat 40EAF-PL Lot 2002	5 gallon	Room 1	--						
D-105	Bucket	Tryflex low Cu GCMI 38 Blue (dried red mat., 3")	5 gallon	Room 1	--						
D-106	Bucket	Solarflex 235U Red	5 gallon	Room 1	--						
D-107	Bucket	32 Blue	5 gallon	Room 1	--						
D-108	Bucket	984 Pink R06-10845	5 gallon	Room 1	--						
D-109	Bucket	JM Fry Solar Flex Procard Yellow	5 gallon	Room 1	--						
D-110	Bucket	Homemade Black	5 gallon	Room 1	--						
D-111	Bucket	Le 394 Black	5 gallon	Room 1	--						
D-112	Bucket	Michem Coat 40EAF-PL	5 gallon	Room 1	--						
D-113	Tote	Collapsed tote, Full/Frozen - possibly H ₂ O	250 gallon	Room 1 - Near collapse	--						

TABLE 1

**CONTAINER INVENTORY
CREATIVE PACKAGING AND PAPER
WORCESTER, MASSACHUSETTS**

Container No.	Container Type	Contents ¹	Size ²	Location	pH ⁴	Ahura Sample ⁵	Lab Sample ⁶ (Sample No.)	VOCs ⁷ (ppm)	CO ⁸ (ppm)	LEL ⁹ (%)	Comments
D-114	Drum, Poly	<1/4 Full, Brown liquid. Labeled "Corrosive"	55 gallon	Room 1	--						
D-115	Drum, Steel	Gray-Powder	55 gallon	Room 1	--						
D-116	Drum, Steel	Gray-Powder	55 gallon	Room 1	--						
D-117	Drum, Poly	Unlabeled	55 gallon	Room 1	--	Y	(0005)	370	17	8	Yellow liquid.
D-118	Tote	ST-111 Polymer - 4" Clear liquid	250 gallon	Room 1	5	Y	(0006)	13.5	2	0	Clear liquid.
D-119	Tote	Yellow crystalline substance on top	250 gallon	Room 1	3	Y	(0007)	0.3	0	0	Amber/Brown liquid.
D-120	Tote	1/2 Full of dark liquid	250 gallon	Room 1	6	Y	(0008)	12.8	0	0	
D-121	Drum, Poly	Fe-211 Process Additive	55 gallon	Room 1	10			350	0	0	
D-122	Drum, Poly	Fe-211 Process Additive	55 gallon	Room 1	10			350	0	0	
D-123	Drum, Poly	Fe-211 Process Additive	55 gallon	Room 1	10	Y	(0009)	350	0	0	
D-124	Tank	Caustic Soda	1100 gallons ³	Room 1	--						
D-125	Drum, Poly	Ferric Sulfate Liquid (New)	55 gallon	Room 1	--						
D-126	Drum, Poly	Ferric Sulfate Liquid (New)	55 gallon	Room 1	--						
D-127	Drum, Poly	Ferric Sulfate Liquid (New)	55 gallon	Room 1	--						
D-128	Drum, Poly	Ferric Sulfate Liquid (New)	55 gallon	Room 1	--						
D-129	Drum, Poly	Ferric Sulfate Liquid (New)	55 gallon	Room 1	--						
D-130	Drum, Poly	Ferric Sulfate Liquid (New)	55 gallon	Room 1	--						
D-131	Drum, Poly	Ferric Sulfate Liquid (New)	55 gallon	Room 1	--						
D-132	Drum, Poly	Ferric Sulfate Liquid (New)	55 gallon	Room 1	--						
D-133	Drum, Poly	Ferric Sulfate Liquid (New)	55 gallon	Room 1	--						
D-134	Drum, Poly	Paper Pro	55 gallon	Room 1	7			12	5	0	Yellow liquid.
D-135	Drum, Poly	Paper Pro	55 gallon	Room 1	7	Y	(0010)	12	5	0	Yellow liquid.
D-136	Drum, Poly	Paper Pro	55 gallon	Room 1	7			12	5	0	Yellow liquid.
D-137	Drum, Poly	Paper Pro	55 gallon	Room 1	7			12	5	0	Yellow liquid.
D-138	Fiber Box	Aquaseal W-150 N30g	5 gallon	Room 1	--						
D-139	Bucket	680 Omala" (suspected oil)	5 gallon	Room 1 (in Cabinet)	--			2.4	0	0	
D-140	Bucket	Morlina 150 - Suroco - PA046	5 gallon	Room 1	--						
D-141	Drum, Steel	Lubriplate	55 gallon	Room 1	--						
D-142	Drum, Steel	1/4 Full - Mineral Spirits	55 gallon	Room 1	--						

TABLE 1

**CONTAINER INVENTORY
CREATIVE PACKAGING AND PAPER
WORCESTER, MASSACHUSETTS**

Container No.	Container Type	Contents ¹	Size ²	Location	pH ⁴	Ahura Sample ⁵	Lab Sample ⁶ (Sample No.)	VOCs ⁷ (ppm)	CO ⁸ (ppm)	LEL ⁹ (%)	Comments
D-143	Tote	Labeled Kerosene, Frozen	250 gallon	Room 1	7	Y		0	0	0	
D-144	Tote	Full. Labeled P-680NV Flocculant.	250 gallon	Room 1	10	Y	(0012)	0	0	0	Viscous/slick material.
D-145	Tote	Full. Labeled FO-120 Defoamer. Frozen.	250 gallon	Room 1	7			0	0	0	
D-146	Tote	1/2 Full. Labeled P-680NV Flocculant.	250 gallon	Room 1	7	Y		0	0	0	Dark liquid.
D-147	Tote	Full. Labeled P-680NV Flocculant.	250 gallon	Room 1	10	Y	(0014)	0	0	0	Viscous/slick material.
D-148	Tote	Full. Labeled FO-120 Defoamer.	250 gallon	Room 1	7	Y	(0015)	0.7	0	0	Odor noted.
D-149	Tote	Full. Labeled P-680NV Flocculant.	250 gallon	Room 1	10	Y	(0016)	0.1	0	0	Viscous/slick material. Odor noted.
D-150	Bucket	Fry Flex Black	5 gallon	Work Room	--						
D-151	Bucket	LR 3086 Blue	5 gallon	Work Room	--	Y		0.6	0	0	Gray granular material.
D-152	Drum, Poly	Boiler Water Treatment BL 1717. Odor observed.	55 gallon	Work Room	5	Y	(0017)	14	0	0	Metal parts in liquid. Strong odor.
D-153	Drum, Poly	Boiler Room Tank - 1/4 Full Sulf (on Process Cart)	50 gallon	Room 2, Northwest extension	--						
D-154	Bucket	Colorant Blue	5 gallon	Room 2, Northwest extension	--						
D-155	Bucket	Aquabox Yellow	5 gallon	Room 2, Northwest extension	--						
D-156	Bucket	Lubricant - Almost Empty	5 gallon	Room 2, Northwest extension	--						
D-157	Carboy	Boiler Water Treatment - BL-703	5 gallon	Room 2, Northwest extension	--						
D-158	Carboy	Corrosion Inhibitor - Closed System Treatment Dearborn 545	5 gallon	Room 2, Northwest extension	--						
D-159	Tank	Boiler Room Process Tank	60 gallon	Boiler Room	--						
D-160	Drum, Poly	Water Treatment - BL-02	55 gallon	Boiler Room	--						
D-161	Drum, Fiber	Boiler Water Treatment - B-120	30 gallon	Boiler Room	--						
D-162	Drum, Poly	Boiler Water Management - KEM-X5	55 gallon	Boiler Room	--						
D-163	Drum, Poly	Steam Line Treatment - BL 1559	55 gallon	Boiler Room	12	Y		0	0	0	Viscous/slick material. Ahura FD: Cyclohexamine
D-164	Bucket	Brown/clear viscous liquid	5 gallon	Boiler Room	12			0	0	0	Viscous/slick material and brown solids.

TABLE 1

**CONTAINER INVENTORY
CREATIVE PACKAGING AND PAPER
WORCESTER, MASSACHUSETTS**

Container No.	Container Type	Contents ¹	Size ²	Location	pH ⁴	Ahura Sample ⁵	Lab Sample ⁶ (Sample No.)	VOCs ⁷ (ppm)	CO ⁸ (ppm)	LEL ⁹ (%)	Comments
D-165	Bucket	Brown/clear viscous liquid	5 gallon	Boiler Room	12			0	0	0	Viscous/slick material and brown solids.
D-166	Drum, Poly	Boiler Water Treatment - BL 1717	55 gallon	Boiler Room	--						
D-167	Tote	1/2 Full. Labeled FO-120 Defoamer.	250 gallon	Boiler Room	7	Y	(0018)	0	0	0	Clear liquid.
D-168	Drum, Poly	Fe-211 Batch Cleaner (on Process Cart)	55 gallon	Room 2	--						
D-169	Drum, Poly	PMF 785 Dryer (on Process Cart)	55 gallon	Room 2	--						
D-170	Bucket	Unlabeled	5 gallon	Room 1- near bay door	--	Y		0	0	0	Brown paste/solid.
D-171	Bucket	Speed Wall Part Primer	5 gallon	Second Floor	--						
D-172	Drum, Fiber	Aquaseal	55 gallon	Second Floor	--						
D-173	Bucket	Defoamer Agent	5 gallon	Second Floor	--						
D-174	Drum, Fiber	Aquaseal	55 gallon	Second Floor	--						
D-175	Drum, Fiber	Aquaseal	55 gallon	Second Floor	--						
D-176	Drum, Fiber	Aquaseal	55 gallon	Second Floor	--						
D-177	Bucket	Compuplug Quicksealing Hardening Cement	5 gallon	Second Floor	--						
D-178	Drum, Fiber	Aquaseal W-150	55 gallon	Second Floor	--						
D-179	Drum, Fiber	Harlocide	30 gallon	Second Floor	--						
D-180	Drum, Poly	Betodenten Extec Opti-Sperse 10	30 gallon	Second Floor (Mezzanine Area)	--						
D-181	Drum, Poly	F692FDA-30	30 gallon	Second Floor (Mezzanine Area)	--						
D-182	Drum, Poly	F692FDA-30	30 gallon	Second Floor (Mezzanine Area)	--						
D-183	Drum, Fiber	P1600-200	30 gallon	Second Floor (Mezzanine Area)	--						
D-184	Bucket	Devcon Epoxy T100 Patch	5 gallon	Second Floor (Mezzanine Area)	--						
D-185	Bucket	Oil/lubricant	5 gallon	Room 1 (in Cabinet)	--						
D-186	Bucket	Oil/lubricant	5 gallon	Room 1 (in Cabinet)	--						

TABLE 1

CONTAINER INVENTORY
CREATIVE PACKAGING AND PAPER
WORCESTER, MASSACHUSETTS

Container No.	Container Type	Contents ¹	Size ²	Location	pH ⁴	Ahura Sample ⁵	Lab Sample ⁶ (Sample No.)	VOCs ⁷ (ppm)	CO ⁸ (ppm)	LEL ⁹ (%)	Comments
D-187	Bucket	Unlabeled	5 gallon	Room 1- near bay door	5	Y	(0019)	2.2	3	0	O ₂ ¹⁰ = 20.3%
NA	Drum, Steel	Oil/lubricant	55 gallon	Attached Shed, SW corner	--						
NA	Drum, Steel	Oil/lubricant	55 gallon	Attached Shed, SW corner	--						
NA	Drum, Steel	Oil/lubricant	55 gallon	Attached Shed, SW corner	--						
NA	Drum, Steel	Oil/lubricant	55 gallon	Attached Shed, SW corner	--						
NA	Drum, Steel	Oil/lubricant	55 gallon	Attached Shed, SW corner	--						
NA	Drum, Steel	Oil/lubricant	55 gallon	Attached Shed, SW corner	--						
NA	Drum, Steel	Oil/lubricant	55 gallon	Attached Shed, SW corner	--						
NA	Drum, Steel	Lubriplate	55 gallon	Under trailer, S border	--						
NA	Drum, Poly	Oil/lubricant	30 gallon	Under trailer, S border	--						

% = percent. ppm = parts per million. Y = Yes Poly = Polyethylene
 NE = Northeast NA = Not Assigned. E = East SW = Southwest
 S = South NW = Northwest W = West SE = Southeast

- 1: Obtained from original manufacturer's label, hand written markings, or visual inspection.
- 2: Approximate/known size of the container is listed; containers less than 5 gallons in volume were counted, but not otherwise documented.
- 3: The approximate volume of material in the Tank was documented using the graduated markings on the exterior of the tank.
- 4: pH values were collected using pH paper during the sampling and inventory.
- 5: An aliquot of material was collected for analysis on the Ahura FirstDefender® (FD) Raman Laser Spectrometer. A **bolded Y** indicates that a positive match was found during Ahura analysis.
- 6: An 8-ounce jar of material was collected (at the discretion of the OSC) for laboratory analysis for metals and cyanide. [Value in parentheses is the assigned sample number, listed on the Chain of Custody, with the prefix R01-133020AJ-(00##)].
- 7: Volatile Organic Compounds, measured with a MultiRAE Pro Multigas Monitor.
- 8: Carbon Monoxide, measured with a MultiRAE Pro Multigas Monitor.
- 9: Lower Explosive Limit, measured with a MultiRAE Pro Multigas Monitor.
- 10: Oxygen, measured with a MultiRAE Pro Multigas Monitor. Background Oxygen is 20.9%.
- = Reading (pH) was not obtained.

TABLE 2

**VOLATILE ORGANIC COMPOUNDS RESULTS SUMMARY
CREATIVE PACKAGING AND PAPER
WORCESTER, MASSACHUSETTS**

SAMPLE LOCATION: SAMPLE NUMBER: LABORATORY NUMBER:	D-4 R01-130221AJ-0001 AB38157	D-11 R01-130221AJ-0002 AB38158	D-103 R01-130221AJ-0003 AB38159	D-117 R01-130221AJ-0005 AB38160	D-118 R01-130221AJ-0006 AB38161	D-119 R01-130221AJ-0007 AB38162
COMPOUND						
1,2,4-Trimethylbenzene	11,300,000	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	2,280,000	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND
N-Butylbenzene	4,070,000	ND	ND	ND	ND	ND
N-Propylbenzene	ND	ND	ND	ND	ND	ND
Para-Isopropyltoluene	2,350,000	610,000	ND	ND	ND	ND
Sec-Butylbenzene	1,040,000	ND	ND	ND	ND	ND

SAMPLE LOCATION: SAMPLE NUMBER: LABORATORY NUMBER:	D-120 R01-130221AJ-0008 AB38163	D-123 R01-130221AJ-0009 AB38164	D-135 R01-130221AJ-0010 AB38165	D-144 R01-130221AJ-0012 AB38166	D-147 R01-130221AJ-0014 AB38167	D-148 R01-130221AJ-0015 AB38168
COMPOUND						
1,2,4-Trimethylbenzene	ND	ND	780,000	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	8,540,000	ND	ND	ND
N-Butylbenzene	ND	ND	4,060,000	ND	ND	ND
N-Propylbenzene	ND	ND	ND	ND	ND	ND
Para-Isopropyltoluene	ND	ND	1,080,000	ND	ND	ND
Sec-Butylbenzene	ND	ND	ND	ND	ND	ND

NOTES

START has reported the data as it was received from the EPA Office of Environmental Measurement and Evaluation (OEME) Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative.

Sample analysis was conducted following EPA REGION I SOP, EIASOP-VOAGCMS8, via Gas Chromatograph/Mass Spectrometry (GC/MS).

Results are in micrograms per kilogram (µg/Kg).

ND = Not Detected.

TABLE 2

**VOLATILE ORGANIC COMPOUNDS RESULTS SUMMARY
CREATIVE PACKAGING AND PAPER
WORCESTER, MASSACHUSETTS**

SAMPLE LOCATION:	D-149	D-152	D-167	D-187		
SAMPLE NUMBER:	R01-130221AJ-0016	R01-130221AJ-0017	R01-130221AJ-0018	R01-130221AJ-0019		
LABORATORY NUMBER:	AB38169	AB38170	AB38171	AB38172		
COMPOUND						
1,2,4-Trimethylbenzene	ND	4,570,000	ND	ND		
1,3,5-Trimethylbenzene	ND	930,000	ND	ND		
Naphthalene	ND	1,960,000	ND	ND		
N-Butylbenzene	ND	1,530,000	ND	ND		
N-Propylbenzene	ND	370,000	ND	ND		
Para-Isopropyltoluene	ND	580,000	ND	ND		
Sec-Butylbenzene	ND	420,000	ND	ND		

NOTES

START has reported the data as it was received from the EPA Office of Environmental Measurement and Evaluation (OEME) Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative. Sample analysis was conducted following EPA REGION I SOP, EIASOP-VOAGCMS8, via Gas Chromatograph/Mass Spectrometry (GC/MS). Results are in micrograms per kilogram (µg/Kg).
ND = Not Detected.

**TABLE 3
SEMIVOLATILE ORGANIC COMPOUNDS RESULTS SUMMARY
CREATIVE PACKAGING AND PAPER
WORCESTER, MASSACHUSETTS**

SAMPLE LOCATION: SAMPLE NUMBER: LABORATORY NUMBER:	D-4 R01-130221AJ-0001 AB38157	D-11 R01-130221AJ-0002 AB38158	D-103 R01-130221AJ-0003 AB38159	D-117 R01-130221AJ-0005 AB38160	D-118 R01-130221AJ-0006 AB38161	D-119 R01-130221AJ-0007 AB38162
COMPOUND						
1-Methylnaphthalene	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	380	ND	ND	ND	ND	ND
Di-n-butylphthalate	190	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND

SAMPLE LOCATION: SAMPLE NUMBER: LABORATORY NUMBER:	D-120 R01-130221AJ-0008 AB38163	D-123 R01-130221AJ-0009 AB38164	D-135 R01-130221AJ-0010 AB38165	D-144 R01-130221AJ-0012 AB38166	D-147 R01-130221AJ-0014 AB38167	D-148 R01-130221AJ-0015 AB38168
COMPOUND						
1-Methylnaphthalene	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	8,800	ND	ND	ND

SAMPLE LOCATION: SAMPLE NUMBER: LABORATORY NUMBER:	D-149 R01-130221AJ-0016 AB38169	D-152 R01-130221AJ-0017 AB38170	D-167 R01-130221AJ-0018 AB38171	D-187 R01-130221AJ-0019 AB38172		
COMPOUND						
1-Methylnaphthalene	ND	570	ND	ND		
2-Methylnaphthalene	ND	1,000	ND	ND		
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND		
Di-n-butylphthalate	ND	ND	ND	ND		
Naphthalene	ND	3,500	ND	ND		

NOTES

START has reported the data as it was received from the EPA Office of Environmental Measurement and Evaluation (OEME) Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative. Sample analysis was conducted following EPA REGION I SOP, EIASOP-BNAP3 and EIASOP-BNAGCMS8, via Gas Chromatograph/Mass Spectrometry (GC/MS). Results are in milligrams per kilogram (mg/Kg).
ND = Not Detected.

TABLE 4

**CYANIDE RESULTS SUMMARY
CREATIVE PACKAGING AND PAPER
WORCESTER, MASSACHUSETTS**

SAMPLE LOCATION: SAMPLE NUMBER: LABORATORY NUMBER:	D-4 R01-130221AJ-0001 AB38157	D-11 R01-130221AJ-0002 AB38158	D-103 R01-130221AJ-0003 AB38159	D-117 R01-130221AJ-0005 AB38160	D-118 R01-130221AJ-0006 AB38161	D-119 R01-130221AJ-0007 AB38162
COMPOUND						
Cyanide	ND	--	--	ND	--	ND

SAMPLE LOCATION: SAMPLE NUMBER: LABORATORY NUMBER:	D-120 R01-130221AJ-0008 AB38163	D-123 R01-130221AJ-0009 AB38164	D-135 R01-130221AJ-0010 AB38165	D-144 R01-130221AJ-0012 AB38166	D-147 R01-130221AJ-0014 AB38167	D-148 R01-130221AJ-0015 AB38168
COMPOUND						
Cyanide	--	ND	--	ND	0.95	ND

SAMPLE LOCATION: SAMPLE NUMBER: LABORATORY NUMBER:	D-149 R01-130221AJ-0016 AB38169	D-152 R01-130221AJ-0017 AB38170	D-167 R01-130221AJ-0018 AB38171	D-187 R01-130221AJ-0019 AB38172		
COMPOUND						
Cyanide	ND	0.61	ND	ND		

NOTES
 START has reported the data as it was received from the EPA Office of Environmental Measurement and Evaluation (OEME) Laboratory. START has not performed data validation of the EPA OEME Laboratory data. An internal data review was performed by EPA OEME Laboratory personnel prior to submittal to the EPA Contracting Officer's Representative. Sample analysis was conducted following EPA REGION I SOP, EIASOP-INGCN14. Results are in milligrams per kilogram (mg/Kg).
 ND = Not Detected.
 -- = Sample could not be analyzed for the parameter listed.

TABLE 5

**SUMMARY OF BULK ASBESTOS SAMPLE RESULTS
CREATIVE PACKAGING AND PAPER
WORCESTER, MASSACHUSETTS**

SAMPLE LOCATION	ACM-01	ACM-02				
SAMPLE NUMBER	R01-130227AJ-0023	R01-130227AJ-0024				
LABORATORY NUMBER	AB38173	AB38174				
DATE SAMPLED	03/20/2013	03/20/2013				
COMPOUND						
Amosite	4	4				
Chrysotile	2	2				

NOTES:

Samples were analyzed by U.S. EPA Office of Environmental Measurement and Evaluation (OEME) New England Regional Laboratory (NERL) via Polarized Light Microscopy (PLM).
All quantities are estimated volume percent.

Appendix C

Photodocumentation Log

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PHOTODOCUMENTATION LOG
Creative Packaging and Paper • Worcester, Massachusetts



SCENE: View of a tote labeled FO-120 Defoamer, located near the South Ludlow Street Entrance.

DATE: 27 February 2013

PHOTOGRAPHER: C. Dupree

TIME: 1013 hours

CAMERA: iPhone



SCENE: View of totes located along the northern (James Street) side of the building.

DATE: 27 February 2013

PHOTOGRAPHER: C. Dupree

TIME: 1017 hours

CAMERA: iPhone

PHOTODOCUMENTATION LOG
Creative Packaging and Paper • Worcester, Massachusetts



SCENE: View of the southern side of the central room [Room Number (No.) 2]. The Caustic tank (see arrow) is visible in the background.

DATE: 27 February 2013

PHOTOGRAPHER: C. Dupree

TIME: 1017 hours

CAMERA: iPhone



SCENE: View of containers and materials staged in a small side room, near the northwest corner of the building.

DATE: 27 February 2013

PHOTOGRAPHER: C. Dupree

TIME: 1026 hours

CAMERA: iPhone

PHOTODOCUMENTATION LOG
Creative Packaging and Paper • Worcester, Massachusetts



SCENE: View of totes and drums located adjacent to the Caustic tank.

DATE: 27 February 2013
PHOTOGRAPHER: C. Dupree

TIME: 1035 hours
CAMERA: iPhone



SCENE: View of the Caustic tank, with unlabeled containers to the left, and drums of Ferric Sulfate to the right.

DATE: 27 February 2013
PHOTOGRAPHER: C. Dupree

TIME: 1035 hours
CAMERA: iPhone

PHOTODOCUMENTATION LOG
Creative Packaging and Paper • Worcester, Massachusetts



SCENE: View of drums of Ferric Sulfate, staged adjacent to the Caustic tank.

DATE: 27 February 2013
PHOTOGRAPHER: C. Dupree

TIME: 1037 hours
CAMERA: iPhone



SCENE: View of yellow crystals around the opening of a tote that was located adjacent to the Caustic tank.

DATE: 27 February 2013
PHOTOGRAPHER: C. Dupree

TIME: 1039 hours
CAMERA: iPhone

PHOTODOCUMENTATION LOG
Creative Packaging and Paper • Worcester, Massachusetts



SCENE: View of drums staged on pallets over a secondary containment unit, located west of the Caustic tank.

DATE: 27 February 2013
PHOTOGRAPHER: C. Dupree

TIME: 1044 hours
CAMERA: iPhone



SCENE: View of empty drums in the southeast corner of the second floor mezzanine.

DATE: 27 February 2013
PHOTOGRAPHER: C. Dupree

TIME: 1054 hours
CAMERA: iPhone

PHOTODOCUMENTATION LOG
Creative Packaging and Paper • Worcester, Massachusetts



SCENE: View of a paper thickness gauge, under the second floor area. The radiation source used in the device was removed and properly shipped off site, according to the property manager.

DATE: 27 February 2013

PHOTOGRAPHER: C. Dupree

TIME: 1102 hours

CAMERA: iPhone



SCENE: View of the southwest corner of the building. Photograph taken facing northwest.

DATE: 18 March 2013

PHOTOGRAPHER: C. Dupree

TIME: 1437 hours

CAMERA: iPhone

PHOTODOCUMENTATION LOG
Creative Packaging and Paper • Worcester, Massachusetts



SCENE: View of the attached shed on the south side of the building. Photograph taken facing east.

DATE: 18 March 2013

PHOTOGRAPHER: C. Dupree

TIME: 1437 hours

CAMERA: iPhone



SCENE: View of the transformers on the southeast loading dock. According to the property manager, the transformers are scheduled for removal and disposal. Photograph taken facing east-northeast.

DATE: 18 March 2013

PHOTOGRAPHER: C. Dupree

TIME: 1438 hours

CAMERA: iPhone

PHOTODOCUMENTATION LOG
Creative Packaging and Paper • Worcester, Massachusetts



SCENE: View of the south side of the building. Photograph taken facing northeast.

DATE: 18 March 2013

PHOTOGRAPHER: C. Dupree

TIME: 1439 hours

CAMERA: iPhone



SCENE: View of drums in the attached shed.

DATE: 18 March 2013

PHOTOGRAPHER: C. Dupree

TIME: 1441 hours

CAMERA: iPhone

PHOTODOCUMENTATION LOG
Creative Packaging and Paper • Worcester, Massachusetts



SCENE: View of the entrance to the attached shed, covered with a blue tarp. Photograph taken facing west.

DATE: 18 March 2013

PHOTOGRAPHER: C. Dupree

TIME: 1442 hours

CAMERA: iPhone



SCENE: View of the southeast corner of the building, including offices and garage bays. Photograph taken facing west-northwest.

DATE: 18 March 2013

PHOTOGRAPHER: C. Dupree

TIME: 1447 hours

CAMERA: iPhone

PHOTODOCUMENTATION LOG
Creative Packaging and Paper • Worcester, Massachusetts



SCENE: View of the southeast corner of the building, including loading docks. A portion of the collapsed roof section is visible. Photograph taken facing west.

DATE: 18 March 2013

PHOTOGRAPHER: C. Dupree

TIME: 1448 hours

CAMERA: iPhone

Appendix D

Chain-of-Custody Record

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Appendix E
Analytical Data

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Laboratory Report

April 03, 2013

Allen Jarrell - Mail Code OSRR02-2
US EPA New England R1

Project Number: 13030015
Project: Creative Paper - Worcester, MA
Analysis: VOAs in Soil High Level Method
EPA Chemist: Joseph Montanaro

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-VOAGCMS9.

Samples were analyzed by GC/MS. Samples were introduced to the GC via a Tekmar preconcentrator and an Archon auto-sampler. The analysis SOP is based on US EPA Method 8260B, revision 2.0, 1996 and Method 5035A, draft revision 1, 2002, from SW-846.

Date Samples Received by the Laboratory: 03/21/2013

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

Digitally signed by Dan Boudreau
DN: cn=Dan Boudreau, o=EPA,
ou=EIA,
email=boudreau.dan@epa.gov, c=US
Date: 2013.04.03 11:18:08 -04'00'

13030015\$VOAHS

Qualifiers:

- RL** Reporting limit
- ND** Not Detected above reporting limit
- NA** Not Applicable
- NC** Not calculated since analyte concentration is ND
- J1** Estimated value due to MS recovery outside acceptance criteria
- J2** Estimated value due to LFB result outside acceptance criteria
- J3** Estimated value due to RPD result outside acceptance criteria
- J4** Estimated value due to LCS result outside acceptance criteria
- B** Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
- R** No recovery was calculated since the analyte concentration is greater than four times the spike level.

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VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0001	Lab Sample ID:	AB38157
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	5000
Wet Weight Prepared:	0.074 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	680000	
71-55-6	1,1,1-Trichloroethane	ND	680000	
79-34-5	1,1,2,2-Tetrachloroethane	ND	680000	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	680000	
79-00-5	1,1,2-Trichloroethane	ND	680000	
75-34-3	1,1-dichloroethane	ND	680000	
75-35-4	1,1-Dichloroethylene	ND	680000	
563-58-6	1,1-Dichloropropene	ND	680000	
87-61-6	1,2,3-Trichlorobenzene	ND	680000	
96-18-4	1,2,3-Trichloropropane	ND	680000	
120-82-1	1,2,4-Trichlorobenzene	ND	680000	
95-63-6	1,2,4-Trimethylbenzene	11300000	680000	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	680000	
106-93-4	1,2-Dibromoethane	ND	680000	
95-50-1	1,2-Dichlorobenzene	ND	680000	
107-06-2	1,2-Dichloroethane	ND	680000	
78-87-5	1,2-Dichloropropane	ND	680000	
108-67-8	1,3,5-Trimethylbenzene	2280000	680000	
541-73-1	1,3-Dichlorobenzene	ND	680000	
142-28-9	1,3-Dichloropropane	ND	680000	
106-46-7	1,4-Dichlorobenzene	ND	680000	
594-20-7	2,2-Dichloropropane	ND	680000	
78-93-3	2-Butanone (MEK)	ND	680000	
95-49-8	2-Chlorotoluene	ND	680000	
591-78-6	2-Hexanone	ND	680000	
67-64-1	2-Propanone (acetone)	ND	680000	
106-43-4	4-Chlorotoluene	ND	680000	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	680000	
107-13-1	Acrylonitrile	ND	680000	
71-43-2	Benzene	ND	680000	
108-86-1	Bromobenzene	ND	680000	
74-97-5	Bromochloromethane	ND	680000	
75-27-4	Bromodichloromethane	ND	680000	
75-25-2	Bromoform	ND	680000	
74-83-9	Bromomethane	ND	680000	
10061-01-5	c-1,3-dichloropropene	ND	680000	
75-15-0	Carbon Disulfide	ND	680000	
56-23-5	Carbon tetrachloride	ND	680000	
108-90-7	Chlorobenzene	ND	680000	
75-00-3	Chloroethane	ND	680000	
67-66-3	Chloroform	ND	680000	
74-87-3	Chloromethane	ND	680000	
156-59-2	cis-1,2-Dichloroethylene	ND	680000	

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VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0001	Lab Sample ID:	AB38157
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	5000
Wet Weight Prepared:	0.074 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	680000	
74-95-3	Dibromomethane	ND	680000	
75-71-8	Dichlorodifluoromethane	ND	680000	
60-29-7	Ethyl Ether	ND	680000	
100-41-4	Ethylbenzene	ND	680000	
87-68-3	Hexachlorobutadiene	ND	680000	
98-82-8	Isopropylbenzene	ND	680000	
108-38-3/106-42-3	M/P Xylene	ND	1400000	
75-09-2	Methylene Chloride	ND	680000	
1634-04-4	Methyl-t-Butyl Ether	ND	680000	
91-20-3	Naphthalene	ND	680000	
104-51-8	N-Butylbenzene	4070000	680000	
103-65-1	N-Propylbenzene	ND	680000	
95-47-6	Ortho Xylene	ND	680000	
99-87-6	Para-Isopropyltoluene	2350000	680000	
135-98-8	Sec-Butylbenzene	1040000	680000	
100-42-5	Styrene	ND	680000	
10061-02-6	t-1,3-Dichloropropene	ND	680000	
98-06-6	Tert-Butylbenzene	ND	680000	
127-18-4	Tetrachloroethylene	ND	680000	
109-99-9	Tetrahydrofuran	ND	680000	
108-88-3	Toluene	ND	680000	
156-60-5	Trans-1,2-Dichloroethylene	ND	680000	
79-01-6	Trichloroethylene	ND	680000	
75-69-4	Trichlorofluoromethane	ND	680000	
108-05-4	Vinyl Acetate	ND	680000	
75-01-4	Vinyl Chloride	ND	680000	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	108	74 - 136
1,4-Bromofluorobenzene	101	78 - 111
Toluene-D8	98	85 - 118

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VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0001
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.074 grams

Lab Sample ID: AB38157
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 5000
pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
Comments: Tentatively Identified Compounds				
		(ug/Kg)		Qualifier
	4-methyl-nonane	11000000		J
	2-methyl-nonane	11000000		J
	3-methyl-nonane	12000000		J
	Decane	86000000		J
	2,6-dimethyl-nonane	16000000		J
	5-methyl-decane	14000000		J
	4-methyl-decane	15000000		J
	2-methyl-decane	12000000		J
	3-methyl-decane	12000000		J
	Undecane	73000000		J

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VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0002	Lab Sample ID:	AB38158
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	2500
Wet Weight Prepared:	0.088 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	280000	
71-55-6	1,1,1-Trichloroethane	ND	280000	
79-34-5	1,1,2,2-Tetrachloroethane	ND	280000	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	280000	
79-00-5	1,1,2-Trichloroethane	ND	280000	
75-34-3	1,1-dichloroethane	ND	280000	
75-35-4	1,1-Dichloroethylene	ND	280000	
563-58-6	1,1-Dichloropropene	ND	280000	
87-61-6	1,2,3-Trichlorobenzene	ND	280000	
96-18-4	1,2,3-Trichloropropane	ND	280000	
120-82-1	1,2,4-Trichlorobenzene	ND	280000	
95-63-6	1,2,4-Trimethylbenzene	ND	280000	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	280000	
106-93-4	1,2-Dibromoethane	ND	280000	
95-50-1	1,2-Dichlorobenzene	ND	280000	
107-06-2	1,2-Dichloroethane	ND	280000	
78-87-5	1,2-Dichloropropane	ND	280000	
108-67-8	1,3,5-Trimethylbenzene	ND	280000	
541-73-1	1,3-Dichlorobenzene	ND	280000	
142-28-9	1,3-Dichloropropane	ND	280000	
106-46-7	1,4-Dichlorobenzene	ND	280000	
594-20-7	2,2-Dichloropropane	ND	280000	
78-93-3	2-Butanone (MEK)	ND	280000	
95-49-8	2-Chlorotoluene	ND	280000	
591-78-6	2-Hexanone	ND	280000	
67-64-1	2-Propanone (acetone)	ND	280000	
106-43-4	4-Chlorotoluene	ND	280000	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	280000	
107-13-1	Acrylonitrile	ND	280000	
71-43-2	Benzene	ND	280000	
108-86-1	Bromobenzene	ND	280000	
74-97-5	Bromochloromethane	ND	280000	
75-27-4	Bromodichloromethane	ND	280000	
75-25-2	Bromoform	ND	280000	
74-83-9	Bromomethane	ND	280000	
10061-01-5	c-1,3-dichloropropene	ND	280000	
75-15-0	Carbon Disulfide	ND	280000	
56-23-5	Carbon tetrachloride	ND	280000	
108-90-7	Chlorobenzene	ND	280000	
75-00-3	Chloroethane	ND	280000	
67-66-3	Chloroform	ND	280000	
74-87-3	Chloromethane	ND	280000	
156-59-2	cis-1,2-Dichloroethylene	ND	280000	

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VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0002	Lab Sample ID:	AB38158
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	2500
Wet Weight Prepared:	0.088 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	280000	
74-95-3	Dibromomethane	ND	280000	
75-71-8	Dichlorodifluoromethane	ND	280000	
60-29-7	Ethyl Ether	ND	280000	
100-41-4	Ethylbenzene	ND	280000	
87-68-3	Hexachlorobutadiene	ND	280000	
98-82-8	Isopropylbenzene	ND	280000	
108-38-3/106-42-3	M/P Xylene	ND	570000	
75-09-2	Methylene Chloride	ND	280000	
1634-04-4	Methyl-t-Butyl Ether	ND	280000	
91-20-3	Naphthalene	ND	280000	
104-51-8	N-Butylbenzene	ND	280000	
103-65-1	N-Propylbenzene	ND	280000	
95-47-6	Ortho Xylene	ND	280000	
99-87-6	Para-Isopropyltoluene	610000	280000	
135-98-8	Sec-Butylbenzene	ND	280000	
100-42-5	Styrene	ND	280000	
10061-02-6	t-1,3-Dichloropropene	ND	280000	
98-06-6	Tert-Butylbenzene	ND	280000	
127-18-4	Tetrachloroethylene	ND	280000	
109-99-9	Tetrahydrofuran	ND	280000	
108-88-3	Toluene	ND	280000	
156-60-5	Trans-1,2-Dichloroethylene	ND	280000	
79-01-6	Trichloroethylene	ND	280000	
75-69-4	Trichlorofluoromethane	ND	280000	
108-05-4	Vinyl Acetate	ND	280000	
75-01-4	Vinyl Chloride	ND	280000	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	103	74 - 136
1,4-Bromofluorobenzene	95	78 - 111
Toluene-D8	97	85 - 118

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VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0002
 Date of Collection: 3/20/2013
 Date of Preparation: 3/25/2013
 Date of Analysis: 3/25/2013
 Dry Weight Prepared: N/A
 Wet Weight Prepared: 0.088 grams

Lab Sample ID: AB38158
 Matrix: Drum Product
 Amount Prepared: 5 mL
 Percent Solids: N/A
 Extract Dilution: 2500
 pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
Comments: Tentatively Identified Compounds				
		(ug/Kg)		Qualifier
	Decane	2200000		J
	D-limonene	7600000		J

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VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0003	Lab Sample ID:	AB38159
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.098 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	5100	
71-55-6	1,1,1-Trichloroethane	ND	5100	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5100	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	5100	
79-00-5	1,1,2-Trichloroethane	ND	5100	
75-34-3	1,1-dichloroethane	ND	5100	
75-35-4	1,1-Dichloroethylene	ND	5100	
563-58-6	1,1-Dichloropropene	ND	5100	
87-61-6	1,2,3-Trichlorobenzene	ND	5100	
96-18-4	1,2,3-Trichloropropane	ND	5100	
120-82-1	1,2,4-Trichlorobenzene	ND	5100	
95-63-6	1,2,4-Trimethylbenzene	ND	5100	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	5100	
106-93-4	1,2-Dibromoethane	ND	5100	
95-50-1	1,2-Dichlorobenzene	ND	5100	
107-06-2	1,2-Dichloroethane	ND	5100	
78-87-5	1,2-Dichloropropane	ND	5100	
108-67-8	1,3,5-Trimethylbenzene	ND	5100	
541-73-1	1,3-Dichlorobenzene	ND	5100	
142-28-9	1,3-Dichloropropane	ND	5100	
106-46-7	1,4-Dichlorobenzene	ND	5100	
594-20-7	2,2-Dichloropropane	ND	5100	
78-93-3	2-Butanone (MEK)	ND	5100	
95-49-8	2-Chlorotoluene	ND	5100	
591-78-6	2-Hexanone	ND	5100	
67-64-1	2-Propanone (acetone)	ND	5100	
106-43-4	4-Chlorotoluene	ND	5100	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	5100	
107-13-1	Acrylonitrile	ND	5100	
71-43-2	Benzene	ND	5100	
108-86-1	Bromobenzene	ND	5100	
74-97-5	Bromochloromethane	ND	5100	
75-27-4	Bromodichloromethane	ND	5100	
75-25-2	Bromoform	ND	5100	
74-83-9	Bromomethane	ND	5100	
10061-01-5	c-1,3-dichloropropene	ND	5100	
75-15-0	Carbon Disulfide	ND	5100	
56-23-5	Carbon tetrachloride	ND	5100	
108-90-7	Chlorobenzene	ND	5100	
75-00-3	Chloroethane	ND	5100	
67-66-3	Chloroform	ND	5100	
74-87-3	Chloromethane	ND	5100	
156-59-2	cis-1,2-Dichloroethylene	ND	5100	

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VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0003	Lab Sample ID:	AB38159
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.098 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	5100	
74-95-3	Dibromomethane	ND	5100	
75-71-8	Dichlorodifluoromethane	ND	5100	
60-29-7	Ethyl Ether	ND	5100	
100-41-4	Ethylbenzene	ND	5100	
87-68-3	Hexachlorobutadiene	ND	5100	
98-82-8	Isopropylbenzene	ND	5100	
108-38-3/106-42-3	M/P Xylene	ND	10000	
75-09-2	Methylene Chloride	ND	5100	
1634-04-4	Methyl-t-Butyl Ether	ND	5100	
91-20-3	Naphthalene	ND	5100	
104-51-8	N-Butylbenzene	ND	5100	
103-65-1	N-Propylbenzene	ND	5100	
95-47-6	Ortho Xylene	ND	5100	
99-87-6	Para-Isopropyltoluene	ND	5100	
135-98-8	Sec-Butylbenzene	ND	5100	
100-42-5	Styrene	ND	5100	
10061-02-6	t-1,3-Dichloropropene	ND	5100	
98-06-6	Tert-Butylbenzene	ND	5100	
127-18-4	Tetrachloroethylene	ND	5100	
109-99-9	Tetrahydrofuran	ND	5100	
108-88-3	Toluene	ND	5100	
156-60-5	Trans-1,2-Dichloroethylene	ND	5100	
79-01-6	Trichloroethylene	ND	5100	
75-69-4	Trichlorofluoromethane	ND	5100	
108-05-4	Vinyl Acetate	ND	5100	
75-01-4	Vinyl Chloride	ND	5100	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	91	74 - 136
1,4-Bromofluorobenzene	96	78 - 111
Toluene-D8	98	85 - 118

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VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0003
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.098 grams

Lab Sample ID: AB38159
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 50
pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
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Comments:

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Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	N/A	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	
71-55-6	1,1,1-Trichloroethane	ND	50	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	50	
79-00-5	1,1,2-Trichloroethane	ND	50	
75-34-3	1,1-dichloroethane	ND	50	
75-35-4	1,1-Dichloroethylene	ND	50	
563-58-6	1,1-Dichloropropene	ND	50	
87-61-6	1,2,3-Trichlorobenzene	ND	50	
96-18-4	1,2,3-Trichloropropane	ND	50	
120-82-1	1,2,4-Trichlorobenzene	ND	50	
95-63-6	1,2,4-Trimethylbenzene	ND	50	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	50	
106-93-4	1,2-Dibromoethane	ND	50	
95-50-1	1,2-Dichlorobenzene	ND	50	
107-06-2	1,2-Dichloroethane	ND	50	
78-87-5	1,2-Dichloropropane	ND	50	
108-67-8	1,3,5-Trimethylbenzene	ND	50	
541-73-1	1,3-Dichlorobenzene	ND	50	
142-28-9	1,3-Dichloropropane	ND	50	
106-46-7	1,4-Dichlorobenzene	ND	50	
594-20-7	2,2-Dichloropropane	ND	50	
78-93-3	2-Butanone (MEK)	ND	50	
95-49-8	2-Chlorotoluene	ND	50	
591-78-6	2-Hexanone	ND	50	
67-64-1	2-Propanone (acetone)	ND	50	
106-43-4	4-Chlorotoluene	ND	50	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	50	
107-13-1	Acrylonitrile	ND	50	
71-43-2	Benzene	ND	50	
108-86-1	Bromobenzene	ND	50	
74-97-5	Bromochloromethane	ND	50	
75-27-4	Bromodichloromethane	ND	50	
75-25-2	Bromoform	ND	50	
74-83-9	Bromomethane	ND	50	
10061-01-5	c-1,3-dichloropropene	ND	50	
75-15-0	Carbon Disulfide	ND	50	
56-23-5	Carbon tetrachloride	ND	50	
108-90-7	Chlorobenzene	ND	50	
75-00-3	Chloroethane	ND	50	
67-66-3	Chloroform	ND	50	
74-87-3	Chloromethane	ND	50	
156-59-2	cis-1,2-Dichloroethylene	ND	50	

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Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	N/A	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	50	
74-95-3	Dibromomethane	ND	50	
75-71-8	Dichlorodifluoromethane	ND	50	
60-29-7	Ethyl Ether	ND	50	
100-41-4	Ethylbenzene	ND	50	
87-68-3	Hexachlorobutadiene	ND	50	
98-82-8	Isopropylbenzene	ND	50	
108-38-3/106-42-3	M/P Xylene	ND	100	
75-09-2	Methylene Chloride	ND	50	
1634-04-4	Methyl-t-Butyl Ether	ND	50	
91-20-3	Naphthalene	ND	50	
104-51-8	N-Butylbenzene	ND	50	
103-65-1	N-Propylbenzene	ND	50	
95-47-6	Ortho Xylene	ND	50	
99-87-6	Para-Isopropyltoluene	ND	50	
135-98-8	Sec-Butylbenzene	ND	50	
100-42-5	Styrene	ND	50	
10061-02-6	t-1,3-Dichloropropene	ND	50	
98-06-6	Tert-Butylbenzene	ND	50	
127-18-4	Tetrachloroethylene	ND	50	
109-99-9	Tetrahydrofuran	ND	50	
108-88-3	Toluene	ND	50	
156-60-5	Trans-1,2-Dichloroethylene	ND	50	
79-01-6	Trichloroethylene	ND	50	
75-69-4	Trichlorofluoromethane	ND	50	
108-05-4	Vinyl Acetate	ND	50	
75-01-4	Vinyl Chloride	ND	50	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	94	74 - 136
1,4-Bromofluorobenzene	98	78 - 111
Toluene-D8	96	85 - 118

Creative Paper - Worcester, MA

Laboratory Blank

Client Sample ID: N/A

Date of Collection: N/A

Date of Preparation: 3/25/2013

Date of Analysis: 3/25/2013

Dry Weight Prepared: N/A

Wet Weight Prepared: N/A

Lab Sample ID: N/A

Matrix: Drum Product

Amount Prepared: 5 mL

Percent Solids: N/A

Extract Dilution: 50

pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
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Comments: Method reagent laboratory blank is reported in ug/L.

Laboratory blank is associated with samples AB38159 (MS/MS and Duplicate Studies).

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0005	Lab Sample ID:	AB38160
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.106 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	4700	
71-55-6	1,1,1-Trichloroethane	ND	4700	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4700	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	4700	
79-00-5	1,1,2-Trichloroethane	ND	4700	
75-34-3	1,1-dichloroethane	ND	4700	
75-35-4	1,1-Dichloroethylene	ND	4700	
563-58-6	1,1-Dichloropropene	ND	4700	
87-61-6	1,2,3-Trichlorobenzene	ND	4700	
96-18-4	1,2,3-Trichloropropane	ND	4700	
120-82-1	1,2,4-Trichlorobenzene	ND	4700	
95-63-6	1,2,4-Trimethylbenzene	ND	4700	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	4700	
106-93-4	1,2-Dibromoethane	ND	4700	
95-50-1	1,2-Dichlorobenzene	ND	4700	
107-06-2	1,2-Dichloroethane	ND	4700	
78-87-5	1,2-Dichloropropane	ND	4700	
108-67-8	1,3,5-Trimethylbenzene	ND	4700	
541-73-1	1,3-Dichlorobenzene	ND	4700	
142-28-9	1,3-Dichloropropane	ND	4700	
106-46-7	1,4-Dichlorobenzene	ND	4700	
594-20-7	2,2-Dichloropropane	ND	4700	
78-93-3	2-Butanone (MEK)	ND	4700	
95-49-8	2-Chlorotoluene	ND	4700	
591-78-6	2-Hexanone	ND	4700	
67-64-1	2-Propanone (acetone)	ND	4700	
106-43-4	4-Chlorotoluene	ND	4700	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	4700	
107-13-1	Acrylonitrile	ND	4700	
71-43-2	Benzene	ND	4700	
108-86-1	Bromobenzene	ND	4700	
74-97-5	Bromochloromethane	ND	4700	
75-27-4	Bromodichloromethane	ND	4700	
75-25-2	Bromoform	ND	4700	
74-83-9	Bromomethane	ND	4700	
10061-01-5	c-1,3-dichloropropene	ND	4700	
75-15-0	Carbon Disulfide	ND	4700	
56-23-5	Carbon tetrachloride	ND	4700	
108-90-7	Chlorobenzene	ND	4700	
75-00-3	Chloroethane	ND	4700	
67-66-3	Chloroform	ND	4700	
74-87-3	Chloromethane	ND	4700	
156-59-2	cis-1,2-Dichloroethylene	ND	4700	

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0005	Lab Sample ID:	AB38160
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.106 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	4700	
74-95-3	Dibromomethane	ND	4700	
75-71-8	Dichlorodifluoromethane	ND	4700	
60-29-7	Ethyl Ether	ND	4700	
100-41-4	Ethylbenzene	ND	4700	
87-68-3	Hexachlorobutadiene	ND	4700	
98-82-8	Isopropylbenzene	ND	4700	
108-38-3/106-42-3	M/P Xylene	ND	9400	
75-09-2	Methylene Chloride	ND	4700	
1634-04-4	Methyl-t-Butyl Ether	ND	4700	
91-20-3	Naphthalene	ND	4700	
104-51-8	N-Butylbenzene	ND	4700	
103-65-1	N-Propylbenzene	ND	4700	
95-47-6	Ortho Xylene	ND	4700	
99-87-6	Para-Isopropyltoluene	ND	4700	
135-98-8	Sec-Butylbenzene	ND	4700	
100-42-5	Styrene	ND	4700	
10061-02-6	t-1,3-Dichloropropene	ND	4700	
98-06-6	Tert-Butylbenzene	ND	4700	
127-18-4	Tetrachloroethylene	ND	4700	
109-99-9	Tetrahydrofuran	ND	4700	
108-88-3	Toluene	ND	4700	
156-60-5	Trans-1,2-Dichloroethylene	ND	4700	
79-01-6	Trichloroethylene	ND	4700	
75-69-4	Trichlorofluoromethane	ND	4700	
108-05-4	Vinyl Acetate	ND	4700	
75-01-4	Vinyl Chloride	ND	4700	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	95	74 - 136
1,4-Bromofluorobenzene	95	78 - 111
Toluene-D8	96	85 - 118

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0005

Lab Sample ID: AB38160

Date of Collection: 3/20/2013

Matrix: Drum Product

Date of Preparation: 3/25/2013

Amount Prepared: 5 mL

Date of Analysis: 3/25/2013

Percent Solids: N/A

Dry Weight Prepared: N/A

Extract Dilution: 50

Wet Weight Prepared: 0.106 grams

pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
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Comments:

Creative Paper - Worcester, MA

Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	N/A	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	
71-55-6	1,1,1-Trichloroethane	ND	50	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	50	
79-00-5	1,1,2-Trichloroethane	ND	50	
75-34-3	1,1-dichloroethane	ND	50	
75-35-4	1,1-Dichloroethylene	ND	50	
563-58-6	1,1-Dichloropropene	ND	50	
87-61-6	1,2,3-Trichlorobenzene	ND	50	
96-18-4	1,2,3-Trichloropropane	ND	50	
120-82-1	1,2,4-Trichlorobenzene	ND	50	
95-63-6	1,2,4-Trimethylbenzene	ND	50	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	50	
106-93-4	1,2-Dibromoethane	ND	50	
95-50-1	1,2-Dichlorobenzene	ND	50	
107-06-2	1,2-Dichloroethane	ND	50	
78-87-5	1,2-Dichloropropane	ND	50	
108-67-8	1,3,5-Trimethylbenzene	ND	50	
541-73-1	1,3-Dichlorobenzene	ND	50	
142-28-9	1,3-Dichloropropane	ND	50	
106-46-7	1,4-Dichlorobenzene	ND	50	
594-20-7	2,2-Dichloropropane	ND	50	
78-93-3	2-Butanone (MEK)	ND	50	
95-49-8	2-Chlorotoluene	ND	50	
591-78-6	2-Hexanone	ND	50	
67-64-1	2-Propanone (acetone)	ND	50	
106-43-4	4-Chlorotoluene	ND	50	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	50	
107-13-1	Acrylonitrile	ND	50	
71-43-2	Benzene	ND	50	
108-86-1	Bromobenzene	ND	50	
74-97-5	Bromochloromethane	ND	50	
75-27-4	Bromodichloromethane	ND	50	
75-25-2	Bromoform	ND	50	
74-83-9	Bromomethane	ND	50	
10061-01-5	c-1,3-dichloropropene	ND	50	
75-15-0	Carbon Disulfide	ND	50	
56-23-5	Carbon tetrachloride	ND	50	
108-90-7	Chlorobenzene	ND	50	
75-00-3	Chloroethane	ND	50	
67-66-3	Chloroform	ND	50	
74-87-3	Chloromethane	ND	50	
156-59-2	cis-1,2-Dichloroethylene	ND	50	

Creative Paper - Worcester, MA

Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	N/A	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	50	
74-95-3	Dibromomethane	ND	50	
75-71-8	Dichlorodifluoromethane	ND	50	
60-29-7	Ethyl Ether	ND	50	
100-41-4	Ethylbenzene	ND	50	
87-68-3	Hexachlorobutadiene	ND	50	
98-82-8	Isopropylbenzene	ND	50	
108-38-3/106-42-3	M/P Xylene	ND	100	
75-09-2	Methylene Chloride	ND	50	
1634-04-4	Methyl-t-Butyl Ether	ND	50	
91-20-3	Naphthalene	ND	50	
104-51-8	N-Butylbenzene	ND	50	
103-65-1	N-Propylbenzene	ND	50	
95-47-6	Ortho Xylene	ND	50	
99-87-6	Para-Isopropyltoluene	ND	50	
135-98-8	Sec-Butylbenzene	ND	50	
100-42-5	Styrene	ND	50	
10061-02-6	t-1,3-Dichloropropene	ND	50	
98-06-6	Tert-Butylbenzene	ND	50	
127-18-4	Tetrachloroethylene	ND	50	
109-99-9	Tetrahydrofuran	ND	50	
108-88-3	Toluene	ND	50	
156-60-5	Trans-1,2-Dichloroethylene	ND	50	
79-01-6	Trichloroethylene	ND	50	
75-69-4	Trichlorofluoromethane	ND	50	
108-05-4	Vinyl Acetate	ND	50	
75-01-4	Vinyl Chloride	ND	50	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	91	74 - 136
1,4-Bromofluorobenzene	96	78 - 111
Toluene-D8	97	85 - 118

Creative Paper - Worcester, MA

Laboratory Blank

Client Sample ID: N/A

Date of Collection: N/A

Date of Preparation: 3/25/2013

Date of Analysis: 3/25/2013

Dry Weight Prepared: N/A

Wet Weight Prepared: N/A

Lab Sample ID: N/A

Matrix: Drum Product

Amount Prepared: 5 mL

Percent Solids: N/A

Extract Dilution: 50

pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
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Comments: Method reagent laboratory blank is reported in ug/L.

Laboratory blank is associated with samples AB38157, AB38158, and AB38160 - AB38172..

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0006	Lab Sample ID:	AB38161
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.100 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	5000	
71-55-6	1,1,1-Trichloroethane	ND	5000	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5000	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	5000	
79-00-5	1,1,2-Trichloroethane	ND	5000	
75-34-3	1,1-dichloroethane	ND	5000	
75-35-4	1,1-Dichloroethylene	ND	5000	
563-58-6	1,1-Dichloropropene	ND	5000	
87-61-6	1,2,3-Trichlorobenzene	ND	5000	
96-18-4	1,2,3-Trichloropropane	ND	5000	
120-82-1	1,2,4-Trichlorobenzene	ND	5000	
95-63-6	1,2,4-Trimethylbenzene	ND	5000	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	5000	
106-93-4	1,2-Dibromoethane	ND	5000	
95-50-1	1,2-Dichlorobenzene	ND	5000	
107-06-2	1,2-Dichloroethane	ND	5000	
78-87-5	1,2-Dichloropropane	ND	5000	
108-67-8	1,3,5-Trimethylbenzene	ND	5000	
541-73-1	1,3-Dichlorobenzene	ND	5000	
142-28-9	1,3-Dichloropropane	ND	5000	
106-46-7	1,4-Dichlorobenzene	ND	5000	
594-20-7	2,2-Dichloropropane	ND	5000	
78-93-3	2-Butanone (MEK)	ND	5000	
95-49-8	2-Chlorotoluene	ND	5000	
591-78-6	2-Hexanone	ND	5000	
67-64-1	2-Propanone (acetone)	ND	5000	
106-43-4	4-Chlorotoluene	ND	5000	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	5000	
107-13-1	Acrylonitrile	ND	5000	
71-43-2	Benzene	ND	5000	
108-86-1	Bromobenzene	ND	5000	
74-97-5	Bromochloromethane	ND	5000	
75-27-4	Bromodichloromethane	ND	5000	
75-25-2	Bromoform	ND	5000	
74-83-9	Bromomethane	ND	5000	
10061-01-5	c-1,3-dichloropropene	ND	5000	
75-15-0	Carbon Disulfide	ND	5000	
56-23-5	Carbon tetrachloride	ND	5000	
108-90-7	Chlorobenzene	ND	5000	
75-00-3	Chloroethane	ND	5000	
67-66-3	Chloroform	ND	5000	
74-87-3	Chloromethane	ND	5000	
156-59-2	cis-1,2-Dichloroethylene	ND	5000	

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0006	Lab Sample ID:	AB38161
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.100 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	5000	
74-95-3	Dibromomethane	ND	5000	
75-71-8	Dichlorodifluoromethane	ND	5000	
60-29-7	Ethyl Ether	ND	5000	
100-41-4	Ethylbenzene	ND	5000	
87-68-3	Hexachlorobutadiene	ND	5000	
98-82-8	Isopropylbenzene	ND	5000	
108-38-3/106-42-3	M/P Xylene	ND	10000	
75-09-2	Methylene Chloride	ND	5000	
1634-04-4	Methyl-t-Butyl Ether	ND	5000	
91-20-3	Naphthalene	ND	5000	
104-51-8	N-Butylbenzene	ND	5000	
103-65-1	N-Propylbenzene	ND	5000	
95-47-6	Ortho Xylene	ND	5000	
99-87-6	Para-Isopropyltoluene	ND	5000	
135-98-8	Sec-Butylbenzene	ND	5000	
100-42-5	Styrene	ND	5000	
10061-02-6	t-1,3-Dichloropropene	ND	5000	
98-06-6	Tert-Butylbenzene	ND	5000	
127-18-4	Tetrachloroethylene	ND	5000	
109-99-9	Tetrahydrofuran	ND	5000	
108-88-3	Toluene	ND	5000	
156-60-5	Trans-1,2-Dichloroethylene	ND	5000	
79-01-6	Trichloroethylene	ND	5000	
75-69-4	Trichlorofluoromethane	ND	5000	
108-05-4	Vinyl Acetate	ND	5000	
75-01-4	Vinyl Chloride	ND	5000	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	95	74 - 136
1,4-Bromofluorobenzene	94	78 - 111
Toluene-D8	97	85 - 118

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0006
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.100 grams

Lab Sample ID: AB38161
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 50
pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
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Comments:

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0007	Lab Sample ID:	AB38162
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.137 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	3700	
71-55-6	1,1,1-Trichloroethane	ND	3700	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3700	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	3700	
79-00-5	1,1,2-Trichloroethane	ND	3700	
75-34-3	1,1-dichloroethane	ND	3700	
75-35-4	1,1-Dichloroethylene	ND	3700	
563-58-6	1,1-Dichloropropene	ND	3700	
87-61-6	1,2,3-Trichlorobenzene	ND	3700	
96-18-4	1,2,3-Trichloropropane	ND	3700	
120-82-1	1,2,4-Trichlorobenzene	ND	3700	
95-63-6	1,2,4-Trimethylbenzene	ND	3700	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	3700	
106-93-4	1,2-Dibromoethane	ND	3700	
95-50-1	1,2-Dichlorobenzene	ND	3700	
107-06-2	1,2-Dichloroethane	ND	3700	
78-87-5	1,2-Dichloropropane	ND	3700	
108-67-8	1,3,5-Trimethylbenzene	ND	3700	
541-73-1	1,3-Dichlorobenzene	ND	3700	
142-28-9	1,3-Dichloropropane	ND	3700	
106-46-7	1,4-Dichlorobenzene	ND	3700	
594-20-7	2,2-Dichloropropane	ND	3700	
78-93-3	2-Butanone (MEK)	ND	3700	
95-49-8	2-Chlorotoluene	ND	3700	
591-78-6	2-Hexanone	ND	3700	
67-64-1	2-Propanone (acetone)	ND	3700	
106-43-4	4-Chlorotoluene	ND	3700	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	3700	
107-13-1	Acrylonitrile	ND	3700	
71-43-2	Benzene	ND	3700	
108-86-1	Bromobenzene	ND	3700	
74-97-5	Bromochloromethane	ND	3700	
75-27-4	Bromodichloromethane	ND	3700	
75-25-2	Bromoform	ND	3700	
74-83-9	Bromomethane	ND	3700	
10061-01-5	c-1,3-dichloropropene	ND	3700	
75-15-0	Carbon Disulfide	ND	3700	
56-23-5	Carbon tetrachloride	ND	3700	
108-90-7	Chlorobenzene	ND	3700	
75-00-3	Chloroethane	ND	3700	
67-66-3	Chloroform	ND	3700	
74-87-3	Chloromethane	ND	3700	
156-59-2	cis-1,2-Dichloroethylene	ND	3700	

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VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0007	Lab Sample ID:	AB38162
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.137 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	3700	
74-95-3	Dibromomethane	ND	3700	
75-71-8	Dichlorodifluoromethane	ND	3700	
60-29-7	Ethyl Ether	ND	3700	
100-41-4	Ethylbenzene	ND	3700	
87-68-3	Hexachlorobutadiene	ND	3700	
98-82-8	Isopropylbenzene	ND	3700	
108-38-3/106-42-3	M/P Xylene	ND	7400	
75-09-2	Methylene Chloride	ND	3700	
1634-04-4	Methyl-t-Butyl Ether	ND	3700	
91-20-3	Naphthalene	ND	3700	
104-51-8	N-Butylbenzene	ND	3700	
103-65-1	N-Propylbenzene	ND	3700	
95-47-6	Ortho Xylene	ND	3700	
99-87-6	Para-Isopropyltoluene	ND	3700	
135-98-8	Sec-Butylbenzene	ND	3700	
100-42-5	Styrene	ND	3700	
10061-02-6	t-1,3-Dichloropropene	ND	3700	
98-06-6	Tert-Butylbenzene	ND	3700	
127-18-4	Tetrachloroethylene	ND	3700	
109-99-9	Tetrahydrofuran	ND	3700	
108-88-3	Toluene	ND	3700	
156-60-5	Trans-1,2-Dichloroethylene	ND	3700	
79-01-6	Trichloroethylene	ND	3700	
75-69-4	Trichlorofluoromethane	ND	3700	
108-05-4	Vinyl Acetate	ND	3700	
75-01-4	Vinyl Chloride	ND	3700	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	97	74 - 136
1,4-Bromofluorobenzene	94	78 - 111
Toluene-D8	98	85 - 118

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0007
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.137 grams

Lab Sample ID: AB38162
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 50
pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
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Comments:

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0008	Lab Sample ID:	AB38163
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.100 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	5000	
71-55-6	1,1,1-Trichloroethane	ND	5000	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5000	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	5000	
79-00-5	1,1,2-Trichloroethane	ND	5000	
75-34-3	1,1-dichloroethane	ND	5000	
75-35-4	1,1-Dichloroethylene	ND	5000	
563-58-6	1,1-Dichloropropene	ND	5000	
87-61-6	1,2,3-Trichlorobenzene	ND	5000	
96-18-4	1,2,3-Trichloropropane	ND	5000	
120-82-1	1,2,4-Trichlorobenzene	ND	5000	
95-63-6	1,2,4-Trimethylbenzene	ND	5000	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	5000	
106-93-4	1,2-Dibromoethane	ND	5000	
95-50-1	1,2-Dichlorobenzene	ND	5000	
107-06-2	1,2-Dichloroethane	ND	5000	
78-87-5	1,2-Dichloropropane	ND	5000	
108-67-8	1,3,5-Trimethylbenzene	ND	5000	
541-73-1	1,3-Dichlorobenzene	ND	5000	
142-28-9	1,3-Dichloropropane	ND	5000	
106-46-7	1,4-Dichlorobenzene	ND	5000	
594-20-7	2,2-Dichloropropane	ND	5000	
78-93-3	2-Butanone (MEK)	ND	5000	
95-49-8	2-Chlorotoluene	ND	5000	
591-78-6	2-Hexanone	ND	5000	
67-64-1	2-Propanone (acetone)	ND	5000	
106-43-4	4-Chlorotoluene	ND	5000	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	5000	
107-13-1	Acrylonitrile	ND	5000	
71-43-2	Benzene	ND	5000	
108-86-1	Bromobenzene	ND	5000	
74-97-5	Bromochloromethane	ND	5000	
75-27-4	Bromodichloromethane	ND	5000	
75-25-2	Bromoform	ND	5000	
74-83-9	Bromomethane	ND	5000	
10061-01-5	c-1,3-dichloropropene	ND	5000	
75-15-0	Carbon Disulfide	ND	5000	
56-23-5	Carbon tetrachloride	ND	5000	
108-90-7	Chlorobenzene	ND	5000	
75-00-3	Chloroethane	ND	5000	
67-66-3	Chloroform	ND	5000	
74-87-3	Chloromethane	ND	5000	
156-59-2	cis-1,2-Dichloroethylene	ND	5000	

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0008
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.100 grams

Lab Sample ID: AB38163
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 50
pH: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	5000	
74-95-3	Dibromomethane	ND	5000	
75-71-8	Dichlorodifluoromethane	ND	5000	
60-29-7	Ethyl Ether	ND	5000	
100-41-4	Ethylbenzene	ND	5000	
87-68-3	Hexachlorobutadiene	ND	5000	
98-82-8	Isopropylbenzene	ND	5000	
108-38-3/106-42-3	M/P Xylene	ND	10000	
75-09-2	Methylene Chloride	ND	5000	
1634-04-4	Methyl-t-Butyl Ether	ND	5000	
91-20-3	Naphthalene	ND	5000	
104-51-8	N-Butylbenzene	ND	5000	
103-65-1	N-Propylbenzene	ND	5000	
95-47-6	Ortho Xylene	ND	5000	
99-87-6	Para-Isopropyltoluene	ND	5000	
135-98-8	Sec-Butylbenzene	ND	5000	
100-42-5	Styrene	ND	5000	
10061-02-6	t-1,3-Dichloropropene	ND	5000	
98-06-6	Tert-Butylbenzene	ND	5000	
127-18-4	Tetrachloroethylene	ND	5000	
109-99-9	Tetrahydrofuran	ND	5000	
108-88-3	Toluene	ND	5000	
156-60-5	Trans-1,2-Dichloroethylene	ND	5000	
79-01-6	Trichloroethylene	ND	5000	
75-69-4	Trichlorofluoromethane	ND	5000	
108-05-4	Vinyl Acetate	ND	5000	
75-01-4	Vinyl Chloride	ND	5000	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	96	74 - 136
1,4-Bromofluorobenzene	93	78 - 111
Toluene-D8	97	85 - 118

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0008

Lab Sample ID: AB38163

Date of Collection: 3/20/2013

Matrix: Drum Product

Date of Preparation: 3/25/2013

Amount Prepared: 5 mL

Date of Analysis: 3/25/2013

Percent Solids: N/A

Dry Weight Prepared: N/A

Extract Dilution: 50

Wet Weight Prepared: 0.100 grams

pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
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Comments:

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0009	Lab Sample ID:	AB38164
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.103 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	4900	
71-55-6	1,1,1-Trichloroethane	ND	4900	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4900	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	4900	
79-00-5	1,1,2-Trichloroethane	ND	4900	
75-34-3	1,1-dichloroethane	ND	4900	
75-35-4	1,1-Dichloroethylene	ND	4900	
563-58-6	1,1-Dichloropropene	ND	4900	
87-61-6	1,2,3-Trichlorobenzene	ND	4900	
96-18-4	1,2,3-Trichloropropane	ND	4900	
120-82-1	1,2,4-Trichlorobenzene	ND	4900	
95-63-6	1,2,4-Trimethylbenzene	ND	4900	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	4900	
106-93-4	1,2-Dibromoethane	ND	4900	
95-50-1	1,2-Dichlorobenzene	ND	4900	
107-06-2	1,2-Dichloroethane	ND	4900	
78-87-5	1,2-Dichloropropane	ND	4900	
108-67-8	1,3,5-Trimethylbenzene	ND	4900	
541-73-1	1,3-Dichlorobenzene	ND	4900	
142-28-9	1,3-Dichloropropane	ND	4900	
106-46-7	1,4-Dichlorobenzene	ND	4900	
594-20-7	2,2-Dichloropropane	ND	4900	
78-93-3	2-Butanone (MEK)	ND	4900	
95-49-8	2-Chlorotoluene	ND	4900	
591-78-6	2-Hexanone	ND	4900	
67-64-1	2-Propanone (acetone)	ND	4900	
106-43-4	4-Chlorotoluene	ND	4900	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	4900	
107-13-1	Acrylonitrile	ND	4900	
71-43-2	Benzene	ND	4900	
108-86-1	Bromobenzene	ND	4900	
74-97-5	Bromochloromethane	ND	4900	
75-27-4	Bromodichloromethane	ND	4900	
75-25-2	Bromoform	ND	4900	
74-83-9	Bromomethane	ND	4900	
10061-01-5	c-1,3-dichloropropene	ND	4900	
75-15-0	Carbon Disulfide	ND	4900	
56-23-5	Carbon tetrachloride	ND	4900	
108-90-7	Chlorobenzene	ND	4900	
75-00-3	Chloroethane	ND	4900	
67-66-3	Chloroform	ND	4900	
74-87-3	Chloromethane	ND	4900	
156-59-2	cis-1,2-Dichloroethylene	ND	4900	

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0009	Lab Sample ID:	AB38164
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.103 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	4900	
74-95-3	Dibromomethane	ND	4900	
75-71-8	Dichlorodifluoromethane	ND	4900	
60-29-7	Ethyl Ether	ND	4900	
100-41-4	Ethylbenzene	ND	4900	
87-68-3	Hexachlorobutadiene	ND	4900	
98-82-8	Isopropylbenzene	ND	4900	
108-38-3/106-42-3	M/P Xylene	ND	9700	
75-09-2	Methylene Chloride	ND	4900	
1634-04-4	Methyl-t-Butyl Ether	ND	4900	
91-20-3	Naphthalene	ND	4900	
104-51-8	N-Butylbenzene	ND	4900	
103-65-1	N-Propylbenzene	ND	4900	
95-47-6	Ortho Xylene	ND	4900	
99-87-6	Para-Isopropyltoluene	ND	4900	
135-98-8	Sec-Butylbenzene	ND	4900	
100-42-5	Styrene	ND	4900	
10061-02-6	t-1,3-Dichloropropene	ND	4900	
98-06-6	Tert-Butylbenzene	ND	4900	
127-18-4	Tetrachloroethylene	ND	4900	
109-99-9	Tetrahydrofuran	ND	4900	
108-88-3	Toluene	ND	4900	
156-60-5	Trans-1,2-Dichloroethylene	ND	4900	
79-01-6	Trichloroethylene	ND	4900	
75-69-4	Trichlorofluoromethane	ND	4900	
108-05-4	Vinyl Acetate	ND	4900	
75-01-4	Vinyl Chloride	ND	4900	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	98	74 - 136
1,4-Bromofluorobenzene	92	78 - 111
Toluene-D8	97	85 - 118

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0009
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.103 grams

Lab Sample ID: AB38164
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 50
pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
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Comments:

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VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0010	Lab Sample ID:	AB38165
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	5000
Wet Weight Prepared:	0.080 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	630000	
71-55-6	1,1,1-Trichloroethane	ND	630000	
79-34-5	1,1,2,2-Tetrachloroethane	ND	630000	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	630000	
79-00-5	1,1,2-Trichloroethane	ND	630000	
75-34-3	1,1-dichloroethane	ND	630000	
75-35-4	1,1-Dichloroethylene	ND	630000	
563-58-6	1,1-Dichloropropene	ND	630000	
87-61-6	1,2,3-Trichlorobenzene	ND	630000	
96-18-4	1,2,3-Trichloropropane	ND	630000	
120-82-1	1,2,4-Trichlorobenzene	ND	630000	
95-63-6	1,2,4-Trimethylbenzene	780000	630000	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	630000	
106-93-4	1,2-Dibromoethane	ND	630000	
95-50-1	1,2-Dichlorobenzene	ND	630000	
107-06-2	1,2-Dichloroethane	ND	630000	
78-87-5	1,2-Dichloropropane	ND	630000	
108-67-8	1,3,5-Trimethylbenzene	ND	630000	
541-73-1	1,3-Dichlorobenzene	ND	630000	
142-28-9	1,3-Dichloropropane	ND	630000	
106-46-7	1,4-Dichlorobenzene	ND	630000	
594-20-7	2,2-Dichloropropane	ND	630000	
78-93-3	2-Butanone (MEK)	ND	630000	
95-49-8	2-Chlorotoluene	ND	630000	
591-78-6	2-Hexanone	ND	630000	
67-64-1	2-Propanone (acetone)	ND	630000	
106-43-4	4-Chlorotoluene	ND	630000	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	630000	
107-13-1	Acrylonitrile	ND	630000	
71-43-2	Benzene	ND	630000	
108-86-1	Bromobenzene	ND	630000	
74-97-5	Bromochloromethane	ND	630000	
75-27-4	Bromodichloromethane	ND	630000	
75-25-2	Bromoform	ND	630000	
74-83-9	Bromomethane	ND	630000	
10061-01-5	c-1,3-dichloropropene	ND	630000	
75-15-0	Carbon Disulfide	ND	630000	
56-23-5	Carbon tetrachloride	ND	630000	
108-90-7	Chlorobenzene	ND	630000	
75-00-3	Chloroethane	ND	630000	
67-66-3	Chloroform	ND	630000	
74-87-3	Chloromethane	ND	630000	
156-59-2	cis-1,2-Dichloroethylene	ND	630000	

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0010
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.080 grams

Lab Sample ID: AB38165
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 5000
pH: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	630000	
74-95-3	Dibromomethane	ND	630000	
75-71-8	Dichlorodifluoromethane	ND	630000	
60-29-7	Ethyl Ether	ND	630000	
100-41-4	Ethylbenzene	ND	630000	
87-68-3	Hexachlorobutadiene	ND	630000	
98-82-8	Isopropylbenzene	ND	630000	
108-38-3/106-42-3	M/P Xylene	ND	1300000	
75-09-2	Methylene Chloride	ND	630000	
1634-04-4	Methyl-t-Butyl Ether	ND	630000	
91-20-3	Naphthalene	8540000	630000	
104-51-8	N-Butylbenzene	4060000	630000	
103-65-1	N-Propylbenzene	ND	630000	
95-47-6	Ortho Xylene	ND	630000	
99-87-6	Para-Isopropyltoluene	1080000	630000	
135-98-8	Sec-Butylbenzene	ND	630000	
100-42-5	Styrene	ND	630000	
10061-02-6	t-1,3-Dichloropropene	ND	630000	
98-06-6	Tert-Butylbenzene	ND	630000	
127-18-4	Tetrachloroethylene	ND	630000	
109-99-9	Tetrahydrofuran	ND	630000	
108-88-3	Toluene	ND	630000	
156-60-5	Trans-1,2-Dichloroethylene	ND	630000	
79-01-6	Trichloroethylene	ND	630000	
75-69-4	Trichlorofluoromethane	ND	630000	
108-05-4	Vinyl Acetate	ND	630000	
75-01-4	Vinyl Chloride	ND	630000	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	107	74 - 136
1,4-Bromofluorobenzene	92	78 - 111
Toluene-D8	98	85 - 118

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0010
 Date of Collection: 3/20/2013
 Date of Preparation: 3/25/2013
 Date of Analysis: 3/25/2013
 Dry Weight Prepared: N/A
 Wet Weight Prepared: 0.080 grams

Lab Sample ID: AB38165
 Matrix: Drum Product
 Amount Prepared: 5 mL
 Percent Solids: N/A
 Extract Dilution: 5000
 pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
Comments:	Tentatively Identified Compounds	(ug/Kg)		Qualifier
	1-methyl-4 propylbenzene	6700000		J
	1-ethyl-2,3-dimethylbenze	8800000		J
	1-ethyl-2-(1-methylethylbenzene)	5700000		J
	1-ethyl-4-(1-methylethylbenzene)	6000000		J
	1-ethyl-3-(1-methylethybenzene)	1300000		J
	1,2,4,5-tetramethylbenzene	7600000		J
	1,2,3,4-tetramethylbenzene	1300000		J
	4-ethyl-1,2-dimethylbenzene	490000		J
	2,3-dihydro-5-methyl 1H-indene	590000		J

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0012	Lab Sample ID:	AB38166
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.102 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	4900	
71-55-6	1,1,1-Trichloroethane	ND	4900	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4900	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	4900	
79-00-5	1,1,2-Trichloroethane	ND	4900	
75-34-3	1,1-dichloroethane	ND	4900	
75-35-4	1,1-Dichloroethylene	ND	4900	
563-58-6	1,1-Dichloropropene	ND	4900	
87-61-6	1,2,3-Trichlorobenzene	ND	4900	
96-18-4	1,2,3-Trichloropropane	ND	4900	
120-82-1	1,2,4-Trichlorobenzene	ND	4900	
95-63-6	1,2,4-Trimethylbenzene	ND	4900	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	4900	
106-93-4	1,2-Dibromoethane	ND	4900	
95-50-1	1,2-Dichlorobenzene	ND	4900	
107-06-2	1,2-Dichloroethane	ND	4900	
78-87-5	1,2-Dichloropropane	ND	4900	
108-67-8	1,3,5-Trimethylbenzene	ND	4900	
541-73-1	1,3-Dichlorobenzene	ND	4900	
142-28-9	1,3-Dichloropropane	ND	4900	
106-46-7	1,4-Dichlorobenzene	ND	4900	
594-20-7	2,2-Dichloropropane	ND	4900	
78-93-3	2-Butanone (MEK)	ND	4900	
95-49-8	2-Chlorotoluene	ND	4900	
591-78-6	2-Hexanone	ND	4900	
67-64-1	2-Propanone (acetone)	ND	4900	
106-43-4	4-Chlorotoluene	ND	4900	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	4900	
107-13-1	Acrylonitrile	ND	4900	
71-43-2	Benzene	ND	4900	
108-86-1	Bromobenzene	ND	4900	
74-97-5	Bromochloromethane	ND	4900	
75-27-4	Bromodichloromethane	ND	4900	
75-25-2	Bromoform	ND	4900	
74-83-9	Bromomethane	ND	4900	
10061-01-5	c-1,3-dichloropropene	ND	4900	
75-15-0	Carbon Disulfide	ND	4900	
56-23-5	Carbon tetrachloride	ND	4900	
108-90-7	Chlorobenzene	ND	4900	
75-00-3	Chloroethane	ND	4900	
67-66-3	Chloroform	ND	4900	
74-87-3	Chloromethane	ND	4900	
156-59-2	cis-1,2-Dichloroethylene	ND	4900	

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VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0012	Lab Sample ID:	AB38166
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.102 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	4900	
74-95-3	Dibromomethane	ND	4900	
75-71-8	Dichlorodifluoromethane	ND	4900	
60-29-7	Ethyl Ether	ND	4900	
100-41-4	Ethylbenzene	ND	4900	
87-68-3	Hexachlorobutadiene	ND	4900	
98-82-8	Isopropylbenzene	ND	4900	
108-38-3/106-42-3	M/P Xylene	ND	9800	
75-09-2	Methylene Chloride	ND	4900	
1634-04-4	Methyl-t-Butyl Ether	ND	4900	
91-20-3	Naphthalene	ND	4900	
104-51-8	N-Butylbenzene	ND	4900	
103-65-1	N-Propylbenzene	ND	4900	
95-47-6	Ortho Xylene	ND	4900	
99-87-6	Para-Isopropyltoluene	ND	4900	
135-98-8	Sec-Butylbenzene	ND	4900	
100-42-5	Styrene	ND	4900	
10061-02-6	t-1,3-Dichloropropene	ND	4900	
98-06-6	Tert-Butylbenzene	ND	4900	
127-18-4	Tetrachloroethylene	ND	4900	
109-99-9	Tetrahydrofuran	ND	4900	
108-88-3	Toluene	ND	4900	
156-60-5	Trans-1,2-Dichloroethylene	ND	4900	
79-01-6	Trichloroethylene	ND	4900	
75-69-4	Trichlorofluoromethane	ND	4900	
108-05-4	Vinyl Acetate	ND	4900	
75-01-4	Vinyl Chloride	ND	4900	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	98	74 - 136
1,4-Bromofluorobenzene	94	78 - 111
Toluene-D8	96	85 - 118

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VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0012
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.102 grams

Lab Sample ID: AB38166
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 50
pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
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Comments:

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VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0014	Lab Sample ID:	AB38167
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.098 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	5100	
71-55-6	1,1,1-Trichloroethane	ND	5100	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5100	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	5100	
79-00-5	1,1,2-Trichloroethane	ND	5100	
75-34-3	1,1-dichloroethane	ND	5100	
75-35-4	1,1-Dichloroethylene	ND	5100	
563-58-6	1,1-Dichloropropene	ND	5100	
87-61-6	1,2,3-Trichlorobenzene	ND	5100	
96-18-4	1,2,3-Trichloropropane	ND	5100	
120-82-1	1,2,4-Trichlorobenzene	ND	5100	
95-63-6	1,2,4-Trimethylbenzene	ND	5100	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	5100	
106-93-4	1,2-Dibromoethane	ND	5100	
95-50-1	1,2-Dichlorobenzene	ND	5100	
107-06-2	1,2-Dichloroethane	ND	5100	
78-87-5	1,2-Dichloropropane	ND	5100	
108-67-8	1,3,5-Trimethylbenzene	ND	5100	
541-73-1	1,3-Dichlorobenzene	ND	5100	
142-28-9	1,3-Dichloropropane	ND	5100	
106-46-7	1,4-Dichlorobenzene	ND	5100	
594-20-7	2,2-Dichloropropane	ND	5100	
78-93-3	2-Butanone (MEK)	ND	5100	
95-49-8	2-Chlorotoluene	ND	5100	
591-78-6	2-Hexanone	ND	5100	
67-64-1	2-Propanone (acetone)	ND	5100	
106-43-4	4-Chlorotoluene	ND	5100	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	5100	
107-13-1	Acrylonitrile	ND	5100	
71-43-2	Benzene	ND	5100	
108-86-1	Bromobenzene	ND	5100	
74-97-5	Bromochloromethane	ND	5100	
75-27-4	Bromodichloromethane	ND	5100	
75-25-2	Bromoform	ND	5100	
74-83-9	Bromomethane	ND	5100	
10061-01-5	c-1,3-dichloropropene	ND	5100	
75-15-0	Carbon Disulfide	ND	5100	
56-23-5	Carbon tetrachloride	ND	5100	
108-90-7	Chlorobenzene	ND	5100	
75-00-3	Chloroethane	ND	5100	
67-66-3	Chloroform	ND	5100	
74-87-3	Chloromethane	ND	5100	
156-59-2	cis-1,2-Dichloroethylene	ND	5100	

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VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0014
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.098 grams

Lab Sample ID: AB38167
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 50
pH: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	5100	
74-95-3	Dibromomethane	ND	5100	
75-71-8	Dichlorodifluoromethane	ND	5100	
60-29-7	Ethyl Ether	ND	5100	
100-41-4	Ethylbenzene	ND	5100	
87-68-3	Hexachlorobutadiene	ND	5100	
98-82-8	Isopropylbenzene	ND	5100	
108-38-3/106-42-3	M/P Xylene	ND	10000	
75-09-2	Methylene Chloride	ND	5100	
1634-04-4	Methyl-t-Butyl Ether	ND	5100	
91-20-3	Naphthalene	ND	5100	
104-51-8	N-Butylbenzene	ND	5100	
103-65-1	N-Propylbenzene	ND	5100	
95-47-6	Ortho Xylene	ND	5100	
99-87-6	Para-Isopropyltoluene	ND	5100	
135-98-8	Sec-Butylbenzene	ND	5100	
100-42-5	Styrene	ND	5100	
10061-02-6	t-1,3-Dichloropropene	ND	5100	
98-06-6	Tert-Butylbenzene	ND	5100	
127-18-4	Tetrachloroethylene	ND	5100	
109-99-9	Tetrahydrofuran	ND	5100	
108-88-3	Toluene	ND	5100	
156-60-5	Trans-1,2-Dichloroethylene	ND	5100	
79-01-6	Trichloroethylene	ND	5100	
75-69-4	Trichlorofluoromethane	ND	5100	
108-05-4	Vinyl Acetate	ND	5100	
75-01-4	Vinyl Chloride	ND	5100	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	102	74 - 136
1,4-Bromofluorobenzene	92	78 - 111
Toluene-D8	97	85 - 118

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0014
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.098 grams

Lab Sample ID: AB38167
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 50
pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
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Comments:

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VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0015
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.099 grams

Lab Sample ID: AB38168
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 50
pH: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	5100	
71-55-6	1,1,1-Trichloroethane	ND	5100	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5100	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	5100	
79-00-5	1,1,2-Trichloroethane	ND	5100	
75-34-3	1,1-dichloroethane	ND	5100	
75-35-4	1,1-Dichloroethylene	ND	5100	
563-58-6	1,1-Dichloropropene	ND	5100	
87-61-6	1,2,3-Trichlorobenzene	ND	5100	
96-18-4	1,2,3-Trichloropropane	ND	5100	
120-82-1	1,2,4-Trichlorobenzene	ND	5100	
95-63-6	1,2,4-Trimethylbenzene	ND	5100	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	5100	
106-93-4	1,2-Dibromoethane	ND	5100	
95-50-1	1,2-Dichlorobenzene	ND	5100	
107-06-2	1,2-Dichloroethane	ND	5100	
78-87-5	1,2-Dichloropropane	ND	5100	
108-67-8	1,3,5-Trimethylbenzene	ND	5100	
541-73-1	1,3-Dichlorobenzene	ND	5100	
142-28-9	1,3-Dichloropropane	ND	5100	
106-46-7	1,4-Dichlorobenzene	ND	5100	
594-20-7	2,2-Dichloropropane	ND	5100	
78-93-3	2-Butanone (MEK)	ND	5100	
95-49-8	2-Chlorotoluene	ND	5100	
591-78-6	2-Hexanone	ND	5100	
67-64-1	2-Propanone (acetone)	ND	5100	
106-43-4	4-Chlorotoluene	ND	5100	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	5100	
107-13-1	Acrylonitrile	ND	5100	
71-43-2	Benzene	ND	5100	
108-86-1	Bromobenzene	ND	5100	
74-97-5	Bromochloromethane	ND	5100	
75-27-4	Bromodichloromethane	ND	5100	
75-25-2	Bromoform	ND	5100	
74-83-9	Bromomethane	ND	5100	
10061-01-5	c-1,3-dichloropropene	ND	5100	
75-15-0	Carbon Disulfide	ND	5100	
56-23-5	Carbon tetrachloride	ND	5100	
108-90-7	Chlorobenzene	ND	5100	
75-00-3	Chloroethane	ND	5100	
67-66-3	Chloroform	ND	5100	
74-87-3	Chloromethane	ND	5100	
156-59-2	cis-1,2-Dichloroethylene	ND	5100	

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VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0015	Lab Sample ID:	AB38168
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.099 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	5100	
74-95-3	Dibromomethane	ND	5100	
75-71-8	Dichlorodifluoromethane	ND	5100	
60-29-7	Ethyl Ether	ND	5100	
100-41-4	Ethylbenzene	ND	5100	
87-68-3	Hexachlorobutadiene	ND	5100	
98-82-8	Isopropylbenzene	ND	5100	
108-38-3/106-42-3	M/P Xylene	ND	10000	
75-09-2	Methylene Chloride	ND	5100	
1634-04-4	Methyl-t-Butyl Ether	ND	5100	
91-20-3	Naphthalene	ND	5100	
104-51-8	N-Butylbenzene	ND	5100	
103-65-1	N-Propylbenzene	ND	5100	
95-47-6	Ortho Xylene	ND	5100	
99-87-6	Para-Isopropyltoluene	ND	5100	
135-98-8	Sec-Butylbenzene	ND	5100	
100-42-5	Styrene	ND	5100	
10061-02-6	t-1,3-Dichloropropene	ND	5100	
98-06-6	Tert-Butylbenzene	ND	5100	
127-18-4	Tetrachloroethylene	ND	5100	
109-99-9	Tetrahydrofuran	ND	5100	
108-88-3	Toluene	ND	5100	
156-60-5	Trans-1,2-Dichloroethylene	ND	5100	
79-01-6	Trichloroethylene	ND	5100	
75-69-4	Trichlorofluoromethane	ND	5100	
108-05-4	Vinyl Acetate	ND	5100	
75-01-4	Vinyl Chloride	ND	5100	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	100	74 - 136
1,4-Bromofluorobenzene	91	78 - 111
Toluene-D8	96	85 - 118

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0015
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.099 grams

Lab Sample ID: AB38168
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 50
pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
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Comments:

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VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0016	Lab Sample ID:	AB38169
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.104 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	4800	
71-55-6	1,1,1-Trichloroethane	ND	4800	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4800	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	4800	
79-00-5	1,1,2-Trichloroethane	ND	4800	
75-34-3	1,1-dichloroethane	ND	4800	
75-35-4	1,1-Dichloroethylene	ND	4800	
563-58-6	1,1-Dichloropropene	ND	4800	
87-61-6	1,2,3-Trichlorobenzene	ND	4800	
96-18-4	1,2,3-Trichloropropane	ND	4800	
120-82-1	1,2,4-Trichlorobenzene	ND	4800	
95-63-6	1,2,4-Trimethylbenzene	ND	4800	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	4800	
106-93-4	1,2-Dibromoethane	ND	4800	
95-50-1	1,2-Dichlorobenzene	ND	4800	
107-06-2	1,2-Dichloroethane	ND	4800	
78-87-5	1,2-Dichloropropane	ND	4800	
108-67-8	1,3,5-Trimethylbenzene	ND	4800	
541-73-1	1,3-Dichlorobenzene	ND	4800	
142-28-9	1,3-Dichloropropane	ND	4800	
106-46-7	1,4-Dichlorobenzene	ND	4800	
594-20-7	2,2-Dichloropropane	ND	4800	
78-93-3	2-Butanone (MEK)	ND	4800	
95-49-8	2-Chlorotoluene	ND	4800	
591-78-6	2-Hexanone	ND	4800	
67-64-1	2-Propanone (acetone)	ND	4800	
106-43-4	4-Chlorotoluene	ND	4800	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	4800	
107-13-1	Acrylonitrile	ND	4800	
71-43-2	Benzene	ND	4800	
108-86-1	Bromobenzene	ND	4800	
74-97-5	Bromochloromethane	ND	4800	
75-27-4	Bromodichloromethane	ND	4800	
75-25-2	Bromoform	ND	4800	
74-83-9	Bromomethane	ND	4800	
10061-01-5	c-1,3-dichloropropene	ND	4800	
75-15-0	Carbon Disulfide	ND	4800	
56-23-5	Carbon tetrachloride	ND	4800	
108-90-7	Chlorobenzene	ND	4800	
75-00-3	Chloroethane	ND	4800	
67-66-3	Chloroform	ND	4800	
74-87-3	Chloromethane	ND	4800	
156-59-2	cis-1,2-Dichloroethylene	ND	4800	

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0016	Lab Sample ID:	AB38169
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.104 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	4800	
74-95-3	Dibromomethane	ND	4800	
75-71-8	Dichlorodifluoromethane	ND	4800	
60-29-7	Ethyl Ether	ND	4800	
100-41-4	Ethylbenzene	ND	4800	
87-68-3	Hexachlorobutadiene	ND	4800	
98-82-8	Isopropylbenzene	ND	4800	
108-38-3/106-42-3	M/P Xylene	ND	9600	
75-09-2	Methylene Chloride	ND	4800	
1634-04-4	Methyl-t-Butyl Ether	ND	4800	
91-20-3	Naphthalene	ND	4800	
104-51-8	N-Butylbenzene	ND	4800	
103-65-1	N-Propylbenzene	ND	4800	
95-47-6	Ortho Xylene	ND	4800	
99-87-6	Para-Isopropyltoluene	ND	4800	
135-98-8	Sec-Butylbenzene	ND	4800	
100-42-5	Styrene	ND	4800	
10061-02-6	t-1,3-Dichloropropene	ND	4800	
98-06-6	Tert-Butylbenzene	ND	4800	
127-18-4	Tetrachloroethylene	ND	4800	
109-99-9	Tetrahydrofuran	ND	4800	
108-88-3	Toluene	ND	4800	
156-60-5	Trans-1,2-Dichloroethylene	ND	4800	
79-01-6	Trichloroethylene	ND	4800	
75-69-4	Trichlorofluoromethane	ND	4800	
108-05-4	Vinyl Acetate	ND	4800	
75-01-4	Vinyl Chloride	ND	4800	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	104	74 - 136
1,4-Bromofluorobenzene	93	78 - 111
Toluene-D8	98	85 - 118

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0016

Lab Sample ID: AB38169

Date of Collection: 3/20/2013

Matrix: Drum Product

Date of Preparation: 3/25/2013

Amount Prepared: 5 mL

Date of Analysis: 3/25/2013

Percent Solids: N/A

Dry Weight Prepared: N/A

Extract Dilution: 50

Wet Weight Prepared: 0.104 grams

pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
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Comments:

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VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0017	Lab Sample ID:	AB38170
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/26/2013	Amount Prepared:	5 mL
Date of Analysis:	3/26/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	1000
Wet Weight Prepared:	0.075 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	130000	
71-55-6	1,1,1-Trichloroethane	ND	130000	
79-34-5	1,1,2,2-Tetrachloroethane	ND	130000	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	130000	
79-00-5	1,1,2-Trichloroethane	ND	130000	
75-34-3	1,1-dichloroethane	ND	130000	
75-35-4	1,1-Dichloroethylene	ND	130000	
563-58-6	1,1-Dichloropropene	ND	130000	
87-61-6	1,2,3-Trichlorobenzene	ND	130000	
96-18-4	1,2,3-Trichloropropane	ND	130000	
120-82-1	1,2,4-Trichlorobenzene	ND	130000	
95-63-6	1,2,4-Trimethylbenzene	4570000	130000	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	130000	
106-93-4	1,2-Dibromoethane	ND	130000	
95-50-1	1,2-Dichlorobenzene	ND	130000	
107-06-2	1,2-Dichloroethane	ND	130000	
78-87-5	1,2-Dichloropropane	ND	130000	
108-67-8	1,3,5-Trimethylbenzene	930000	130000	
541-73-1	1,3-Dichlorobenzene	ND	130000	
142-28-9	1,3-Dichloropropane	ND	130000	
106-46-7	1,4-Dichlorobenzene	ND	130000	
594-20-7	2,2-Dichloropropane	ND	130000	
78-93-3	2-Butanone (MEK)	ND	130000	
95-49-8	2-Chlorotoluene	ND	130000	
591-78-6	2-Hexanone	ND	130000	
67-64-1	2-Propanone (acetone)	ND	130000	
106-43-4	4-Chlorotoluene	ND	130000	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	130000	
107-13-1	Acrylonitrile	ND	130000	
71-43-2	Benzene	ND	130000	
108-86-1	Bromobenzene	ND	130000	
74-97-5	Bromochloromethane	ND	130000	
75-27-4	Bromodichloromethane	ND	130000	
75-25-2	Bromoform	ND	130000	
74-83-9	Bromomethane	ND	130000	
10061-01-5	c-1,3-dichloropropene	ND	130000	
75-15-0	Carbon Disulfide	ND	130000	
56-23-5	Carbon tetrachloride	ND	130000	
108-90-7	Chlorobenzene	ND	130000	
75-00-3	Chloroethane	ND	130000	
67-66-3	Chloroform	ND	130000	
74-87-3	Chloromethane	ND	130000	
156-59-2	cis-1,2-Dichloroethylene	ND	130000	

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0017
Date of Collection: 3/20/2013
Date of Preparation: 3/26/2013
Date of Analysis: 3/26/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.075 grams

Lab Sample ID: AB38170
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 1000
pH: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	130000	
74-95-3	Dibromomethane	ND	130000	
75-71-8	Dichlorodifluoromethane	ND	130000	
60-29-7	Ethyl Ether	ND	130000	
100-41-4	Ethylbenzene	ND	130000	
87-68-3	Hexachlorobutadiene	ND	130000	
98-82-8	Isopropylbenzene	ND	130000	
108-38-3/106-42-3	M/P Xylene	ND	260000	
75-09-2	Methylene Chloride	ND	130000	
1634-04-4	Methyl-t-Butyl Ether	ND	130000	
91-20-3	Naphthalene	1960000	130000	
104-51-8	N-Butylbenzene	1530000	130000	
103-65-1	N-Propylbenzene	370000	130000	
95-47-6	Ortho Xylene	ND	130000	
99-87-6	Para-Isopropyltoluene	580000	130000	
135-98-8	Sec-Butylbenzene	420000	130000	
100-42-5	Styrene	ND	130000	
10061-02-6	t-1,3-Dichloropropene	ND	130000	
98-06-6	Tert-Butylbenzene	ND	130000	
127-18-4	Tetrachloroethylene	ND	130000	
109-99-9	Tetrahydrofuran	ND	130000	
108-88-3	Toluene	ND	130000	
156-60-5	Trans-1,2-Dichloroethylene	ND	130000	
79-01-6	Trichloroethylene	ND	130000	
75-69-4	Trichlorofluoromethane	ND	130000	
108-05-4	Vinyl Acetate	ND	130000	
75-01-4	Vinyl Chloride	ND	130000	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	106	74 - 136
1,4-Bromofluorobenzene	100	78 - 111
Toluene-D8	98	85 - 118

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0017
Date of Collection: 3/20/2013
Date of Preparation: 3/26/2013
Date of Analysis: 3/26/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.075 grams

Lab Sample ID: AB38170
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 1000
pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
Comments: Tentatively Identified Compounds				
		(ug/Kg)		Qualifier
	1,2,3-trimethylbenzene	3000000		J
	Undecane	1500000		J
	2-tolyoxirane	1400000		J
	1-ethyl-2,3-dimethylbenzene	2000000		J
	1-methyl-2-(1-methylethylbenzene)	1100000		J
	1-methyl-3-(1-methylethylbenzene)	1300000		J
	1-ethyl-3-ethylbenzene	1300000		J
	1,2,3,5-tetramethylbenzene	1900000		J
	1-ethyl-2,3-dimethylbenzene	2800000		J

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0018	Lab Sample ID:	AB38171
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.103 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	4900	
71-55-6	1,1,1-Trichloroethane	ND	4900	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4900	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	4900	
79-00-5	1,1,2-Trichloroethane	ND	4900	
75-34-3	1,1-dichloroethane	ND	4900	
75-35-4	1,1-Dichloroethylene	ND	4900	
563-58-6	1,1-Dichloropropene	ND	4900	
87-61-6	1,2,3-Trichlorobenzene	ND	4900	
96-18-4	1,2,3-Trichloropropane	ND	4900	
120-82-1	1,2,4-Trichlorobenzene	ND	4900	
95-63-6	1,2,4-Trimethylbenzene	ND	4900	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	4900	
106-93-4	1,2-Dibromoethane	ND	4900	
95-50-1	1,2-Dichlorobenzene	ND	4900	
107-06-2	1,2-Dichloroethane	ND	4900	
78-87-5	1,2-Dichloropropane	ND	4900	
108-67-8	1,3,5-Trimethylbenzene	ND	4900	
541-73-1	1,3-Dichlorobenzene	ND	4900	
142-28-9	1,3-Dichloropropane	ND	4900	
106-46-7	1,4-Dichlorobenzene	ND	4900	
594-20-7	2,2-Dichloropropane	ND	4900	
78-93-3	2-Butanone (MEK)	ND	4900	
95-49-8	2-Chlorotoluene	ND	4900	
591-78-6	2-Hexanone	ND	4900	
67-64-1	2-Propanone (acetone)	ND	4900	
106-43-4	4-Chlorotoluene	ND	4900	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	4900	
107-13-1	Acrylonitrile	ND	4900	
71-43-2	Benzene	ND	4900	
108-86-1	Bromobenzene	ND	4900	
74-97-5	Bromochloromethane	ND	4900	
75-27-4	Bromodichloromethane	ND	4900	
75-25-2	Bromoform	ND	4900	
74-83-9	Bromomethane	ND	4900	
10061-01-5	c-1,3-dichloropropene	ND	4900	
75-15-0	Carbon Disulfide	ND	4900	
56-23-5	Carbon tetrachloride	ND	4900	
108-90-7	Chlorobenzene	ND	4900	
75-00-3	Chloroethane	ND	4900	
67-66-3	Chloroform	ND	4900	
74-87-3	Chloromethane	ND	4900	
156-59-2	cis-1,2-Dichloroethylene	ND	4900	

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0018
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.103 grams

Lab Sample ID: AB38171
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 50
pH: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	4900	
74-95-3	Dibromomethane	ND	4900	
75-71-8	Dichlorodifluoromethane	ND	4900	
60-29-7	Ethyl Ether	ND	4900	
100-41-4	Ethylbenzene	ND	4900	
87-68-3	Hexachlorobutadiene	ND	4900	
98-82-8	Isopropylbenzene	ND	4900	
108-38-3/106-42-3	M/P Xylene	ND	9700	
75-09-2	Methylene Chloride	ND	4900	
1634-04-4	Methyl-t-Butyl Ether	ND	4900	
91-20-3	Naphthalene	ND	4900	
104-51-8	N-Butylbenzene	ND	4900	
103-65-1	N-Propylbenzene	ND	4900	
95-47-6	Ortho Xylene	ND	4900	
99-87-6	Para-Isopropyltoluene	ND	4900	
135-98-8	Sec-Butylbenzene	ND	4900	
100-42-5	Styrene	ND	4900	
10061-02-6	t-1,3-Dichloropropene	ND	4900	
98-06-6	Tert-Butylbenzene	ND	4900	
127-18-4	Tetrachloroethylene	ND	4900	
109-99-9	Tetrahydrofuran	ND	4900	
108-88-3	Toluene	ND	4900	
156-60-5	Trans-1,2-Dichloroethylene	ND	4900	
79-01-6	Trichloroethylene	ND	4900	
75-69-4	Trichlorofluoromethane	ND	4900	
108-05-4	Vinyl Acetate	ND	4900	
75-01-4	Vinyl Chloride	ND	4900	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	104	74 - 136
1,4-Bromofluorobenzene	92	78 - 111
Toluene-D8	97	85 - 118

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0018
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.103 grams

Lab Sample ID: AB38171
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 50
pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
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Comments:

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VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0019	Lab Sample ID:	AB38172
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.080 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
630-20-6	1,1,1,2-Tetrachloroethane	ND	6300	
71-55-6	1,1,1-Trichloroethane	ND	6300	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6300	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroetha	ND	6300	
79-00-5	1,1,2-Trichloroethane	ND	6300	
75-34-3	1,1-dichloroethane	ND	6300	
75-35-4	1,1-Dichloroethylene	ND	6300	
563-58-6	1,1-Dichloropropene	ND	6300	
87-61-6	1,2,3-Trichlorobenzene	ND	6300	
96-18-4	1,2,3-Trichloropropane	ND	6300	
120-82-1	1,2,4-Trichlorobenzene	ND	6300	
95-63-6	1,2,4-Trimethylbenzene	ND	6300	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	6300	
106-93-4	1,2-Dibromoethane	ND	6300	
95-50-1	1,2-Dichlorobenzene	ND	6300	
107-06-2	1,2-Dichloroethane	ND	6300	
78-87-5	1,2-Dichloropropane	ND	6300	
108-67-8	1,3,5-Trimethylbenzene	ND	6300	
541-73-1	1,3-Dichlorobenzene	ND	6300	
142-28-9	1,3-Dichloropropane	ND	6300	
106-46-7	1,4-Dichlorobenzene	ND	6300	
594-20-7	2,2-Dichloropropane	ND	6300	
78-93-3	2-Butanone (MEK)	ND	6300	
95-49-8	2-Chlorotoluene	ND	6300	
591-78-6	2-Hexanone	ND	6300	
67-64-1	2-Propanone (acetone)	ND	6300	
106-43-4	4-Chlorotoluene	ND	6300	
108-10-1	4-Methyl-2-Pentanone(MIBK)	ND	6300	
107-13-1	Acrylonitrile	ND	6300	
71-43-2	Benzene	ND	6300	
108-86-1	Bromobenzene	ND	6300	
74-97-5	Bromochloromethane	ND	6300	
75-27-4	Bromodichloromethane	ND	6300	
75-25-2	Bromoform	ND	6300	
74-83-9	Bromomethane	ND	6300	
10061-01-5	c-1,3-dichloropropene	ND	6300	
75-15-0	Carbon Disulfide	ND	6300	
56-23-5	Carbon tetrachloride	ND	6300	
108-90-7	Chlorobenzene	ND	6300	
75-00-3	Chloroethane	ND	6300	
67-66-3	Chloroform	ND	6300	
74-87-3	Chloromethane	ND	6300	
156-59-2	cis-1,2-Dichloroethylene	ND	6300	

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID:	R01-130227AJ-0019	Lab Sample ID:	AB38172
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	5 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	50
Wet Weight Prepared:	0.080 grams	pH:	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
124-48-1	Dibromochloromethane	ND	6300	
74-95-3	Dibromomethane	ND	6300	
75-71-8	Dichlorodifluoromethane	ND	6300	
60-29-7	Ethyl Ether	ND	6300	
100-41-4	Ethylbenzene	ND	6300	
87-68-3	Hexachlorobutadiene	ND	6300	
98-82-8	Isopropylbenzene	ND	6300	
108-38-3/106-42-3	M/P Xylene	ND	13000	
75-09-2	Methylene Chloride	ND	6300	
1634-04-4	Methyl-t-Butyl Ether	ND	6300	
91-20-3	Naphthalene	ND	6300	
104-51-8	N-Butylbenzene	ND	6300	
103-65-1	N-Propylbenzene	ND	6300	
95-47-6	Ortho Xylene	ND	6300	
99-87-6	Para-Isopropyltoluene	ND	6300	
135-98-8	Sec-Butylbenzene	ND	6300	
100-42-5	Styrene	ND	6300	
10061-02-6	t-1,3-Dichloropropene	ND	6300	
98-06-6	Tert-Butylbenzene	ND	6300	
127-18-4	Tetrachloroethylene	ND	6300	
109-99-9	Tetrahydrofuran	ND	6300	
108-88-3	Toluene	ND	6300	
156-60-5	Trans-1,2-Dichloroethylene	ND	6300	
79-01-6	Trichloroethylene	ND	6300	
75-69-4	Trichlorofluoromethane	ND	6300	
108-05-4	Vinyl Acetate	ND	6300	
75-01-4	Vinyl Chloride	ND	6300	

Surrogate Compounds	Recoveries (%)	QC Ranges
1,2-Dichloroethane-D4	103	74 - 136
1,4-Bromofluorobenzene	92	78 - 111
Toluene-D8	97	85 - 118

Creative Paper - Worcester, MA

VOAs in Soil High Level Method

Client Sample ID: R01-130227AJ-0019
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.080 grams

Lab Sample ID: AB38172
Matrix: Drum Product
Amount Prepared: 5 mL
Percent Solids: N/A
Extract Dilution: 50
pH: N/A

<u>CAS Number</u>	<u>Compound</u>	<u>Concentration ug/Kg</u>	<u>RL ug/Kg</u>	<u>Qualifier</u>
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Comments:

Creative Paper - Worcester, MA

MATRIX SPIKE (MS) RECOVERY

Sample ID: AB38159

PARAMETER	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC	QC LIMITS (% REC)
1,1,1,2-Tetrachloroethane	102,048	ND	100000	98	74 - 124
1,1,1-Trichloroethane	102,048	ND	100000	98	76 - 132
1,1,2,2-Tetrachloroethane	102,048	ND	99000	97	69 - 125
1,1,2-Trichloro-1,2,2-Trifluoroetha	102,048	ND	99000	97	68 - 144
1,1,2-Trichloroethane	102,048	ND	100000	98	75 - 126
1,1-Dichloroethylene	102,048	ND	100000	98	65 - 140
1,1-Dichloropropene	102,048	ND	100000	98	81 - 125
1,1-dichloroethane	102,048	ND	96000	94	77 - 130
1,2,3-Trichlorobenzene	102,048	ND	91000	89	64 - 125
1,2,3-Trichloropropane	102,048	ND	95000	93	68 - 122
1,2,4-Trichlorobenzene	102,048	ND	99000	97	72 - 120
1,2,4-Trimethylbenzene	102,048	ND	100000	98	81 - 125
1,2-Dibromo-3-Chloropropane	102,048	ND	95000	93	54 - 125
1,2-Dibromoethane	102,048	ND	100000	98	73 - 124
1,2-Dichlorobenzene	102,048	ND	99000	97	81 - 116
1,2-Dichloroethane	102,048	ND	94000	92	74 - 130
1,2-Dichloropropane	102,048	ND	98000	96	78 - 120
1,3,5-Trimethylbenzene	102,048	ND	100000	98	81 - 125
1,3-Dichlorobenzene	102,048	ND	99000	97	82 - 117
1,3-Dichloropropane	102,048	ND	100000	98	76 - 123
1,4-Dichlorobenzene	102,048	ND	96000	94	80 - 116
2,2-Dichloropropane	102,048	ND	100000	98	57 - 147
2-Butanone (MEK)	102,048	ND	100000	98	41 - 151
2-Chlorotoluene	102,048	ND	98000	96	82 - 119
2-Hexanone	102,048	ND	94000	92	51 - 148
2-Propanone (acetone)	102,048	ND	100000	98	25 - 161
4-Chlorotoluene	102,048	ND	98000	96	82 - 119
4-Methyl-2-Pentanone(MIBK)	102,048	ND	92000	90	62 - 130
Acrylonitrile	102,048	ND	100000	98	67 - 130
Benzene	102,048	ND	100000	98	82 - 124
Bromobenzene	102,048	ND	98000	96	79 - 119
Bromochloromethane	102,048	ND	97000	95	79 - 125
Bromodichloromethane	102,048	ND	97000	95	71 - 126
Bromoform	102,048	ND	98000	96	56 - 119
Bromomethane	102,048	ND	99000	97	37 - 161
Carbon Disulfide	102,048	ND	96000	94	63 - 134
Carbon tetrachloride	102,048	ND	100000	98	68 - 136
Chlorobenzene	102,048	ND	95000	93	82 - 126
Chloroethane	102,048	ND	92000	90	57 - 148
Chloroform	102,048	ND	93000	91	78 - 130
Chloromethane	102,048	ND	86000	84	56 - 147
Dibromochloromethane	102,048	ND	96000	94	62 - 131
Dibromomethane	102,048	ND	94000	92	75 - 122
Dichlorodifluoromethane	102,048	ND	86000	84	59 - 131
Ethyl Ether	102,048	ND	210000	210	65 - 138
Ethylbenzene	102,048	ND	100000	98	82 - 122

Creative Paper - Worcester, MA

MATRIX SPIKE (MS) RECOVERY

Sample ID: AB38159

PARAMETER	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC	QC LIMITS (% REC)
Hexachlorobutadiene	102,048	ND	99000	97	70 - 130
Isopropylbenzene	102,048	ND	110000	110	82 - 125
M/P Xylene	204,096	ND	200000	98	85 - 120
Methyl-t-Butyl Ether	102,048	ND	110000	110	74 - 125
Methylene Chloride	102,048	ND	90000	88	67 - 139
N-Butylbenzene	102,048	ND	99000	97	80 - 129
N-Propylbenzene	102,048	ND	98000	96	81 - 122
Naphthalene	102,048	ND	90000	88	59 - 129
Ortho Xylene	102,048	ND	110000	110	84 - 122
Para-Isopropyltoluene	102,048	ND	93000	91	79 - 129
Sec-Butylbenzene	102,048	ND	100000	98	81 - 126
Styrene	102,048	ND	110000	110	82 - 125
Tert-Butylbenzene	102,048	ND	110000	110	81 - 126
Tetrachloroethylene	102,048	ND	99000	97	74 - 133
Tetrahydrofuran	102,048	ND	91000	89	60 - 132
Toluene	102,048	ND	100000	98	82 - 124
Trans-1,2-Dichloroethylene	102,048	ND	98000	96	79 - 127
Trichloroethylene	102,048	ND	98000	96	76 - 124
Trichlorofluoromethane	102,048	ND	89000	87	65 - 144
Vinyl Acetate	102,048	ND	89000	87	14 - 152
Vinyl Chloride	102,048	ND	90000	88	34 - 142
c-1,3-dichloropropene	102,048	ND	100000	98	68 - 133
cis-1,2-Dichloroethylene	102,048	ND	100000	98	79 - 131
t-1,3-Dichloropropene	102,048	ND	100000	98	65 - 126

Comments:

Creative Paper - Worcester, MA

MATRIX SPIKE DUPLICATE (MSD) RECOVERY

Sample ID:AB38159

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION ug/Kg	MSD % REC	RPD %	QC LIMITS RPD
1,1,1,2-Tetrachloroethane	102,048	100000	98	0	40
1,1,1-Trichloroethane	102,048	99000	97	1	40
1,1,2,2-Tetrachloroethane	102,048	100000	98	1	40
1,1,2-Trichloro-1,2,2-Trifluoroetha	102,048	100000	98	1	40
1,1,2-Trichloroethane	102,048	98000	96	2	40
1,1-Dichloroethylene	102,048	110000	110	12	52
1,1-Dichloropropene	102,048	100000	98	0	40
1,1-dichloroethane	102,048	97000	95	1	40
1,2,3-Trichlorobenzene	102,048	94000	92	3	40
1,2,3-Trichloropropane	102,048	97000	95	2	40
1,2,4-Trichlorobenzene	102,048	110000	110	13	40
1,2,4-Trimethylbenzene	102,048	110000	110	12	40
1,2-Dibromo-3-Chloropropane	102,048	97000	95	2	40
1,2-Dibromoethane	102,048	100000	98	0	40
1,2-Dichlorobenzene	102,048	100000	98	1	40
1,2-Dichloroethane	102,048	95000	93	1	40
1,2-Dichloropropane	102,048	99000	97	1	40
1,3,5-Trimethylbenzene	102,048	110000	110	12	40
1,3-Dichlorobenzene	102,048	100000	98	1	40
1,3-Dichloropropane	102,048	98000	96	2	40
1,4-Dichlorobenzene	102,048	98000	96	2	40
2,2-Dichloropropane	102,048	100000	98	0	40
2-Butanone (MEK)	102,048	99000	97	1	40
2-Chlorotoluene	102,048	100000	98	2	40
2-Hexanone	102,048	91000	89	3	40
2-Propanone (acetone)	102,048	110000	110	12	40
4-Chlorotoluene	102,048	100000	98	2	40
4-Methyl-2-Pentanone(MIBK)	102,048	90000	88	2	40
Acrylonitrile	102,048	100000	98	0	40
Benzene	102,048	100000	98	0	24
Bromobenzene	102,048	100000	98	2	40
Bromochloromethane	102,048	96000	94	1	40
Bromodichloromethane	102,048	98000	96	1	40
Bromoform	102,048	98000	96	0	40
Bromomethane	102,048	98000	96	1	40
Carbon Disulfide	102,048	98000	96	2	40
Carbon tetrachloride	102,048	100000	98	0	40
Chlorobenzene	102,048	93000	91	2	34
Chloroethane	102,048	94000	92	2	40
Chloroform	102,048	97000	95	4	40
Chloromethane	102,048	88000	86	2	40
Dibromochloromethane	102,048	100000	98	4	40
Dibromomethane	102,048	96000	94	2	40
Dichlorodifluoromethane	102,048	91000	89	6	40
Ethyl Ether	102,048	200000	200	5	40
Ethylbenzene	102,048	100000	98	0	40
Hexachlorobutadiene	102,048	110000	110	13	40
Isopropylbenzene	102,048	110000	110	0	40

Creative Paper - Worcester, MA

MATRIX SPIKE DUPLICATE (MSD) RECOVERY

Sample ID:AB38159

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION ug/Kg	MSD % REC	RPD %	QC LIMITS RPD
M/P Xylene	204,096	200000	98	0	40
Methyl-t-Butyl Ether	102,048	110000	110	0	40
Methylene Chloride	102,048	90000	88	0	40
N-Butylbenzene	102,048	100000	98	1	40
N-Propylbenzene	102,048	100000	98	2	40
Naphthalene	102,048	91000	89	1	40
Ortho Xylene	102,048	110000	110	0	40
Para-Isopropyltoluene	102,048	98000	96	5	40
Sec-Butylbenzene	102,048	110000	110	12	40
Styrene	102,048	110000	110	0	40
Tert-Butylbenzene	102,048	110000	110	0	40
Tetrachloroethylene	102,048	100000	98	1	40
Tetrahydrofuran	102,048	90000	88	1	40
Toluene	102,048	100000	98	0	33
Trans-1,2-Dichloroethylene	102,048	100000	98	2	40
Trichloroethylene	102,048	100000	98	2	27
Trichlorofluoromethane	102,048	90000	88	1	40
Vinyl Acetate	102,048	89000	87	0	40
Vinyl Chloride	102,048	93000	91	3	40
c-1,3-dichloropropene	102,048	110000	110	12	40
cis-1,2-Dichloroethylene	102,048	100000	98	0	40
t-1,3-Dichloropropene	102,048	100000	98	0	40

Comments:

Creative Paper - Worcester, MA

Laboratory Duplicate Results

Sample ID: AB38159

PARAMETER	SAMPLE RESULT ug/Kg	SAMPLE DUPLICATE RESULT ug/Kg	PRECISION RPD %	QC LIMITS
1,1,1,2-Tetrachloroethane	ND	ND	ND	40
1,1,1-Trichloroethane	ND	ND	ND	40
1,1,2,2-Tetrachloroethane	ND	ND	ND	40
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ND	40
1,1,2-Trichloroethane	ND	ND	ND	40
1,1-Dichloroethylene	ND	ND	ND	40
1,1-Dichloropropene	ND	ND	ND	40
1,1-dichloroethane	ND	ND	ND	40
1,2,3-Trichlorobenzene	ND	ND	ND	40
1,2,3-Trichloropropane	ND	ND	ND	40
1,2,4-Trichlorobenzene	ND	ND	ND	40
1,2,4-Trimethylbenzene	ND	ND	ND	40
1,2-Dibromo-3-Chloropropane	ND	ND	ND	40
1,2-Dibromoethane	ND	ND	ND	40
1,2-Dichlorobenzene	ND	ND	ND	40
1,2-Dichloroethane	ND	ND	ND	40
1,2-Dichloropropane	ND	ND	ND	40
1,3,5-Trimethylbenzene	ND	ND	ND	40
1,3-Dichlorobenzene	ND	ND	ND	40
1,3-Dichloropropane	ND	ND	ND	40
1,4-Dichlorobenzene	ND	ND	ND	40
2,2-Dichloropropane	ND	ND	ND	40
2-Butanone (MEK)	ND	ND	ND	40
2-Chlorotoluene	ND	ND	ND	40
2-Hexanone	ND	ND	ND	40
2-Propanone (acetone)	ND	ND	ND	40
4-Chlorotoluene	ND	ND	ND	40
4-Methyl-2-Pentanone(MIBK)	ND	ND	ND	40
Acrylonitrile	ND	ND	ND	40
Benzene	ND	ND	ND	40
Bromobenzene	ND	ND	ND	40
Bromochloromethane	ND	ND	ND	40
Bromodichloromethane	ND	ND	ND	40
Bromoform	ND	ND	ND	40
Bromomethane	ND	ND	ND	40
Carbon Disulfide	ND	ND	ND	40
Carbon tetrachloride	ND	ND	ND	40
Chlorobenzene	ND	ND	ND	40
Chloroethane	ND	ND	ND	40
Chloroform	ND	ND	ND	40
Chloromethane	ND	ND	ND	40
Dibromochloromethane	ND	ND	ND	40
Dibromomethane	ND	ND	ND	40
Dichlorodifluoromethane	ND	ND	ND	40
Ethyl Ether	ND	ND	ND	40
Ethylbenzene	ND	ND	ND	40
Hexachlorobutadiene	ND	ND	ND	40
Isopropylbenzene	ND	ND	ND	40
M/P Xylene	ND	ND	ND	40

Creative Paper - Worcester, MA

Laboratory Duplicate Results

Sample ID: AB38159

PARAMETER	SAMPLE RESULT ug/Kg	SAMPLE DUPLICATE RESULT ug/Kg	PRECISION RPD %	QC LIMITS
Methyl-t-Butyl Ether	ND	ND	ND	40
Methylene Chloride	ND	ND	ND	40
N-Butylbenzene	ND	ND	ND	40
N-Propylbenzene	ND	ND	ND	40
Naphthalene	ND	ND	ND	40
Ortho Xylene	ND	ND	ND	40
Para-Isopropyltoluene	ND	ND	ND	40
Sec-Butylbenzene	ND	ND	ND	40
Styrene	ND	ND	ND	40
Tert-Butylbenzene	ND	ND	ND	40
Tetrachloroethylene	ND	ND	ND	40
Tetrahydrofuran	ND	ND	ND	40
Toluene	ND	ND	ND	40
Trans-1,2-Dichloroethylene	ND	ND	ND	40
Trichloroethylene	ND	ND	ND	40
Trichlorofluoromethane	ND	ND	ND	40
Vinyl Acetate	ND	ND	ND	40
Vinyl Chloride	ND	ND	ND	40
c-1,3-dichloropropene	ND	ND	ND	40
cis-1,2-Dichloroethylene	ND	ND	ND	40
t-1,3-Dichloropropene	ND	ND	ND	40

Creative Paper - Worcester, MA

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/Kg	LFB RESULT ug/Kg	LFB RECOVERY %	QC LIMITS %
1,1,1,2-Tetrachloroethane	20	19.5	98	77 - 122
1,1,1-Trichloroethane	20	19.4	97	80 - 128
1,1,2,2-Tetrachloroethane	20	18.6	93	73 - 118
1,1,2-Trichloro-1,2,2-Trifluoroeth	20	18.4	92	59 - 146
1,1,2-Trichloroethane	20	18.5	93	79 - 117
1,1-Dichloroethylene	20	19.9	100	70 - 130
1,1-Dichloropropene	20	19.3	97	79 - 123
1,1-dichloroethane	20	19.0	95	81 - 122
1,2,3-Trichlorobenzene	20	16.3	82	70 - 119
1,2,3-Trichloropropane	20	17.8	89	73 - 114
1,2,4-Trichlorobenzene	20	18.1	91	74 - 120
1,2,4-Trimethylbenzene	20	20.0	100	79 - 123
1,2-Dibromo-3-Chloropropane	20	17.7	89	63 - 124
1,2-Dibromoethane	20	19.0	95	79 - 116
1,2-Dichlorobenzene	20	18.7	94	77 - 117
1,2-Dichloroethane	20	17.6	88	75 - 124
1,2-Dichloropropane	20	19.1	96	80 - 117
1,3,5-Trimethylbenzene	20	19.8	99	80 - 122
1,3-Dichlorobenzene	20	19.2	96	78 - 117
1,3-Dichloropropane	20	19.1	96	79 - 116
1,4-Dichlorobenzene	20	18.7	94	77 - 115
2,2-Dichloropropane	20	19.9	100	64 - 152
2-Butanone (MEK)	20	17.4	87	55 - 144
2-Chlorotoluene	20	18.7	94	79 - 119
2-Hexanone	20	15.9	80	58 - 147
2-Propanone (acetone)	20	16.9	85	37 - 168
4-Chlorotoluene	20	18.7	94	78 - 120
4-Methyl-2-Pentanone(MIBK)	20	16.6	83	68 - 125
Acrylonitrile	20	18.3	92	68 - 124
Benzene	20	18.9	95	80 - 120
Bromobenzene	20	19.6	98	80 - 115
Bromochloromethane	20	19.2	96	81 - 120
Bromodichloromethane	20	19.0	95	77 - 125
Bromoform	20	19.1	96	62 - 127
Bromomethane	20	18.3	92	60 - 139
Carbon Disulfide	20	18.6	93	73 - 129
Carbon tetrachloride	20	19.2	96	73 - 136
Chlorobenzene	20	18.5	93	82 - 119
Chloroethane	20	17.5	88	69 - 130
Chloroform	20	18.3	92	80 - 122
Chloromethane	20	16.7	84	65 - 129
Dibromochloromethane	20	19.4	97	71 - 129
Dibromomethane	20	18.2	91	79 - 115
Dichlorodifluoromethane	20	17.8	89	69 - 126
Ethyl Ether	20	17.6	88	69 - 127
Ethylbenzene	20	19.2	96	80 - 121
Hexachlorobutadiene	20	19.6	98	72 - 124
Isopropylbenzene	20	21.0	105	79 - 124
M/P Xylene	40	39.5	99	81 - 120
Methyl-t-Butyl Ether	20	20.5	103	78 - 120
Methylene Chloride	20	17.3	87	73 - 129
N-Butylbenzene	20	19.0	95	78 - 126

Creative Paper - Worcester, MA

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/Kg	LFB RESULT ug/Kg	LFB RECOVERY %	QC LIMITS %
N-Propylbenzene	20	19.0	95	78 - 122
Naphthalene	20	16.8	84	66 - 124
Ortho Xylene	20	20.4	102	81 - 121
Para-Isopropyltoluene	20	17.9	90	77 - 127
Sec-Butylbenzene	20	19.8	99	79 - 124
Styrene	20	20.0	100	82 - 122
Tert-Butylbenzene	20	20.7	104	78 - 124
Tetrachloroethylene	20	19.5	98	77 - 118
Tetrahydrofuran	20	17.6	88	67 - 124
Toluene	20	19.3	97	81 - 120
Trans-1,2-Dichloroethylene	20	19.4	97	80 - 121
Trichloroethylene	20	19.2	96	80 - 117
Trichlorofluoromethane	20	16.9	85	68 - 137
Vinyl Acetate	20	16.9	85	25 - 150
Vinyl Chloride	20	17.8	89	67 - 134
c-1,3-dichloropropene	20	20.5	103	73 - 133
cis-1,2-Dichloroethylene	20	19.6	98	82 - 122
t-1,3-Dichloropropene	20	19.8	99	69 - 127

Comments: The percent recovery for ethyl ether did not meet the acceptable QC criteria in the MS/MS Study.

Creative Paper - Worcester, MA

LABORATORY FORTIFIED DUPLICATE (LFB Dup) RECOVERY

COMPOUND	LFB Dup CONCENTRATION ug/Kg	LFB Dup RECOVERY %	RPD %	QC LIMITS RPD
1,1,1,2-Tetrachloroethane	20.7	104	ND	50
1,1,1-Trichloroethane	19.0	95	ND	50
1,1,2,2-Tetrachloroethane	19.7	99	ND	50
1,1,2-Trichloro-1,2,2-Trifluoroetha	19.7	99	ND	50
1,1,2-Trichloroethane	20.0	100	ND	50
1,1-Dichloroethylene	20.4	102	ND	52
1,1-Dichloropropene	20.4	102	ND	50
1,1-dichloroethane	18.6	93	ND	50
1,2,3-Trichlorobenzene	18.5	93	ND	50
1,2,3-Trichloropropane	19.2	96	ND	50
1,2,4-Trichlorobenzene	21.0	105	ND	50
1,2,4-Trimethylbenzene	20.7	104	ND	50
1,2-Dibromo-3-Chloropropane	19.6	98	ND	50
1,2-Dibromoethane	20.2	101	ND	50
1,2-Dichlorobenzene	19.2	96	ND	50
1,2-Dichloroethane	18.1	91	ND	50
1,2-Dichloropropane	19.7	99	ND	50
1,3,5-Trimethylbenzene	20.4	102	ND	50
1,3-Dichlorobenzene	19.6	98	ND	50
1,3-Dichloropropane	20.4	102	ND	50
1,4-Dichlorobenzene	18.9	95	ND	50
2,2-Dichloropropane	20.3	102	ND	50
2-Butanone (MEK)	18.2	91	ND	50
2-Chlorotoluene	19.7	99	ND	50
2-Hexanone	17.1	86	ND	50
2-Propanone (acetone)	18.1	91	ND	50
4-Chlorotoluene	19.4	97	ND	50
4-Methyl-2-Pentanone(MIBK)	17.6	88	ND	50
Acrylonitrile	19.6	98	ND	50
Benzene	19.4	97	ND	50
Bromobenzene	19.9	100	ND	50
Bromochloromethane	19.4	97	ND	50
Bromodichloromethane	20.1	101	ND	50
Bromoform	20.4	102	ND	50
Bromomethane	18.2	91	ND	50
Carbon Disulfide	18.7	94	ND	50
Carbon tetrachloride	20.3	102	ND	50
Chlorobenzene	19.0	95	ND	34
Chloroethane	17.9	90	ND	50
Chloroform	18.7	94	ND	50
Chloromethane	17.1	86	ND	50
Dibromochloromethane	20.6	103	ND	50
Dibromomethane	19.1	96	ND	50
Dichlorodifluoromethane	17.9	90	ND	50
Ethyl Ether	17.6	88	ND	50
Ethylbenzene	20.1	101	ND	50
Hexachlorobutadiene	21.3	107	ND	50
Isopropylbenzene	21.3	107	ND	50
M/P Xylene	40.9	102	ND	50
Methyl-t-Butyl Ether	21.2	106	ND	50
Methylene Chloride	17.3	87	ND	50
N-Butylbenzene	19.4	97	ND	50
N-Propylbenzene	19.5	98	ND	50

Creative Paper - Worcester, MA

LABORATORY FORTIFIED DUPLICATE (LFB Dup) RECOVERY

COMPOUND	LFB Dup CONCENTRATION ug/Kg	LFB Dup RECOVERY %	RPD %	QC LIMITS RPD
Naphthalene	18.6	93	ND	50
Ortho Xylene	21.2	106	ND	50
Para-Isopropyltoluene	18.7	94	ND	50
Sec-Butylbenzene	20.1	101	ND	50
Styrene	21.0	105	ND	50
Tert-Butylbenzene	21.2	106	ND	50
Tetrachloroethylene	19.6	98	ND	50
Tetrahydrofuran	17.5	88	ND	50
Toluene	19.5	98	ND	50
Trans-1,2-Dichloroethylene	19.4	97	ND	50
Trichloroethylene	20.0	100	ND	27
Trichlorofluoromethane	17.0	85	ND	50
Vinyl Acetate	17.6	88	ND	50
Vinyl Chloride	17.9	90	ND	50
c-1,3-dichloropropene	21.3	107	ND	50
cis-1,2-Dichloroethylene	19.9	100	ND	50
t-1,3-Dichloropropene	20.4	102	ND	50

Samples in Batch AB38157, AB38158, AB38159, AB38160, AB38161, AB38162, AB38163, AB38164, AB38165, AB38166,
AB38167, AB38168, AB38169, AB38170, AB38171, AB38172

PN. 13030015

USEPA
Region I START
Creative Paper

CHAIN OF CUSTODY RECORD
Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001
Lab: NERL
Lab Phone:

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Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample_Remarks
	R01-130227AJ-0001	D-4	Metals +Cn +Hg	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0001	D-4	VOCs, SVOCs	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0001	D-4	PCBs	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0002	D-11	Metals +Cn +Hg	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0002	D-11	VOCs, SVOCs	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0002	D-11	PCBs	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0003	D-103	Metals +Cn +Hg	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0003	D-103	VOCs, SVOCs	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0003	D-103	PCBs	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0005	D-117	Metals +Cn +Hg	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0005	D-117	VOCs, SVOCs	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0005	D-117	PCBs	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0006	D-118	Metals +Cn +Hg	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0006	D-118	VOCs, SVOCs	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0006	D-118	PCBs	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0007	D-119	Metals +Cn +Hg	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0007	D-119	VOCs, SVOCs	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0007	D-119	PCBs	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0008	D-120	Metals +Cn +Hg	Drum Product	2013-03-20	13:45	1	4 oz Jar	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	J. Jarrell	3/21/13	[Signature]	3/21/13	09:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS

PN: 13030015

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CHAIN OF CUSTODY RECORD

Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001

Lab: NERL
Lab Phone:

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Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample_Remarks
	R01-130227AJ-0008	D-120	VOCs, SVOCs	Drum Product	2013-03-20	13:45	1	4 oz Jar	
	R01-130227AJ-0008	D-120	PCBs	Drum Product	2013-03-20	13:45	1	4 oz Jar	
	R01-130227AJ-0009	D-123	Metals +Cn +Hg	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0009	D-123	VOCs, SVOCs	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0009	D-123	PCBs	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	Metals +Cn +Hg	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	VOCs, SVOCs	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	PCBs	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0012	D-144	Metals +Cn +Hg	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0012	D-144	VOCs, SVOCs	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0012	D-144	PCBs	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0014	D-147	Metals +Cn +Hg	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0014	D-147	VOCs, SVOCs	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0014	D-147	PCBs	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0015	D-148	Metals +Cn +Hg	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0015	D-148	VOCs, SVOCs	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0015	D-148	PCBs	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0016	D-149	Metals +Cn +Hg	Drum Product	2013-03-20	10:40	1	4 oz Jar	
	R01-130227AJ-0016	D-149	VOCs, SVOCs	Drum Product	2013-03-20	10:40	1	4 oz Jar	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>J. Santos</i>	3/21/13	<i>Allen Jarrell</i>	3/21/13	09:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS

PN: 13030015

USEPA
Region I START
Creative Paper

CHAIN OF CUSTODY RECORD
Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001
Lab: NERL
Lab Phone:

Page 69 of 69

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample Remarks
	R01-130227AJ-0016	D-149	PCBs	Drum Product	2013-03-20	10:40	1	4 oz Jar	
	R01-130227AJ-0017	D-152	Metals +Cn +Hg	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0017	D-152	VOCs, SVOCs	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0017	D-152	PCBs	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0018	D-167	Metals +Cn +Hg	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0018	D-167	VOCs, SVOCs	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0018	D-167	PCBs	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0019	D-187	Metals +Cn +Hg	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0019	D-187	VOCs, SVOCs	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0019	D-187	PCBs	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0023	ASB-01	Bulk Asbestos	ACM	2013-03-20	15:25	1	Bag	
	R01-130227AJ-0024	ASB-02	Bulk Asbestos	ACM	2013-03-20	15:30	1	Bag	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>J. Benter</i>	3/21/13	<i>Allen Jarrell</i>	3/21/13	07:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS



Laboratory Report

March 27, 2013

Allen Jarrell - Mail Code OSRR02-2
US EPA New England R1

Project Number: 13030015
Project: Creative Paper - Worcester, MA
Analysis: BNAs in Product
EPA Chemist: Bhavita Patel

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-BNAP3.

The SOP for this method is based on the US EPA Contract Laboratory Program, Statement of Work for Organic Analysis, Multi-Media, Multi-Concentration, Exhibit B, Analytical Methods for Semivolatiles, Revision OLM04.2, 1999, US EPA SW-846 methods 3585 and 8270C and EIASOP-BNAGCMS8.

Date Samples Received by the Laboratory: 03/21/2013

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340.

Sincerely,

Digitally signed by Dan Boudreau
DN: cn=Dan Boudreau, o=EPA,
ou=EIA,
email=boudreau.dan@epa.gov, c=US
Date: 2013.03.27 12:55:16 -04'00'

13030015\$BNAP

Qualifiers:

- RL** Reporting limit
- ND** Not Detected above reporting limit
- NA** Not Applicable
- NC** Not calculated since analyte concentration is ND
- J1** Estimated value due to MS recovery outside acceptance criteria
- J2** Estimated value due to LFB result outside acceptance criteria
- J3** Estimated value due to RPD result outside acceptance criteria
- J4** Estimated value due to LCS result outside acceptance criteria
- B** Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
- R** No recovery was calculated since the analyte concentration is greater than four times the spike level.

Creative Paper - Worcester, MA

BNAs in Product

Client Sample ID:	R01-130227AJ-0001	Lab Sample ID:	AB38157
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.082 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	150	
120-82-1	1,2,4-Trichlorobenzene	ND	150	
95-50-1	1,2-Dichlorobenzene	ND	150	
541-73-1	1,3-Dichlorobenzene	ND	150	
99-65-0	1,3-Dinitrobenzene	ND	150	
106-46-7	1,4-Dichlorobenzene	ND	150	
130-15-4	1,4-Naphthoquinone	ND	150	
90-12-0	1-Methylnaphthalene	ND	150	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	150	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	150	
95-95-4	2,4,5-Trichlorophenol	ND	150	
88-06-2	2,4,6-Trichlorophenol	ND	150	
120-83-2	2,4-Dichlorophenol	ND	150	
105-67-9	2,4-dimethylphenol	ND	150	
51-28-5	2,4-Dinitrophenol	ND	300	
121-14-2	2,4-Dinitrotoluene	ND	150	
87-65-0	2,6-Dichlorophenol	ND	150	
606-20-2	2,6-Dinitrotoluene	ND	150	
91-58-7	2-Chloronaphthalene	ND	150	
95-57-8	2-Chlorophenol	ND	150	
91-57-6	2-Methylnaphthalene	ND	150	
95-48-7	2-Methylphenol	ND	150	
88-74-4	2-Nitroaniline	ND	150	
88-75-5	2-Nitrophenol	ND	150	
108-39-4/106-44-5	3&4-Methylphenol	ND	300	
91-94-1	3,3'-Dichlorobenzidine	ND	150	
56-49-5	3-Methylcholanthrene	ND	150	
99-09-2	3-Nitroaniline	ND	150	
534-52-1	4,6-Dinitro-2-methylphenol	ND	300	
101-55-3	4-Bromophenyl-phenylether	ND	150	
59-50-7	4-Chloro-3-methylphenol	ND	150	
106-47-8	4-Chloroaniline	ND	150	
7005-72-3	4-Chlorophenyl-phenylether	ND	150	
100-01-6	4-Nitroaniline	ND	150	
100-02-7	4-Nitrophenol	ND	610	
56-57-5	4-nitroquinoline-1-oxide	ND	150	J
83-32-9	Acenaphthene	ND	150	
208-96-8	Acenaphthylene	ND	150	
98-86-2	Acetophenone	ND	150	
62-53-3	Aniline	ND	150	
120-12-7	Anthracene	ND	150	
140-57-8	Aramite	ND	150	
103-33-3	Azobenzene	ND	150	

Creative Paper - Worcester, MA

BNAs in Product

Client Sample ID:	R01-130227AJ-0001	Lab Sample ID:	AB38157
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.082 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benidine	ND	150	
56-55-3	Benzo(a)anthracene	ND	150	
50-32-8	Benzo(a)pyrene	ND	150	
205-99-2	Benzo(b)fluoranthene	ND	150	
191-24-2	Benzo(g,h,i)perylene	ND	150	
207-08-9	Benzo(k)fluoranthene	ND	150	
65-85-0	Benzoic acid	ND	300	
100-51-6	Benzyl alcohol	ND	150	
111-91-1	bis(-2-Chloroethoxy)methane	ND	150	
111-44-4	Bis(2-Chloroethyl)ether	ND	150	
117-81-7	Bis(2-ethylhexyl)phthalate	380	150	
85-68-7	Butylbenzylphthalate	ND	150	
86-74-8	Carbazole	ND	150	
510-15-6	Chlorobenzilate	ND	150	
218-01-9	Chrysene	ND	150	
53-70-3	Dibenz(a,h)anthracene	ND	150	
132-64-9	Dibenzofuran	ND	150	
84-66-2	Diethylphthalate	ND	150	
131-11-3	Dimethyl phthalate	ND	150	
84-74-2	Di-n-butylphthalate	190	150	
117-84-0	Di-n-octyl phthalate	ND	300	
88-85-7	Dinoseb	ND	150	
62-50-0	Ethyl methanesulfonate	ND	150	
206-44-0	Fluoranthene	ND	150	
86-73-7	Fluorene	ND	150	
118-74-1	Hexachlorobenzene	ND	150	
87-68-3	Hexachlorobutadiene	ND	150	
77-47-4	Hexachlorocyclopentadiene	ND	150	
67-72-1	Hexachloroethane	ND	150	
1888-71-7	Hexachloropropene	ND	150	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	150	
465-73-6	Isodrin	ND	150	
78-59-1	Isophorone	ND	150	
120-58-1	Isosafrole	ND	150	
143-50-0	Kepone	ND	150	
66-27-3	Methyl methanesulfonate	ND	150	
91-20-3	Naphthalene	ND	150	
98-95-3	Nitrobenzene	ND	150	
62-75-9	N-nitrosodimethylamine	ND	150	
621-64-7	N-nitroso-di-n-propylamine	ND	150	
122-39-4	N-Nitrosodiphenylamine	ND	150	
608-93-5	Pentachlorobenzene	ND	150	
82-68-8	Pentachloronitrobenzene	ND	150	

Creative Paper - Worcester, MA

BNAs in Product

Client Sample ID: R01-130227AJ-0001
Date of Collection: 3/20/2013
Date of Preparation: 3/21/2013
Date of Analysis: 3/21/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.082 grams

Lab Sample ID: AB38157
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: N/A
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	150	
62-44-2	Phenacetin	ND	150	
85-01-8	Phenanthrene	ND	150	
108-95-2	Phenol	ND	150	
129-00-0	Pyrene	ND	150	
110-86-1	Pyridine	ND	150	
94-59-7	Safrole	ND	150	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	106	10 - 126
2-Fluorobiphenyl (SS4)	101	39 - 120
2-Fluorophenol (SS1)	118	15 - 78
Nitrobenzene-d5 (SS3)	115	30 - 120
Phenol-d6 (SS2)	125	10 - 65
p-Terphenyl-d14 (SS6)	110	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

Tentatively Identified non-Target Compounds

1-methyl-2-(1-methylethyl)-benzene 3,200 ppm J
1,2,3,5-tetramethyl-benzene 2,900 ppm J
1-methyl-4-(1-methylpropyl)-benzene 1,800 ppm J
1-ethyl-3,5-dimethyl-benzene 2,700 ppm J

Creative Paper - Worcester, MA

Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.100 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.095 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	130	
120-82-1	1,2,4-Trichlorobenzene	ND	130	
95-50-1	1,2-Dichlorobenzene	ND	130	
541-73-1	1,3-Dichlorobenzene	ND	130	
99-65-0	1,3-Dinitrobenzene	ND	130	
106-46-7	1,4-Dichlorobenzene	ND	130	
130-15-4	1,4-Naphthoquinone	ND	130	
90-12-0	1-Methylnaphthalene	ND	130	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	130	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	130	
95-95-4	2,4,5-Trichlorophenol	ND	130	
88-06-2	2,4,6-Trichlorophenol	ND	130	
120-83-2	2,4-Dichlorophenol	ND	130	
105-67-9	2,4-dimethylphenol	ND	130	
51-28-5	2,4-Dinitrophenol	ND	260	
121-14-2	2,4-Dinitrotoluene	ND	130	
87-65-0	2,6-Dichlorophenol	ND	130	
606-20-2	2,6-Dinitrotoluene	ND	130	
91-58-7	2-Chloronaphthalene	ND	130	
95-57-8	2-Chlorophenol	ND	130	
91-57-6	2-Methylnaphthalene	ND	130	
95-48-7	2-Methylphenol	ND	130	
88-74-4	2-Nitroaniline	ND	130	
88-75-5	2-Nitrophenol	ND	130	
108-39-4/106-44-5	3&4-Methylphenol	ND	260	
91-94-1	3,3'-Dichlorobenzidine	ND	130	
56-49-5	3-Methylcholanthrene	ND	130	
99-09-2	3-Nitroaniline	ND	130	
534-52-1	4,6-Dinitro-2-methylphenol	ND	260	
101-55-3	4-Bromophenyl-phenylether	ND	130	
59-50-7	4-Chloro-3-methylphenol	ND	130	
106-47-8	4-Chloroaniline	ND	130	
7005-72-3	4-Chlorophenyl-phenylether	ND	130	
100-01-6	4-Nitroaniline	ND	130	
100-02-7	4-Nitrophenol	ND	530	
56-57-5	4-nitroquinoline-1-oxide	ND	130	J
83-32-9	Acenaphthene	ND	130	
208-96-8	Acenaphthylene	ND	130	
98-86-2	Acetophenone	ND	130	
62-53-3	Aniline	ND	130	
120-12-7	Anthracene	ND	130	
140-57-8	Aramite	ND	130	
103-33-3	Azobenzene	ND	130	

Creative Paper - Worcester, MA

Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.100 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.095 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	130	
56-55-3	Benzo(a)anthracene	ND	130	
50-32-8	Benzo(a)pyrene	ND	130	
205-99-2	Benzo(b)fluoranthene	ND	130	
191-24-2	Benzo(g,h,i)perylene	ND	130	
207-08-9	Benzo(k)fluoranthene	ND	130	
65-85-0	Benzoic acid	ND	260	
100-51-6	Benzyl alcohol	ND	130	
111-91-1	bis(-2-Chloroethoxy)methane	ND	130	
111-44-4	Bis(2-Chloroethyl)ether	ND	130	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	130	
85-68-7	Butylbenzylphthalate	ND	130	
86-74-8	Carbazole	ND	130	
510-15-6	Chlorobenzilate	ND	130	
218-01-9	Chrysene	ND	130	
53-70-3	Dibenz(a,h)anthracene	ND	130	
132-64-9	Dibenzofuran	ND	130	
84-66-2	Diethylphthalate	ND	130	
131-11-3	Dimethyl phthalate	ND	130	
84-74-2	Di-n-butylphthalate	ND	130	
117-84-0	Di-n-octyl phthalate	ND	260	
88-85-7	Dinoseb	ND	130	
62-50-0	Ethyl methanesulfonate	ND	130	
206-44-0	Fluoranthene	ND	130	
86-73-7	Fluorene	ND	130	
118-74-1	Hexachlorobenzene	ND	130	
87-68-3	Hexachlorobutadiene	ND	130	
77-47-4	Hexachlorocyclopentadiene	ND	130	
67-72-1	Hexachloroethane	ND	130	
1888-71-7	Hexachloropropene	ND	130	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	130	
465-73-6	Isodrin	ND	130	
78-59-1	Isophorone	ND	130	
120-58-1	Isosafrole	ND	130	
143-50-0	Kepone	ND	130	
66-27-3	Methyl methanesulfonate	ND	130	
91-20-3	Naphthalene	ND	130	
98-95-3	Nitrobenzene	ND	130	
62-75-9	N-nitrosodimethylamine	ND	130	
621-64-7	N-nitroso-di-n-propylamine	ND	130	
122-39-4	N-Nitrosodiphenylamine	ND	130	
608-93-5	Pentachlorobenzene	ND	130	
82-68-8	Pentachloronitrobenzene	ND	130	

Creative Paper - Worcester, MA

Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.100 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.095 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	130	
62-44-2	Phenacetin	ND	130	
85-01-8	Phenanthrene	ND	130	
108-95-2	Phenol	ND	130	
129-00-0	Pyrene	ND	130	
110-86-1	Pyridine	ND	130	
94-59-7	Safrole	ND	130	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	105	10 - 126
2-Fluorobiphenyl (SS4)	109	39 - 120
2-Fluorophenol (SS1)	110	15 - 78
Nitrobenzene-d5 (SS3)	110	30 - 120
Phenol-d6 (SS2)	108	10 - 65
p-Terphenyl-d14 (SS6)	115	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

Creative Paper - Worcester, MA

BNAs in Product

Client Sample ID:	R01-130227AJ-0002	Lab Sample ID:	AB38158
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.107 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	120	
120-82-1	1,2,4-Trichlorobenzene	ND	120	
95-50-1	1,2-Dichlorobenzene	ND	120	
541-73-1	1,3-Dichlorobenzene	ND	120	
99-65-0	1,3-Dinitrobenzene	ND	120	
106-46-7	1,4-Dichlorobenzene	ND	120	
130-15-4	1,4-Naphthoquinone	ND	120	
90-12-0	1-Methylnaphthalene	ND	120	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	120	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	120	
95-95-4	2,4,5-Trichlorophenol	ND	120	
88-06-2	2,4,6-Trichlorophenol	ND	120	
120-83-2	2,4-Dichlorophenol	ND	120	
105-67-9	2,4-dimethylphenol	ND	120	
51-28-5	2,4-Dinitrophenol	ND	230	
121-14-2	2,4-Dinitrotoluene	ND	120	
87-65-0	2,6-Dichlorophenol	ND	120	
606-20-2	2,6-Dinitrotoluene	ND	120	
91-58-7	2-Chloronaphthalene	ND	120	
95-57-8	2-Chlorophenol	ND	120	
91-57-6	2-Methylnaphthalene	ND	120	
95-48-7	2-Methylphenol	ND	120	
88-74-4	2-Nitroaniline	ND	120	
88-75-5	2-Nitrophenol	ND	120	
108-39-4/106-44-5	3&4-Methylphenol	ND	230	
91-94-1	3,3'-Dichlorobenzidine	ND	120	
56-49-5	3-Methylcholanthrene	ND	120	
99-09-2	3-Nitroaniline	ND	120	
534-52-1	4,6-Dinitro-2-methylphenol	ND	230	
101-55-3	4-Bromophenyl-phenylether	ND	120	
59-50-7	4-Chloro-3-methylphenol	ND	120	
106-47-8	4-Chloroaniline	ND	120	
7005-72-3	4-Chlorophenyl-phenylether	ND	120	
100-01-6	4-Nitroaniline	ND	120	
100-02-7	4-Nitrophenol	ND	470	
56-57-5	4-nitroquinoline-1-oxide	ND	120	J
83-32-9	Acenaphthene	ND	120	
208-96-8	Acenaphthylene	ND	120	
98-86-2	Acetophenone	ND	120	
62-53-3	Aniline	ND	120	
120-12-7	Anthracene	ND	120	
140-57-8	Aramite	ND	120	
103-33-3	Azobenzene	ND	120	

Creative Paper - Worcester, MA

BNAs in Product

Client Sample ID:	R01-130227AJ-0002	Lab Sample ID:	AB38158
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.107 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	120	
56-55-3	Benzo(a)anthracene	ND	120	
50-32-8	Benzo(a)pyrene	ND	120	
205-99-2	Benzo(b)fluoranthene	ND	120	
191-24-2	Benzo(g,h,i)perylene	ND	120	
207-08-9	Benzo(k)fluoranthene	ND	120	
65-85-0	Benzoic acid	ND	230	
100-51-6	Benzyl alcohol	ND	120	
111-91-1	bis(-2-Chloroethoxy)methane	ND	120	
111-44-4	Bis(2-Chloroethyl)ether	ND	120	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	120	
85-68-7	Butylbenzylphthalate	ND	120	
86-74-8	Carbazole	ND	120	
510-15-6	Chlorobenzilate	ND	120	
218-01-9	Chrysene	ND	120	
53-70-3	Dibenz(a,h)anthracene	ND	120	
132-64-9	Dibenzofuran	ND	120	
84-66-2	Diethylphthalate	ND	120	
131-11-3	Dimethyl phthalate	ND	120	
84-74-2	Di-n-butylphthalate	ND	120	
117-84-0	Di-n-octyl phthalate	ND	230	
88-85-7	Dinoseb	ND	120	
62-50-0	Ethyl methanesulfonate	ND	120	
206-44-0	Fluoranthene	ND	120	
86-73-7	Fluorene	ND	120	
118-74-1	Hexachlorobenzene	ND	120	
87-68-3	Hexachlorobutadiene	ND	120	
77-47-4	Hexachlorocyclopentadiene	ND	120	
67-72-1	Hexachloroethane	ND	120	
1888-71-7	Hexachloropropene	ND	120	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	120	
465-73-6	Isodrin	ND	120	
78-59-1	Isophorone	ND	120	
120-58-1	Isosafrole	ND	120	
143-50-0	Kepone	ND	120	
66-27-3	Methyl methanesulfonate	ND	120	
91-20-3	Naphthalene	ND	120	
98-95-3	Nitrobenzene	ND	120	
62-75-9	N-nitrosodimethylamine	ND	120	
621-64-7	N-nitroso-di-n-propylamine	ND	120	
122-39-4	N-Nitrosodiphenylamine	ND	120	
608-93-5	Pentachlorobenzene	ND	120	
82-68-8	Pentachloronitrobenzene	ND	120	

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BNAs in Product

Client Sample ID: R01-130227AJ-0002
Date of Collection: 3/20/2013
Date of Preparation: 3/21/2013
Date of Analysis: 3/21/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.107 grams

Lab Sample ID: AB38158
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: N/A
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	120	
62-44-2	Phenacetin	ND	120	
85-01-8	Phenanthrene	ND	120	
108-95-2	Phenol	ND	120	
129-00-0	Pyrene	ND	120	
110-86-1	Pyridine	ND	120	
94-59-7	Safrole	ND	120	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	97	10 - 126
2-Fluorobiphenyl (SS4)	101	39 - 120
2-Fluorophenol (SS1)	108	15 - 78
Nitrobenzene-d5 (SS3)	105	30 - 120
Phenol-d6 (SS2)	108	10 - 65
p-Terphenyl-d14 (SS6)	115	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

Tentatively Identified non-Target Compounds

D-Limonene 24,000 ppm J
Dodecanoic acid 2,100 ppm J

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BNAs in Product

Client Sample ID:	R01-130227AJ-0003	Lab Sample ID:	AB38159
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.106 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	120	
120-82-1	1,2,4-Trichlorobenzene	ND	120	
95-50-1	1,2-Dichlorobenzene	ND	120	
541-73-1	1,3-Dichlorobenzene	ND	120	
99-65-0	1,3-Dinitrobenzene	ND	120	
106-46-7	1,4-Dichlorobenzene	ND	120	
130-15-4	1,4-Naphthoquinone	ND	120	
90-12-0	1-Methylnaphthalene	ND	120	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	120	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	120	
95-95-4	2,4,5-Trichlorophenol	ND	120	
88-06-2	2,4,6-Trichlorophenol	ND	120	
120-83-2	2,4-Dichlorophenol	ND	120	
105-67-9	2,4-dimethylphenol	ND	120	
51-28-5	2,4-Dinitrophenol	ND	240	
121-14-2	2,4-Dinitrotoluene	ND	120	
87-65-0	2,6-Dichlorophenol	ND	120	
606-20-2	2,6-Dinitrotoluene	ND	120	
91-58-7	2-Chloronaphthalene	ND	120	
95-57-8	2-Chlorophenol	ND	120	
91-57-6	2-Methylnaphthalene	ND	120	
95-48-7	2-Methylphenol	ND	120	
88-74-4	2-Nitroaniline	ND	120	
88-75-5	2-Nitrophenol	ND	120	
108-39-4/106-44-5	3&4-Methylphenol	ND	240	
91-94-1	3,3'-Dichlorobenzidine	ND	120	
56-49-5	3-Methylcholanthrene	ND	120	
99-09-2	3-Nitroaniline	ND	120	
534-52-1	4,6-Dinitro-2-methylphenol	ND	240	
101-55-3	4-Bromophenyl-phenylether	ND	120	
59-50-7	4-Chloro-3-methylphenol	ND	120	
106-47-8	4-Chloroaniline	ND	120	
7005-72-3	4-Chlorophenyl-phenylether	ND	120	
100-01-6	4-Nitroaniline	ND	120	
100-02-7	4-Nitrophenol	ND	470	
56-57-5	4-nitroquinoline-1-oxide	ND	120	J
83-32-9	Acenaphthene	ND	120	
208-96-8	Acenaphthylene	ND	120	
98-86-2	Acetophenone	ND	120	
62-53-3	Aniline	ND	120	
120-12-7	Anthracene	ND	120	
140-57-8	Aramite	ND	120	
103-33-3	Azobenzene	ND	120	

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BNAs in Product

Client Sample ID:	R01-130227AJ-0003	Lab Sample ID:	AB38159
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.106 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	120	
56-55-3	Benzo(a)anthracene	ND	120	
50-32-8	Benzo(a)pyrene	ND	120	
205-99-2	Benzo(b)fluoranthene	ND	120	
191-24-2	Benzo(g,h,i)perylene	ND	120	
207-08-9	Benzo(k)fluoranthene	ND	120	
65-85-0	Benzoic acid	ND	240	
100-51-6	Benzyl alcohol	ND	120	
111-91-1	bis(-2-Chloroethoxy)methane	ND	120	
111-44-4	Bis(2-Chloroethyl)ether	ND	120	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	120	
85-68-7	Butylbenzylphthalate	ND	120	
86-74-8	Carbazole	ND	120	
510-15-6	Chlorobenzilate	ND	120	
218-01-9	Chrysene	ND	120	
53-70-3	Dibenz(a,h)anthracene	ND	120	
132-64-9	Dibenzofuran	ND	120	
84-66-2	Diethylphthalate	ND	120	
131-11-3	Dimethyl phthalate	ND	120	
84-74-2	Di-n-butylphthalate	ND	120	
117-84-0	Di-n-octyl phthalate	ND	240	
88-85-7	Dinoseb	ND	120	
62-50-0	Ethyl methanesulfonate	ND	120	
206-44-0	Fluoranthene	ND	120	
86-73-7	Fluorene	ND	120	
118-74-1	Hexachlorobenzene	ND	120	
87-68-3	Hexachlorobutadiene	ND	120	
77-47-4	Hexachlorocyclopentadiene	ND	120	
67-72-1	Hexachloroethane	ND	120	
1888-71-7	Hexachloropropene	ND	120	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	120	
465-73-6	Isodrin	ND	120	
78-59-1	Isophorone	ND	120	
120-58-1	Isosafrole	ND	120	
143-50-0	Kepone	ND	120	
66-27-3	Methyl methanesulfonate	ND	120	
91-20-3	Naphthalene	ND	120	
98-95-3	Nitrobenzene	ND	120	
62-75-9	N-nitrosodimethylamine	ND	120	
621-64-7	N-nitroso-di-n-propylamine	ND	120	
122-39-4	N-Nitrosodiphenylamine	ND	120	
608-93-5	Pentachlorobenzene	ND	120	
82-68-8	Pentachloronitrobenzene	ND	120	

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BNAs in Product

Client Sample ID: R01-130227AJ-0003
Date of Collection: 3/20/2013
Date of Preparation: 3/21/2013
Date of Analysis: 3/21/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.106 grams

Lab Sample ID: AB38159
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: N/A
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	120	
62-44-2	Phenacetin	ND	120	
85-01-8	Phenanthrene	ND	120	
108-95-2	Phenol	ND	120	
129-00-0	Pyrene	ND	120	
110-86-1	Pyridine	ND	120	
94-59-7	Safrole	ND	120	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	77	10 - 126
2-Fluorobiphenyl (SS4)	98	39 - 120
2-Fluorophenol (SS1)	110	15 - 78
Nitrobenzene-d5 (SS3)	105	30 - 120
Phenol-d6 (SS2)	108	10 - 65
p-Terphenyl-d14 (SS6)	105	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

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BNAs in Product

Client Sample ID:	R01-130227AJ-0005	Lab Sample ID:	AB38160
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.125 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	100	
120-82-1	1,2,4-Trichlorobenzene	ND	100	
95-50-1	1,2-Dichlorobenzene	ND	100	
541-73-1	1,3-Dichlorobenzene	ND	100	
99-65-0	1,3-Dinitrobenzene	ND	100	
106-46-7	1,4-Dichlorobenzene	ND	100	
130-15-4	1,4-Naphthoquinone	ND	100	
90-12-0	1-Methylnaphthalene	ND	100	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	100	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	100	
95-95-4	2,4,5-Trichlorophenol	ND	100	
88-06-2	2,4,6-Trichlorophenol	ND	100	
120-83-2	2,4-Dichlorophenol	ND	100	
105-67-9	2,4-dimethylphenol	ND	100	
51-28-5	2,4-Dinitrophenol	ND	200	
121-14-2	2,4-Dinitrotoluene	ND	100	
87-65-0	2,6-Dichlorophenol	ND	100	
606-20-2	2,6-Dinitrotoluene	ND	100	
91-58-7	2-Chloronaphthalene	ND	100	
95-57-8	2-Chlorophenol	ND	100	
91-57-6	2-Methylnaphthalene	ND	100	
95-48-7	2-Methylphenol	ND	100	
88-74-4	2-Nitroaniline	ND	100	
88-75-5	2-Nitrophenol	ND	100	
108-39-4/106-44-5	3&4-Methylphenol	ND	200	
91-94-1	3,3'-Dichlorobenzidine	ND	100	
56-49-5	3-Methylcholanthrene	ND	100	
99-09-2	3-Nitroaniline	ND	100	
534-52-1	4,6-Dinitro-2-methylphenol	ND	200	
101-55-3	4-Bromophenyl-phenylether	ND	100	
59-50-7	4-Chloro-3-methylphenol	ND	100	
106-47-8	4-Chloroaniline	ND	100	
7005-72-3	4-Chlorophenyl-phenylether	ND	100	
100-01-6	4-Nitroaniline	ND	100	
100-02-7	4-Nitrophenol	ND	400	
56-57-5	4-nitroquinoline-1-oxide	ND	100	J
83-32-9	Acenaphthene	ND	100	
208-96-8	Acenaphthylene	ND	100	
98-86-2	Acetophenone	ND	100	
62-53-3	Aniline	ND	100	
120-12-7	Anthracene	ND	100	
140-57-8	Aramite	ND	100	
103-33-3	Azobenzene	ND	100	

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BNAs in Product

Client Sample ID:	R01-130227AJ-0005	Lab Sample ID:	AB38160
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.125 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	100	
56-55-3	Benzo(a)anthracene	ND	100	
50-32-8	Benzo(a)pyrene	ND	100	
205-99-2	Benzo(b)fluoranthene	ND	100	
191-24-2	Benzo(g,h,i)perylene	ND	100	
207-08-9	Benzo(k)fluoranthene	ND	100	
65-85-0	Benzoic acid	ND	200	
100-51-6	Benzyl alcohol	ND	100	
111-91-1	bis(-2-Chloroethoxy)methane	ND	100	
111-44-4	Bis(2-Chloroethyl)ether	ND	100	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	100	
85-68-7	Butylbenzylphthalate	ND	100	
86-74-8	Carbazole	ND	100	
510-15-6	Chlorobenzilate	ND	100	
218-01-9	Chrysene	ND	100	
53-70-3	Dibenz(a,h)anthracene	ND	100	
132-64-9	Dibenzofuran	ND	100	
84-66-2	Diethylphthalate	ND	100	
131-11-3	Dimethyl phthalate	ND	100	
84-74-2	Di-n-butylphthalate	ND	100	
117-84-0	Di-n-octyl phthalate	ND	200	
88-85-7	Dinoseb	ND	100	
62-50-0	Ethyl methanesulfonate	ND	100	
206-44-0	Fluoranthene	ND	100	
86-73-7	Fluorene	ND	100	
118-74-1	Hexachlorobenzene	ND	100	
87-68-3	Hexachlorobutadiene	ND	100	
77-47-4	Hexachlorocyclopentadiene	ND	100	
67-72-1	Hexachloroethane	ND	100	
1888-71-7	Hexachloropropene	ND	100	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	100	
465-73-6	Isodrin	ND	100	
78-59-1	Isophorone	ND	100	
120-58-1	Isosafrole	ND	100	
143-50-0	Kepone	ND	100	
66-27-3	Methyl methanesulfonate	ND	100	
91-20-3	Naphthalene	ND	100	
98-95-3	Nitrobenzene	ND	100	
62-75-9	N-nitrosodimethylamine	ND	100	
621-64-7	N-nitroso-di-n-propylamine	ND	100	
122-39-4	N-Nitrosodiphenylamine	ND	100	
608-93-5	Pentachlorobenzene	ND	100	
82-68-8	Pentachloronitrobenzene	ND	100	

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BNAs in Product

Client Sample ID: R01-130227AJ-0005
Date of Collection: 3/20/2013
Date of Preparation: 3/21/2013
Date of Analysis: 3/21/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.125 grams

Lab Sample ID: AB38160
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: N/A
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	100	
62-44-2	Phenacetin	ND	100	
85-01-8	Phenanthrene	ND	100	
108-95-2	Phenol	ND	100	
129-00-0	Pyrene	ND	100	
110-86-1	Pyridine	ND	100	
94-59-7	Safrole	ND	100	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	83	10 - 126
2-Fluorobiphenyl (SS4)	109	39 - 120
2-Fluorophenol (SS1)	18	15 - 78
Nitrobenzene-d5 (SS3)	108	30 - 120
Phenol-d6 (SS2)	12	10 - 65
p-Terphenyl-d14 (SS6)	145	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

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Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.095 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	130	
120-82-1	1,2,4-Trichlorobenzene	ND	130	
95-50-1	1,2-Dichlorobenzene	ND	130	
541-73-1	1,3-Dichlorobenzene	ND	130	
99-65-0	1,3-Dinitrobenzene	ND	130	
106-46-7	1,4-Dichlorobenzene	ND	130	
130-15-4	1,4-Naphthoquinone	ND	130	
90-12-0	1-Methylnaphthalene	ND	130	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	130	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	130	
95-95-4	2,4,5-Trichlorophenol	ND	130	
88-06-2	2,4,6-Trichlorophenol	ND	130	
120-83-2	2,4-Dichlorophenol	ND	130	
105-67-9	2,4-dimethylphenol	ND	130	
51-28-5	2,4-Dinitrophenol	ND	260	
121-14-2	2,4-Dinitrotoluene	ND	130	
87-65-0	2,6-Dichlorophenol	ND	130	
606-20-2	2,6-Dinitrotoluene	ND	130	
91-58-7	2-Chloronaphthalene	ND	130	
95-57-8	2-Chlorophenol	ND	130	
91-57-6	2-Methylnaphthalene	ND	130	
95-48-7	2-Methylphenol	ND	130	
88-74-4	2-Nitroaniline	ND	130	
88-75-5	2-Nitrophenol	ND	130	
108-39-4/106-44-5	3&4-Methylphenol	ND	260	
91-94-1	3,3'-Dichlorobenzidine	ND	130	
56-49-5	3-Methylcholanthrene	ND	130	
99-09-2	3-Nitroaniline	ND	130	
534-52-1	4,6-Dinitro-2-methylphenol	ND	260	
101-55-3	4-Bromophenyl-phenylether	ND	130	
59-50-7	4-Chloro-3-methylphenol	ND	130	
106-47-8	4-Chloroaniline	ND	130	
7005-72-3	4-Chlorophenyl-phenylether	ND	130	
100-01-6	4-Nitroaniline	ND	130	
100-02-7	4-Nitrophenol	ND	530	
56-57-5	4-nitroquinoline-1-oxide	ND	130	J
83-32-9	Acenaphthene	ND	130	
208-96-8	Acenaphthylene	ND	130	
98-86-2	Acetophenone	ND	130	
62-53-3	Aniline	ND	130	
120-12-7	Anthracene	ND	130	
140-57-8	Aramite	ND	130	
103-33-3	Azobenzene	ND	130	

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Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.095 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	130	
56-55-3	Benzo(a)anthracene	ND	130	
50-32-8	Benzo(a)pyrene	ND	130	
205-99-2	Benzo(b)fluoranthene	ND	130	
191-24-2	Benzo(g,h,i)perylene	ND	130	
207-08-9	Benzo(k)fluoranthene	ND	130	
65-85-0	Benzoic acid	ND	260	
100-51-6	Benzyl alcohol	ND	130	
111-91-1	bis(-2-Chloroethoxy)methane	ND	130	
111-44-4	Bis(2-Chloroethyl)ether	ND	130	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	130	
85-68-7	Butylbenzylphthalate	ND	130	
86-74-8	Carbazole	ND	130	
510-15-6	Chlorobenzilate	ND	130	
218-01-9	Chrysene	ND	130	
53-70-3	Dibenz(a,h)anthracene	ND	130	
132-64-9	Dibenzofuran	ND	130	
84-66-2	Diethylphthalate	ND	130	
131-11-3	Dimethyl phthalate	ND	130	
84-74-2	Di-n-butylphthalate	ND	130	
117-84-0	Di-n-octyl phthalate	ND	260	
88-85-7	Dinoseb	ND	130	
62-50-0	Ethyl methanesulfonate	ND	130	
206-44-0	Fluoranthene	ND	130	
86-73-7	Fluorene	ND	130	
118-74-1	Hexachlorobenzene	ND	130	
87-68-3	Hexachlorobutadiene	ND	130	
77-47-4	Hexachlorocyclopentadiene	ND	130	
67-72-1	Hexachloroethane	ND	130	
1888-71-7	Hexachloropropene	ND	130	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	130	
465-73-6	Isodrin	ND	130	
78-59-1	Isophorone	ND	130	
120-58-1	Isosafrole	ND	130	
143-50-0	Kepone	ND	130	
66-27-3	Methyl methanesulfonate	ND	130	
91-20-3	Naphthalene	ND	130	
98-95-3	Nitrobenzene	ND	130	
62-75-9	N-nitrosodimethylamine	ND	130	
621-64-7	N-nitroso-di-n-propylamine	ND	130	
122-39-4	N-Nitrosodiphenylamine	ND	130	
608-93-5	Pentachlorobenzene	ND	130	
82-68-8	Pentachloronitrobenzene	ND	130	

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Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.095 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	130	
62-44-2	Phenacetin	ND	130	
85-01-8	Phenanthrene	ND	130	
108-95-2	Phenol	ND	130	
129-00-0	Pyrene	ND	130	
110-86-1	Pyridine	ND	130	
94-59-7	Safrole	ND	130	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	91	10 - 126
2-Fluorobiphenyl (SS4)	111	39 - 120
2-Fluorophenol (SS1)	108	15 - 78
Nitrobenzene-d5 (SS3)	135	30 - 120
Phenol-d6 (SS2)	105	10 - 65
p-Terphenyl-d14 (SS6)	145	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

This method blank is for samples AB38161, AB38162, AB38163, AB38164, AB38166, and AB38169.

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BNAs in Product

Client Sample ID:	R01-130227AJ-0006	Lab Sample ID:	AB38161
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.107 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	47	
120-82-1	1,2,4-Trichlorobenzene	ND	47	
95-50-1	1,2-Dichlorobenzene	ND	47	
541-73-1	1,3-Dichlorobenzene	ND	47	
99-65-0	1,3-Dinitrobenzene	ND	47	
106-46-7	1,4-Dichlorobenzene	ND	47	
130-15-4	1,4-Naphthoquinone	ND	47	
90-12-0	1-Methylnaphthalene	ND	47	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	47	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	47	
95-95-4	2,4,5-Trichlorophenol	ND	47	
88-06-2	2,4,6-Trichlorophenol	ND	47	
120-83-2	2,4-Dichlorophenol	ND	47	
105-67-9	2,4-dimethylphenol	ND	47	
51-28-5	2,4-Dinitrophenol	ND	94	
121-14-2	2,4-Dinitrotoluene	ND	47	
87-65-0	2,6-Dichlorophenol	ND	47	
606-20-2	2,6-Dinitrotoluene	ND	47	
91-58-7	2-Chloronaphthalene	ND	47	
95-57-8	2-Chlorophenol	ND	47	
91-57-6	2-Methylnaphthalene	ND	47	
95-48-7	2-Methylphenol	ND	47	
88-74-4	2-Nitroaniline	ND	47	
88-75-5	2-Nitrophenol	ND	47	
108-39-4/106-44-5	3&4-Methylphenol	ND	94	
91-94-1	3,3'-Dichlorobenzidine	ND	47	
56-49-5	3-Methylcholanthrene	ND	47	
99-09-2	3-Nitroaniline	ND	47	
534-52-1	4,6-Dinitro-2-methylphenol	ND	94	
101-55-3	4-Bromophenyl-phenylether	ND	47	
59-50-7	4-Chloro-3-methylphenol	ND	47	
106-47-8	4-Chloroaniline	ND	47	
7005-72-3	4-Chlorophenyl-phenylether	ND	47	
100-01-6	4-Nitroaniline	ND	47	
100-02-7	4-Nitrophenol	ND	190	
56-57-5	4-nitroquinoline-1-oxide	ND	47	J
83-32-9	Acenaphthene	ND	47	
208-96-8	Acenaphthylene	ND	47	
98-86-2	Acetophenone	ND	47	
62-53-3	Aniline	ND	47	
120-12-7	Anthracene	ND	47	
140-57-8	Aramite	ND	47	
103-33-3	Azobenzene	ND	47	

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BNAs in Product

Client Sample ID:	R01-130227AJ-0006	Lab Sample ID:	AB38161
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.107 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	47	
56-55-3	Benzo(a)anthracene	ND	47	
50-32-8	Benzo(a)pyrene	ND	47	
205-99-2	Benzo(b)fluoranthene	ND	47	
191-24-2	Benzo(g,h,i)perylene	ND	47	
207-08-9	Benzo(k)fluoranthene	ND	47	
65-85-0	Benzoic acid	ND	94	
100-51-6	Benzyl alcohol	ND	47	
111-91-1	bis(-2-Chloroethoxy)methane	ND	47	
111-44-4	Bis(2-Chloroethyl)ether	ND	47	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	47	
85-68-7	Butylbenzylphthalate	ND	47	
86-74-8	Carbazole	ND	47	
510-15-6	Chlorobenzilate	ND	47	
218-01-9	Chrysene	ND	47	
53-70-3	Dibenz(a,h)anthracene	ND	47	
132-64-9	Dibenzofuran	ND	47	
84-66-2	Diethylphthalate	ND	47	
131-11-3	Dimethyl phthalate	ND	47	
84-74-2	Di-n-butylphthalate	ND	47	
117-84-0	Di-n-octyl phthalate	ND	94	
88-85-7	Dinoseb	ND	47	
62-50-0	Ethyl methanesulfonate	ND	47	
206-44-0	Fluoranthene	ND	47	
86-73-7	Fluorene	ND	47	
118-74-1	Hexachlorobenzene	ND	47	
87-68-3	Hexachlorobutadiene	ND	47	
77-47-4	Hexachlorocyclopentadiene	ND	47	
67-72-1	Hexachloroethane	ND	47	
1888-71-7	Hexachloropropene	ND	47	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	47	
465-73-6	Isodrin	ND	47	
78-59-1	Isophorone	ND	47	
120-58-1	Isosafrole	ND	47	
143-50-0	Kepone	ND	47	
66-27-3	Methyl methanesulfonate	ND	47	
91-20-3	Naphthalene	ND	47	
98-95-3	Nitrobenzene	ND	47	
62-75-9	N-nitrosodimethylamine	ND	47	
621-64-7	N-nitroso-di-n-propylamine	ND	47	
122-39-4	N-Nitrosodiphenylamine	ND	47	
608-93-5	Pentachlorobenzene	ND	47	
82-68-8	Pentachloronitrobenzene	ND	47	

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BNAs in Product

Client Sample ID: R01-130227AJ-0006
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.107 grams

Lab Sample ID: AB38161
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: N/A
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	47	
62-44-2	Phenacetin	ND	47	
85-01-8	Phenanthrene	ND	47	
108-95-2	Phenol	ND	47	
129-00-0	Pyrene	ND	47	
110-86-1	Pyridine	ND	47	
94-59-7	Safrole	ND	47	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	41	10 - 126
2-Fluorobiphenyl (SS4)	88	39 - 120
2-Fluorophenol (SS1)	78	15 - 78
Nitrobenzene-d5 (SS3)	60	30 - 120
Phenol-d6 (SS2)	90	10 - 65
p-Terphenyl-d14 (SS6)	110	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

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BNAs in Product

Client Sample ID:	R01-130227AJ-0007	Lab Sample ID:	AB38162
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.151 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	33	
120-82-1	1,2,4-Trichlorobenzene	ND	33	
95-50-1	1,2-Dichlorobenzene	ND	33	
541-73-1	1,3-Dichlorobenzene	ND	33	
99-65-0	1,3-Dinitrobenzene	ND	33	
106-46-7	1,4-Dichlorobenzene	ND	33	
130-15-4	1,4-Naphthoquinone	ND	33	
90-12-0	1-Methylnaphthalene	ND	33	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	33	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	33	
95-95-4	2,4,5-Trichlorophenol	ND	33	
88-06-2	2,4,6-Trichlorophenol	ND	33	
120-83-2	2,4-Dichlorophenol	ND	33	
105-67-9	2,4-dimethylphenol	ND	33	
51-28-5	2,4-Dinitrophenol	ND	66	
121-14-2	2,4-Dinitrotoluene	ND	33	
87-65-0	2,6-Dichlorophenol	ND	33	
606-20-2	2,6-Dinitrotoluene	ND	33	
91-58-7	2-Chloronaphthalene	ND	33	
95-57-8	2-Chlorophenol	ND	33	
91-57-6	2-Methylnaphthalene	ND	33	
95-48-7	2-Methylphenol	ND	33	
88-74-4	2-Nitroaniline	ND	33	
88-75-5	2-Nitrophenol	ND	33	
108-39-4/106-44-5	3&4-Methylphenol	ND	66	
91-94-1	3,3'-Dichlorobenzidine	ND	33	
56-49-5	3-Methylcholanthrene	ND	33	
99-09-2	3-Nitroaniline	ND	33	
534-52-1	4,6-Dinitro-2-methylphenol	ND	66	
101-55-3	4-Bromophenyl-phenylether	ND	33	
59-50-7	4-Chloro-3-methylphenol	ND	33	
106-47-8	4-Chloroaniline	ND	33	
7005-72-3	4-Chlorophenyl-phenylether	ND	33	
100-01-6	4-Nitroaniline	ND	33	
100-02-7	4-Nitrophenol	ND	130	
56-57-5	4-nitroquinoline-1-oxide	ND	33	J
83-32-9	Acenaphthene	ND	33	
208-96-8	Acenaphthylene	ND	33	
98-86-2	Acetophenone	ND	33	
62-53-3	Aniline	ND	33	
120-12-7	Anthracene	ND	33	
140-57-8	Aramite	ND	33	
103-33-3	Azobenzene	ND	33	

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BNAs in Product

Client Sample ID:	R01-130227AJ-0007	Lab Sample ID:	AB38162
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.151 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	33	
56-55-3	Benzo(a)anthracene	ND	33	
50-32-8	Benzo(a)pyrene	ND	33	
205-99-2	Benzo(b)fluoranthene	ND	33	
191-24-2	Benzo(g,h,i)perylene	ND	33	
207-08-9	Benzo(k)fluoranthene	ND	33	
65-85-0	Benzoic acid	ND	66	
100-51-6	Benzyl alcohol	ND	33	
111-91-1	bis(-2-Chloroethoxy)methane	ND	33	
111-44-4	Bis(2-Chloroethyl)ether	ND	33	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	33	
85-68-7	Butylbenzylphthalate	ND	33	
86-74-8	Carbazole	ND	33	
510-15-6	Chlorobenzilate	ND	33	
218-01-9	Chrysene	ND	33	
53-70-3	Dibenz(a,h)anthracene	ND	33	
132-64-9	Dibenzofuran	ND	33	
84-66-2	Diethylphthalate	ND	33	
131-11-3	Dimethyl phthalate	ND	33	
84-74-2	Di-n-butylphthalate	ND	33	
117-84-0	Di-n-octyl phthalate	ND	66	
88-85-7	Dinoseb	ND	33	
62-50-0	Ethyl methanesulfonate	ND	33	
206-44-0	Fluoranthene	ND	33	
86-73-7	Fluorene	ND	33	
118-74-1	Hexachlorobenzene	ND	33	
87-68-3	Hexachlorobutadiene	ND	33	
77-47-4	Hexachlorocyclopentadiene	ND	33	
67-72-1	Hexachloroethane	ND	33	
1888-71-7	Hexachloropropene	ND	33	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	33	
465-73-6	Isodrin	ND	33	
78-59-1	Isophorone	ND	33	
120-58-1	Isosafrole	ND	33	
143-50-0	Kepone	ND	33	
66-27-3	Methyl methanesulfonate	ND	33	
91-20-3	Naphthalene	ND	33	
98-95-3	Nitrobenzene	ND	33	
62-75-9	N-nitrosodimethylamine	ND	33	
621-64-7	N-nitroso-di-n-propylamine	ND	33	
122-39-4	N-Nitrosodiphenylamine	ND	33	
608-93-5	Pentachlorobenzene	ND	33	
82-68-8	Pentachloronitrobenzene	ND	33	

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BNAs in Product

Client Sample ID: R01-130227AJ-0007
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.151 grams

Lab Sample ID: AB38162
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: N/A
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	33	
62-44-2	Phenacetin	ND	33	
85-01-8	Phenanthrene	ND	33	
108-95-2	Phenol	ND	33	
129-00-0	Pyrene	ND	33	
110-86-1	Pyridine	ND	33	
94-59-7	Safrole	ND	33	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	95	10 - 126
2-Fluorobiphenyl (SS4)	105	39 - 120
2-Fluorophenol (SS1)	103	15 - 78
Nitrobenzene-d5 (SS3)	100	30 - 120
Phenol-d6 (SS2)	78	10 - 65
p-Terphenyl-d14 (SS6)	145	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

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BNAs in Product

Client Sample ID:	R01-130227AJ-0008	Lab Sample ID:	AB38163
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.112 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	110	
120-82-1	1,2,4-Trichlorobenzene	ND	110	
95-50-1	1,2-Dichlorobenzene	ND	110	
541-73-1	1,3-Dichlorobenzene	ND	110	
99-65-0	1,3-Dinitrobenzene	ND	110	
106-46-7	1,4-Dichlorobenzene	ND	110	
130-15-4	1,4-Naphthoquinone	ND	110	
90-12-0	1-Methylnaphthalene	ND	110	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	110	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	110	
95-95-4	2,4,5-Trichlorophenol	ND	110	
88-06-2	2,4,6-Trichlorophenol	ND	110	
120-83-2	2,4-Dichlorophenol	ND	110	
105-67-9	2,4-dimethylphenol	ND	110	
51-28-5	2,4-Dinitrophenol	ND	220	
121-14-2	2,4-Dinitrotoluene	ND	110	
87-65-0	2,6-Dichlorophenol	ND	110	
606-20-2	2,6-Dinitrotoluene	ND	110	
91-58-7	2-Chloronaphthalene	ND	110	
95-57-8	2-Chlorophenol	ND	110	
91-57-6	2-Methylnaphthalene	ND	110	
95-48-7	2-Methylphenol	ND	110	
88-74-4	2-Nitroaniline	ND	110	
88-75-5	2-Nitrophenol	ND	110	
108-39-4/106-44-5	3&4-Methylphenol	ND	220	
91-94-1	3,3'-Dichlorobenzidine	ND	110	
56-49-5	3-Methylcholanthrene	ND	110	
99-09-2	3-Nitroaniline	ND	110	
534-52-1	4,6-Dinitro-2-methylphenol	ND	220	
101-55-3	4-Bromophenyl-phenylether	ND	110	
59-50-7	4-Chloro-3-methylphenol	ND	110	
106-47-8	4-Chloroaniline	ND	110	
7005-72-3	4-Chlorophenyl-phenylether	ND	110	
100-01-6	4-Nitroaniline	ND	110	
100-02-7	4-Nitrophenol	ND	450	
56-57-5	4-nitroquinoline-1-oxide	ND	110	J
83-32-9	Acenaphthene	ND	110	
208-96-8	Acenaphthylene	ND	110	
98-86-2	Acetophenone	ND	110	
62-53-3	Aniline	ND	110	
120-12-7	Anthracene	ND	110	
140-57-8	Aramite	ND	110	
103-33-3	Azobenzene	ND	110	

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BNAs in Product

Client Sample ID:	R01-130227AJ-0008	Lab Sample ID:	AB38163
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.112 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	110	
56-55-3	Benzo(a)anthracene	ND	110	
50-32-8	Benzo(a)pyrene	ND	110	
205-99-2	Benzo(b)fluoranthene	ND	110	
191-24-2	Benzo(g,h,i)perylene	ND	110	
207-08-9	Benzo(k)fluoranthene	ND	110	
65-85-0	Benzoic acid	ND	220	
100-51-6	Benzyl alcohol	ND	110	
111-91-1	bis(-2-Chloroethoxy)methane	ND	110	
111-44-4	Bis(2-Chloroethyl)ether	ND	110	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	110	
85-68-7	Butylbenzylphthalate	ND	110	
86-74-8	Carbazole	ND	110	
510-15-6	Chlorobenzilate	ND	110	
218-01-9	Chrysene	ND	110	
53-70-3	Dibenz(a,h)anthracene	ND	110	
132-64-9	Dibenzofuran	ND	110	
84-66-2	Diethylphthalate	ND	110	
131-11-3	Dimethyl phthalate	ND	110	
84-74-2	Di-n-butylphthalate	ND	110	
117-84-0	Di-n-octyl phthalate	ND	220	
88-85-7	Dinoseb	ND	110	
62-50-0	Ethyl methanesulfonate	ND	110	
206-44-0	Fluoranthene	ND	110	
86-73-7	Fluorene	ND	110	
118-74-1	Hexachlorobenzene	ND	110	
87-68-3	Hexachlorobutadiene	ND	110	
77-47-4	Hexachlorocyclopentadiene	ND	110	
67-72-1	Hexachloroethane	ND	110	
1888-71-7	Hexachloropropene	ND	110	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	110	
465-73-6	Isodrin	ND	110	
78-59-1	Isophorone	ND	110	
120-58-1	Isosafrole	ND	110	
143-50-0	Kepone	ND	110	
66-27-3	Methyl methanesulfonate	ND	110	
91-20-3	Naphthalene	ND	110	
98-95-3	Nitrobenzene	ND	110	
62-75-9	N-nitrosodimethylamine	ND	110	
621-64-7	N-nitroso-di-n-propylamine	ND	110	
122-39-4	N-Nitrosodiphenylamine	ND	110	
608-93-5	Pentachlorobenzene	ND	110	
82-68-8	Pentachloronitrobenzene	ND	110	

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BNAs in Product

Client Sample ID: R01-130227AJ-0008
Date of Collection: 3/20/2013
Date of Preparation: 3/21/2013
Date of Analysis: 3/21/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.112 grams

Lab Sample ID: AB38163
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: N/A
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	110	
62-44-2	Phenacetin	ND	110	
85-01-8	Phenanthrene	ND	110	
108-95-2	Phenol	ND	110	
129-00-0	Pyrene	ND	110	
110-86-1	Pyridine	ND	110	
94-59-7	Safrole	ND	110	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	104	10 - 126
2-Fluorobiphenyl (SS4)	112	39 - 120
2-Fluorophenol (SS1)	110	15 - 78
Nitrobenzene-d5 (SS3)	110	30 - 120
Phenol-d6 (SS2)	103	10 - 65
p-Terphenyl-d14 (SS6)	125	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

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BNAs in Product

Client Sample ID:	R01-130227AJ-0009	Lab Sample ID:	AB38164
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/26/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/26/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	10
Wet Weight Prepared:	0.129 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	390	J
120-82-1	1,2,4-Trichlorobenzene	ND	390	J
95-50-1	1,2-Dichlorobenzene	ND	390	J
541-73-1	1,3-Dichlorobenzene	ND	390	J
99-65-0	1,3-Dinitrobenzene	ND	390	J
106-46-7	1,4-Dichlorobenzene	ND	390	J
130-15-4	1,4-Naphthoquinone	ND	390	J
90-12-0	1-Methylnaphthalene	ND	390	J
108-60-1	2,2'-oxybis(1-chloropropane)	ND	390	J
58-90-2	2,3,4,6-Tetrachlorophenol	ND	390	J
95-95-4	2,4,5-Trichlorophenol	ND	390	J
88-06-2	2,4,6-Trichlorophenol	ND	390	J
120-83-2	2,4-Dichlorophenol	ND	390	J
105-67-9	2,4-dimethylphenol	ND	390	J
51-28-5	2,4-Dinitrophenol	ND	780	J
121-14-2	2,4-Dinitrotoluene	ND	390	J
87-65-0	2,6-Dichlorophenol	ND	390	J
606-20-2	2,6-Dinitrotoluene	ND	390	J
91-58-7	2-Chloronaphthalene	ND	390	J
95-57-8	2-Chlorophenol	ND	390	J
91-57-6	2-Methylnaphthalene	ND	390	J
95-48-7	2-Methylphenol	ND	390	J
88-74-4	2-Nitroaniline	ND	390	J
88-75-5	2-Nitrophenol	ND	390	J
108-39-4/106-44-5	3&4-Methylphenol	ND	780	J
91-94-1	3,3'-Dichlorobenzidine	ND	390	J
56-49-5	3-Methylcholanthrene	ND	390	J
99-09-2	3-Nitroaniline	ND	390	J
534-52-1	4,6-Dinitro-2-methylphenol	ND	780	J
101-55-3	4-Bromophenyl-phenylether	ND	390	J
59-50-7	4-Chloro-3-methylphenol	ND	390	J
106-47-8	4-Chloroaniline	ND	390	J
7005-72-3	4-Chlorophenyl-phenylether	ND	390	J
100-01-6	4-Nitroaniline	ND	390	J
100-02-7	4-Nitrophenol	ND	1600	J
56-57-5	4-nitroquinoline-1-oxide	ND	390	J
83-32-9	Acenaphthene	ND	390	J
208-96-8	Acenaphthylene	ND	390	J
98-86-2	Acetophenone	ND	390	J
62-53-3	Aniline	ND	390	J
120-12-7	Anthracene	ND	390	J
140-57-8	Aramite	ND	390	J
103-33-3	Azobenzene	ND	390	J

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BNAs in Product

Client Sample ID:	R01-130227AJ-0009	Lab Sample ID:	AB38164
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/26/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/26/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	10
Wet Weight Prepared:	0.129 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	390	J
56-55-3	Benzo(a)anthracene	ND	390	J
50-32-8	Benzo(a)pyrene	ND	390	J
205-99-2	Benzo(b)fluoranthene	ND	390	J
191-24-2	Benzo(g,h,i)perylene	ND	390	J
207-08-9	Benzo(k)fluoranthene	ND	390	J
65-85-0	Benzoic acid	ND	780	J
100-51-6	Benzyl alcohol	ND	390	J
111-91-1	bis(-2-Chloroethoxy)methane	ND	390	J
111-44-4	Bis(2-Chloroethyl)ether	ND	390	J
117-81-7	Bis(2-ethylhexyl)phthalate	ND	390	J
85-68-7	Butylbenzylphthalate	ND	390	J
86-74-8	Carbazole	ND	390	J
510-15-6	Chlorobenzilate	ND	390	J
218-01-9	Chrysene	ND	390	J
53-70-3	Dibenz(a,h)anthracene	ND	390	J
132-64-9	Dibenzofuran	ND	390	J
84-66-2	Diethylphthalate	ND	390	J
131-11-3	Dimethyl phthalate	ND	390	J
84-74-2	Di-n-butylphthalate	ND	390	J
117-84-0	Di-n-octyl phthalate	ND	780	J
88-85-7	Dinoseb	ND	390	J
62-50-0	Ethyl methanesulfonate	ND	390	J
206-44-0	Fluoranthene	ND	390	J
86-73-7	Fluorene	ND	390	J
118-74-1	Hexachlorobenzene	ND	390	J
87-68-3	Hexachlorobutadiene	ND	390	J
77-47-4	Hexachlorocyclopentadiene	ND	390	J
67-72-1	Hexachloroethane	ND	390	J
1888-71-7	Hexachloropropene	ND	390	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	390	J
465-73-6	Isodrin	ND	390	J
78-59-1	Isophorone	ND	390	J
120-58-1	Isosafrole	ND	390	J
143-50-0	Kepone	ND	390	J
66-27-3	Methyl methanesulfonate	ND	390	J
91-20-3	Naphthalene	ND	390	J
98-95-3	Nitrobenzene	ND	390	J
62-75-9	N-nitrosodimethylamine	ND	390	J
621-64-7	N-nitroso-di-n-propylamine	ND	390	J
122-39-4	N-Nitrosodiphenylamine	ND	390	J
608-93-5	Pentachlorobenzene	ND	390	J
82-68-8	Pentachloronitrobenzene	ND	390	J

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BNAs in Product

Client Sample ID: R01-130227AJ-0009
Date of Collection: 3/20/2013
Date of Preparation: 3/26/2013
Date of Analysis: 3/26/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.129 grams

Lab Sample ID: AB38164
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: 10
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	390	J
62-44-2	Phenacetin	ND	390	J
85-01-8	Phenanthrene	ND	390	J
108-95-2	Phenol	ND	390	J
129-00-0	Pyrene	ND	390	J
110-86-1	Pyridine	ND	390	J
94-59-7	Safrole	ND	390	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	0	10 - 126
2-Fluorobiphenyl (SS4)	96	39 - 120
2-Fluorophenol (SS1)	1	15 - 78
Nitrobenzene-d5 (SS3)	100	30 - 120
Phenol-d6 (SS2)	3	10 - 65
p-Terphenyl-d14 (SS6)	105	60 - 133

Comments: This sample was prepped and analyzed multiple times. Three of the four analyses had internal standards out of spec, this analysis had no acid surrogate recoverie. All results are estimates.

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BNAs in Product

Client Sample ID:	R01-130227AJ-0010	Lab Sample ID:	AB38165
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.117 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	110	
120-82-1	1,2,4-Trichlorobenzene	ND	110	
95-50-1	1,2-Dichlorobenzene	ND	110	
541-73-1	1,3-Dichlorobenzene	ND	110	
99-65-0	1,3-Dinitrobenzene	ND	110	
106-46-7	1,4-Dichlorobenzene	ND	110	
130-15-4	1,4-Naphthoquinone	ND	110	
90-12-0	1-Methylnaphthalene	ND	110	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	110	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	110	
95-95-4	2,4,5-Trichlorophenol	ND	110	
88-06-2	2,4,6-Trichlorophenol	ND	110	
120-83-2	2,4-Dichlorophenol	ND	110	
105-67-9	2,4-dimethylphenol	ND	110	
51-28-5	2,4-Dinitrophenol	ND	210	
121-14-2	2,4-Dinitrotoluene	ND	110	
87-65-0	2,6-Dichlorophenol	ND	110	
606-20-2	2,6-Dinitrotoluene	ND	110	
91-58-7	2-Chloronaphthalene	ND	110	
95-57-8	2-Chlorophenol	ND	110	
91-57-6	2-Methylnaphthalene	ND	110	
95-48-7	2-Methylphenol	ND	110	
88-74-4	2-Nitroaniline	ND	110	
88-75-5	2-Nitrophenol	ND	110	
108-39-4/106-44-5	3&4-Methylphenol	ND	210	
91-94-1	3,3'-Dichlorobenzidine	ND	110	
56-49-5	3-Methylcholanthrene	ND	110	
99-09-2	3-Nitroaniline	ND	110	
534-52-1	4,6-Dinitro-2-methylphenol	ND	210	
101-55-3	4-Bromophenyl-phenylether	ND	110	
59-50-7	4-Chloro-3-methylphenol	ND	110	
106-47-8	4-Chloroaniline	ND	110	
7005-72-3	4-Chlorophenyl-phenylether	ND	110	
100-01-6	4-Nitroaniline	ND	110	
100-02-7	4-Nitrophenol	ND	430	
56-57-5	4-nitroquinoline-1-oxide	ND	110	J
83-32-9	Acenaphthene	ND	110	
208-96-8	Acenaphthylene	ND	110	
98-86-2	Acetophenone	ND	110	
62-53-3	Aniline	ND	110	
120-12-7	Anthracene	ND	110	
140-57-8	Aramite	ND	110	
103-33-3	Azobenzene	ND	110	

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BNAs in Product

Client Sample ID:	R01-130227AJ-0010	Lab Sample ID:	AB38165
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/21/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.117 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	110	
56-55-3	Benzo(a)anthracene	ND	110	
50-32-8	Benzo(a)pyrene	ND	110	
205-99-2	Benzo(b)fluoranthene	ND	110	
191-24-2	Benzo(g,h,i)perylene	ND	110	
207-08-9	Benzo(k)fluoranthene	ND	110	
65-85-0	Benzoic acid	ND	210	
100-51-6	Benzyl alcohol	ND	110	
111-91-1	bis(-2-Chloroethoxy)methane	ND	110	
111-44-4	Bis(2-Chloroethyl)ether	ND	110	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	110	
85-68-7	Butylbenzylphthalate	ND	110	
86-74-8	Carbazole	ND	110	
510-15-6	Chlorobenzilate	ND	110	
218-01-9	Chrysene	ND	110	
53-70-3	Dibenz(a,h)anthracene	ND	110	
132-64-9	Dibenzofuran	ND	110	
84-66-2	Diethylphthalate	ND	110	
131-11-3	Dimethyl phthalate	ND	110	
84-74-2	Di-n-butylphthalate	ND	110	
117-84-0	Di-n-octyl phthalate	ND	210	
88-85-7	Dinoseb	ND	110	
62-50-0	Ethyl methanesulfonate	ND	110	
206-44-0	Fluoranthene	ND	110	
86-73-7	Fluorene	ND	110	
118-74-1	Hexachlorobenzene	ND	110	
87-68-3	Hexachlorobutadiene	ND	110	
77-47-4	Hexachlorocyclopentadiene	ND	110	
67-72-1	Hexachloroethane	ND	110	
1888-71-7	Hexachloropropene	ND	110	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	110	
465-73-6	Isodrin	ND	110	
78-59-1	Isophorone	ND	110	
120-58-1	Isosafrole	ND	110	
143-50-0	Kepone	ND	110	
66-27-3	Methyl methanesulfonate	ND	110	
91-20-3	Naphthalene	8800	530	
98-95-3	Nitrobenzene	ND	110	
62-75-9	N-nitrosodimethylamine	ND	110	
621-64-7	N-nitroso-di-n-propylamine	ND	110	
122-39-4	N-Nitrosodiphenylamine	ND	110	
608-93-5	Pentachlorobenzene	ND	110	
82-68-8	Pentachloronitrobenzene	ND	110	

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BNAs in Product

Client Sample ID: R01-130227AJ-0010
Date of Collection: 3/20/2013
Date of Preparation: 3/21/2013
Date of Analysis: 3/21/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.117 grams

Lab Sample ID: AB38165
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: N/A
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	110	
62-44-2	Phenacetin	ND	110	
85-01-8	Phenanthrene	ND	110	
108-95-2	Phenol	ND	110	
129-00-0	Pyrene	ND	110	
110-86-1	Pyridine	ND	110	
94-59-7	Safrole	ND	110	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	64	10 - 126
2-Fluorobiphenyl (SS4)	111	39 - 120
2-Fluorophenol (SS1)	25	15 - 78
Nitrobenzene-d5 (SS3)	110	30 - 120
Phenol-d6 (SS2)	65	10 - 65
p-Terphenyl-d14 (SS6)	120	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

Naphthalene is reported from a 5x dilution.

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BNAs in Product

Client Sample ID:	R01-130227AJ-0012	Lab Sample ID:	AB38166
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.108 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	46	
120-82-1	1,2,4-Trichlorobenzene	ND	46	
95-50-1	1,2-Dichlorobenzene	ND	46	
541-73-1	1,3-Dichlorobenzene	ND	46	
99-65-0	1,3-Dinitrobenzene	ND	46	
106-46-7	1,4-Dichlorobenzene	ND	46	
130-15-4	1,4-Naphthoquinone	ND	46	
90-12-0	1-Methylnaphthalene	ND	46	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	46	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	46	
95-95-4	2,4,5-Trichlorophenol	ND	46	
88-06-2	2,4,6-Trichlorophenol	ND	46	
120-83-2	2,4-Dichlorophenol	ND	46	
105-67-9	2,4-dimethylphenol	ND	46	
51-28-5	2,4-Dinitrophenol	ND	92	
121-14-2	2,4-Dinitrotoluene	ND	46	
87-65-0	2,6-Dichlorophenol	ND	46	
606-20-2	2,6-Dinitrotoluene	ND	46	
91-58-7	2-Chloronaphthalene	ND	46	
95-57-8	2-Chlorophenol	ND	46	
91-57-6	2-Methylnaphthalene	ND	46	
95-48-7	2-Methylphenol	ND	46	
88-74-4	2-Nitroaniline	ND	46	
88-75-5	2-Nitrophenol	ND	46	
108-39-4/106-44-5	3&4-Methylphenol	ND	92	
91-94-1	3,3'-Dichlorobenzidine	ND	46	
56-49-5	3-Methylcholanthrene	ND	46	
99-09-2	3-Nitroaniline	ND	46	
534-52-1	4,6-Dinitro-2-methylphenol	ND	92	
101-55-3	4-Bromophenyl-phenylether	ND	46	
59-50-7	4-Chloro-3-methylphenol	ND	46	
106-47-8	4-Chloroaniline	ND	46	
7005-72-3	4-Chlorophenyl-phenylether	ND	46	
100-01-6	4-Nitroaniline	ND	46	
100-02-7	4-Nitrophenol	ND	190	
56-57-5	4-nitroquinoline-1-oxide	ND	46	J
83-32-9	Acenaphthene	ND	46	
208-96-8	Acenaphthylene	ND	46	
98-86-2	Acetophenone	ND	46	
62-53-3	Aniline	ND	46	
120-12-7	Anthracene	ND	46	
140-57-8	Aramite	ND	46	
103-33-3	Azobenzene	ND	46	

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BNAs in Product

Client Sample ID:	R01-130227AJ-0012	Lab Sample ID:	AB38166
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/25/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.108 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	46	
56-55-3	Benzo(a)anthracene	ND	46	
50-32-8	Benzo(a)pyrene	ND	46	
205-99-2	Benzo(b)fluoranthene	ND	46	
191-24-2	Benzo(g,h,i)perylene	ND	46	
207-08-9	Benzo(k)fluoranthene	ND	46	
65-85-0	Benzoic acid	ND	92	
100-51-6	Benzyl alcohol	ND	46	
111-91-1	bis(-2-Chloroethoxy)methane	ND	46	
111-44-4	Bis(2-Chloroethyl)ether	ND	46	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	46	
85-68-7	Butylbenzylphthalate	ND	46	
86-74-8	Carbazole	ND	46	
510-15-6	Chlorobenzilate	ND	46	
218-01-9	Chrysene	ND	46	
53-70-3	Dibenz(a,h)anthracene	ND	46	
132-64-9	Dibenzofuran	ND	46	
84-66-2	Diethylphthalate	ND	46	
131-11-3	Dimethyl phthalate	ND	46	
84-74-2	Di-n-butylphthalate	ND	46	
117-84-0	Di-n-octyl phthalate	ND	92	
88-85-7	Dinoseb	ND	46	
62-50-0	Ethyl methanesulfonate	ND	46	
206-44-0	Fluoranthene	ND	46	
86-73-7	Fluorene	ND	46	
118-74-1	Hexachlorobenzene	ND	46	
87-68-3	Hexachlorobutadiene	ND	46	
77-47-4	Hexachlorocyclopentadiene	ND	46	
67-72-1	Hexachloroethane	ND	46	
1888-71-7	Hexachloropropene	ND	46	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	46	
465-73-6	Isodrin	ND	46	
78-59-1	Isophorone	ND	46	
120-58-1	Isosafrole	ND	46	
143-50-0	Kepone	ND	46	
66-27-3	Methyl methanesulfonate	ND	46	
91-20-3	Naphthalene	ND	46	
98-95-3	Nitrobenzene	ND	46	
62-75-9	N-nitrosodimethylamine	ND	46	
621-64-7	N-nitroso-di-n-propylamine	ND	46	
122-39-4	N-Nitrosodiphenylamine	ND	46	
608-93-5	Pentachlorobenzene	ND	46	
82-68-8	Pentachloronitrobenzene	ND	46	

Creative Paper - Worcester, MA

BNAs in Product

Client Sample ID: R01-130227AJ-0012
Date of Collection: 3/20/2013
Date of Preparation: 3/25/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.108 grams

Lab Sample ID: AB38166
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: N/A
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	46	
62-44-2	Phenacetin	ND	46	
85-01-8	Phenanthrene	ND	46	
108-95-2	Phenol	ND	46	
129-00-0	Pyrene	ND	46	
110-86-1	Pyridine	ND	46	
94-59-7	Safrole	ND	46	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	10	10 - 126
2-Fluorobiphenyl (SS4)	83	39 - 120
2-Fluorophenol (SS1)	60	15 - 78
Nitrobenzene-d5 (SS3)	60	30 - 120
Phenol-d6 (SS2)	70	10 - 65
p-Terphenyl-d14 (SS6)	105	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

Creative Paper - Worcester, MA

BNAs in Product

Client Sample ID:	R01-130227AJ-0014	Lab Sample ID:	AB38167
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.107 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	120	
120-82-1	1,2,4-Trichlorobenzene	ND	120	
95-50-1	1,2-Dichlorobenzene	ND	120	
541-73-1	1,3-Dichlorobenzene	ND	120	
99-65-0	1,3-Dinitrobenzene	ND	120	
106-46-7	1,4-Dichlorobenzene	ND	120	
130-15-4	1,4-Naphthoquinone	ND	120	
90-12-0	1-Methylnaphthalene	ND	120	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	120	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	120	
95-95-4	2,4,5-Trichlorophenol	ND	120	
88-06-2	2,4,6-Trichlorophenol	ND	120	
120-83-2	2,4-Dichlorophenol	ND	120	
105-67-9	2,4-dimethylphenol	ND	120	
51-28-5	2,4-Dinitrophenol	ND	230	
121-14-2	2,4-Dinitrotoluene	ND	120	
87-65-0	2,6-Dichlorophenol	ND	120	
606-20-2	2,6-Dinitrotoluene	ND	120	
91-58-7	2-Chloronaphthalene	ND	120	
95-57-8	2-Chlorophenol	ND	120	
91-57-6	2-Methylnaphthalene	ND	120	
95-48-7	2-Methylphenol	ND	120	
88-74-4	2-Nitroaniline	ND	120	
88-75-5	2-Nitrophenol	ND	120	
108-39-4/106-44-5	3&4-Methylphenol	ND	230	
91-94-1	3,3'-Dichlorobenzidine	ND	120	
56-49-5	3-Methylcholanthrene	ND	120	
99-09-2	3-Nitroaniline	ND	120	
534-52-1	4,6-Dinitro-2-methylphenol	ND	230	
101-55-3	4-Bromophenyl-phenylether	ND	120	
59-50-7	4-Chloro-3-methylphenol	ND	120	
106-47-8	4-Chloroaniline	ND	120	
7005-72-3	4-Chlorophenyl-phenylether	ND	120	
100-01-6	4-Nitroaniline	ND	120	
100-02-7	4-Nitrophenol	ND	470	
56-57-5	4-nitroquinoline-1-oxide	ND	120	J
83-32-9	Acenaphthene	ND	120	
208-96-8	Acenaphthylene	ND	120	
98-86-2	Acetophenone	ND	120	
62-53-3	Aniline	ND	120	
120-12-7	Anthracene	ND	120	
140-57-8	Aramite	ND	120	
103-33-3	Azobenzene	ND	120	

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BNAs in Product

Client Sample ID:	R01-130227AJ-0014	Lab Sample ID:	AB38167
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.107 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	120	
56-55-3	Benzo(a)anthracene	ND	120	
50-32-8	Benzo(a)pyrene	ND	120	
205-99-2	Benzo(b)fluoranthene	ND	120	
191-24-2	Benzo(g,h,i)perylene	ND	120	
207-08-9	Benzo(k)fluoranthene	ND	120	
65-85-0	Benzoic acid	ND	230	
100-51-6	Benzyl alcohol	ND	120	
111-91-1	bis(-2-Chloroethoxy)methane	ND	120	
111-44-4	Bis(2-Chloroethyl)ether	ND	120	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	120	
85-68-7	Butylbenzylphthalate	ND	120	
86-74-8	Carbazole	ND	120	
510-15-6	Chlorobenzilate	ND	120	
218-01-9	Chrysene	ND	120	
53-70-3	Dibenz(a,h)anthracene	ND	120	
132-64-9	Dibenzofuran	ND	120	
84-66-2	Diethylphthalate	ND	120	
131-11-3	Dimethyl phthalate	ND	120	
84-74-2	Di-n-butylphthalate	ND	120	
117-84-0	Di-n-octyl phthalate	ND	230	
88-85-7	Dinoseb	ND	120	
62-50-0	Ethyl methanesulfonate	ND	120	
206-44-0	Fluoranthene	ND	120	
86-73-7	Fluorene	ND	120	
118-74-1	Hexachlorobenzene	ND	120	
87-68-3	Hexachlorobutadiene	ND	120	
77-47-4	Hexachlorocyclopentadiene	ND	120	
67-72-1	Hexachloroethane	ND	120	
1888-71-7	Hexachloropropene	ND	120	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	120	
465-73-6	Isodrin	ND	120	
78-59-1	Isophorone	ND	120	
120-58-1	Isosafrole	ND	120	
143-50-0	Kepone	ND	120	
66-27-3	Methyl methanesulfonate	ND	120	
91-20-3	Naphthalene	ND	120	
98-95-3	Nitrobenzene	ND	120	
62-75-9	N-nitrosodimethylamine	ND	120	
621-64-7	N-nitroso-di-n-propylamine	ND	120	
122-39-4	N-Nitrosodiphenylamine	ND	120	
608-93-5	Pentachlorobenzene	ND	120	
82-68-8	Pentachloronitrobenzene	ND	120	

Creative Paper - Worcester, MA

BNAs in Product

Client Sample ID: R01-130227AJ-0014
Date of Collection: 3/20/2013
Date of Preparation: 3/21/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.107 grams

Lab Sample ID: AB38167
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: N/A
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	120	
62-44-2	Phenacetin	ND	120	
85-01-8	Phenanthrene	ND	120	
108-95-2	Phenol	ND	120	
129-00-0	Pyrene	ND	120	
110-86-1	Pyridine	ND	120	
94-59-7	Safrole	ND	120	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	66	10 - 126
2-Fluorobiphenyl (SS4)	102	39 - 120
2-Fluorophenol (SS1)	96	15 - 78
Nitrobenzene-d5 (SS3)	101	30 - 120
Phenol-d6 (SS2)	82	10 - 65
p-Terphenyl-d14 (SS6)	112	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

Creative Paper - Worcester, MA

BNAs in Product

Client Sample ID:	R01-130227AJ-0015	Lab Sample ID:	AB38168
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.107 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	120	
120-82-1	1,2,4-Trichlorobenzene	ND	120	
95-50-1	1,2-Dichlorobenzene	ND	120	
541-73-1	1,3-Dichlorobenzene	ND	120	
99-65-0	1,3-Dinitrobenzene	ND	120	
106-46-7	1,4-Dichlorobenzene	ND	120	
130-15-4	1,4-Naphthoquinone	ND	120	
90-12-0	1-Methylnaphthalene	ND	120	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	120	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	120	
95-95-4	2,4,5-Trichlorophenol	ND	120	
88-06-2	2,4,6-Trichlorophenol	ND	120	
120-83-2	2,4-Dichlorophenol	ND	120	
105-67-9	2,4-dimethylphenol	ND	120	
51-28-5	2,4-Dinitrophenol	ND	230	
121-14-2	2,4-Dinitrotoluene	ND	120	
87-65-0	2,6-Dichlorophenol	ND	120	
606-20-2	2,6-Dinitrotoluene	ND	120	
91-58-7	2-Chloronaphthalene	ND	120	
95-57-8	2-Chlorophenol	ND	120	
91-57-6	2-Methylnaphthalene	ND	120	
95-48-7	2-Methylphenol	ND	120	
88-74-4	2-Nitroaniline	ND	120	
88-75-5	2-Nitrophenol	ND	120	
108-39-4/106-44-5	3&4-Methylphenol	ND	230	
91-94-1	3,3'-Dichlorobenzidine	ND	120	
56-49-5	3-Methylcholanthrene	ND	120	
99-09-2	3-Nitroaniline	ND	120	
534-52-1	4,6-Dinitro-2-methylphenol	ND	230	
101-55-3	4-Bromophenyl-phenylether	ND	120	
59-50-7	4-Chloro-3-methylphenol	ND	120	
106-47-8	4-Chloroaniline	ND	120	
7005-72-3	4-Chlorophenyl-phenylether	ND	120	
100-01-6	4-Nitroaniline	ND	120	
100-02-7	4-Nitrophenol	ND	470	
56-57-5	4-nitroquinoline-1-oxide	ND	120	J
83-32-9	Acenaphthene	ND	120	
208-96-8	Acenaphthylene	ND	120	
98-86-2	Acetophenone	ND	120	
62-53-3	Aniline	ND	120	
120-12-7	Anthracene	ND	120	
140-57-8	Aramite	ND	120	
103-33-3	Azobenzene	ND	120	

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BNAs in Product

Client Sample ID:	R01-130227AJ-0015	Lab Sample ID:	AB38168
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.107 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benidine	ND	120	
56-55-3	Benzo(a)anthracene	ND	120	
50-32-8	Benzo(a)pyrene	ND	120	
205-99-2	Benzo(b)fluoranthene	ND	120	
191-24-2	Benzo(g,h,i)perylene	ND	120	
207-08-9	Benzo(k)fluoranthene	ND	120	
65-85-0	Benzoic acid	ND	230	
100-51-6	Benzyl alcohol	ND	120	
111-91-1	bis(-2-Chloroethoxy)methane	ND	120	
111-44-4	Bis(2-Chloroethyl)ether	ND	120	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	120	
85-68-7	Butylbenzylphthalate	ND	120	
86-74-8	Carbazole	ND	120	
510-15-6	Chlorobenzilate	ND	120	
218-01-9	Chrysene	ND	120	
53-70-3	Dibenz(a,h)anthracene	ND	120	
132-64-9	Dibenzofuran	ND	120	
84-66-2	Diethylphthalate	ND	120	
131-11-3	Dimethyl phthalate	ND	120	
84-74-2	Di-n-butylphthalate	ND	120	
117-84-0	Di-n-octyl phthalate	ND	230	
88-85-7	Dinoseb	ND	120	
62-50-0	Ethyl methanesulfonate	ND	120	
206-44-0	Fluoranthene	ND	120	
86-73-7	Fluorene	ND	120	
118-74-1	Hexachlorobenzene	ND	120	
87-68-3	Hexachlorobutadiene	ND	120	
77-47-4	Hexachlorocyclopentadiene	ND	120	
67-72-1	Hexachloroethane	ND	120	
1888-71-7	Hexachloropropene	ND	120	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	120	
465-73-6	Isodrin	ND	120	
78-59-1	Isophorone	ND	120	
120-58-1	Isosafrole	ND	120	
143-50-0	Kepone	ND	120	
66-27-3	Methyl methanesulfonate	ND	120	
91-20-3	Naphthalene	ND	120	
98-95-3	Nitrobenzene	ND	120	
62-75-9	N-nitrosodimethylamine	ND	120	
621-64-7	N-nitroso-di-n-propylamine	ND	120	
122-39-4	N-Nitrosodiphenylamine	ND	120	
608-93-5	Pentachlorobenzene	ND	120	
82-68-8	Pentachloronitrobenzene	ND	120	

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BNAs in Product

Client Sample ID: R01-130227AJ-0015
Date of Collection: 3/20/2013
Date of Preparation: 3/21/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.107 grams

Lab Sample ID: AB38168
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: N/A
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	120	
62-44-2	Phenacetin	ND	120	
85-01-8	Phenanthrene	ND	120	
108-95-2	Phenol	ND	120	
129-00-0	Pyrene	ND	120	
110-86-1	Pyridine	ND	120	
94-59-7	Safrole	ND	120	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	59	10 - 126
2-Fluorobiphenyl (SS4)	100	39 - 120
2-Fluorophenol (SS1)	100	15 - 78
Nitrobenzene-d5 (SS3)	100	30 - 120
Phenol-d6 (SS2)	86	10 - 65
p-Terphenyl-d14 (SS6)	108	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

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BNAs in Product

Client Sample ID:	R01-130227AJ-0016	Lab Sample ID:	AB38169
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/26/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	10
Wet Weight Prepared:	0.103 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	490	J
120-82-1	1,2,4-Trichlorobenzene	ND	490	J
95-50-1	1,2-Dichlorobenzene	ND	490	J
541-73-1	1,3-Dichlorobenzene	ND	490	J
99-65-0	1,3-Dinitrobenzene	ND	490	J
106-46-7	1,4-Dichlorobenzene	ND	490	J
130-15-4	1,4-Naphthoquinone	ND	490	J
90-12-0	1-Methylnaphthalene	ND	490	J
108-60-1	2,2'-oxybis(1-chloropropane)	ND	490	J
58-90-2	2,3,4,6-Tetrachlorophenol	ND	490	J
95-95-4	2,4,5-Trichlorophenol	ND	490	J
88-06-2	2,4,6-Trichlorophenol	ND	490	J
120-83-2	2,4-Dichlorophenol	ND	490	J
105-67-9	2,4-dimethylphenol	ND	490	J
51-28-5	2,4-Dinitrophenol	ND	970	J
121-14-2	2,4-Dinitrotoluene	ND	490	J
87-65-0	2,6-Dichlorophenol	ND	490	J
606-20-2	2,6-Dinitrotoluene	ND	490	J
91-58-7	2-Chloronaphthalene	ND	490	J
95-57-8	2-Chlorophenol	ND	490	J
91-57-6	2-Methylnaphthalene	ND	490	J
95-48-7	2-Methylphenol	ND	490	J
88-74-4	2-Nitroaniline	ND	490	J
88-75-5	2-Nitrophenol	ND	490	J
108-39-4/106-44-5	3&4-Methylphenol	ND	970	J
91-94-1	3,3'-Dichlorobenzidine	ND	490	J
56-49-5	3-Methylcholanthrene	ND	490	J
99-09-2	3-Nitroaniline	ND	490	J
534-52-1	4,6-Dinitro-2-methylphenol	ND	970	J
101-55-3	4-Bromophenyl-phenylether	ND	490	J
59-50-7	4-Chloro-3-methylphenol	ND	490	J
106-47-8	4-Chloroaniline	ND	490	J
7005-72-3	4-Chlorophenyl-phenylether	ND	490	J
100-01-6	4-Nitroaniline	ND	490	J
100-02-7	4-Nitrophenol	ND	1900	J
56-57-5	4-nitroquinoline-1-oxide	ND	490	J
83-32-9	Acenaphthene	ND	490	J
208-96-8	Acenaphthylene	ND	490	J
98-86-2	Acetophenone	ND	490	J
62-53-3	Aniline	ND	490	J
120-12-7	Anthracene	ND	490	J
140-57-8	Aramite	ND	490	J
103-33-3	Azobenzene	ND	490	J

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BNAs in Product

Client Sample ID:	R01-130227AJ-0016	Lab Sample ID:	AB38169
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/26/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	10
Wet Weight Prepared:	0.103 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	490	J
56-55-3	Benzo(a)anthracene	ND	490	J
50-32-8	Benzo(a)pyrene	ND	490	J
205-99-2	Benzo(b)fluoranthene	ND	490	J
191-24-2	Benzo(g,h,i)perylene	ND	490	J
207-08-9	Benzo(k)fluoranthene	ND	490	J
65-85-0	Benzoic acid	ND	970	J
100-51-6	Benzyl alcohol	ND	490	J
111-91-1	bis(-2-Chloroethoxy)methane	ND	490	J
111-44-4	Bis(2-Chloroethyl)ether	ND	490	J
117-81-7	Bis(2-ethylhexyl)phthalate	ND	490	J
85-68-7	Butylbenzylphthalate	ND	490	J
86-74-8	Carbazole	ND	490	J
510-15-6	Chlorobenzilate	ND	490	J
218-01-9	Chrysene	ND	490	J
53-70-3	Dibenz(a,h)anthracene	ND	490	J
132-64-9	Dibenzofuran	ND	490	J
84-66-2	Diethylphthalate	ND	490	J
131-11-3	Dimethyl phthalate	ND	490	J
84-74-2	Di-n-butylphthalate	ND	490	J
117-84-0	Di-n-octyl phthalate	ND	970	J
88-85-7	Dinoseb	ND	490	J
62-50-0	Ethyl methanesulfonate	ND	490	J
206-44-0	Fluoranthene	ND	490	J
86-73-7	Fluorene	ND	490	J
118-74-1	Hexachlorobenzene	ND	490	J
87-68-3	Hexachlorobutadiene	ND	490	J
77-47-4	Hexachlorocyclopentadiene	ND	490	J
67-72-1	Hexachloroethane	ND	490	J
1888-71-7	Hexachloropropene	ND	490	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	490	J
465-73-6	Isodrin	ND	490	J
78-59-1	Isophorone	ND	490	J
120-58-1	Isosafrole	ND	490	J
143-50-0	Kepone	ND	490	J
66-27-3	Methyl methanesulfonate	ND	490	J
91-20-3	Naphthalene	ND	490	J
98-95-3	Nitrobenzene	ND	490	J
62-75-9	N-nitrosodimethylamine	ND	490	J
621-64-7	N-nitroso-di-n-propylamine	ND	490	J
122-39-4	N-Nitrosodiphenylamine	ND	490	J
608-93-5	Pentachlorobenzene	ND	490	J
82-68-8	Pentachloronitrobenzene	ND	490	J

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BNAs in Product

Client Sample ID: R01-130227AJ-0016
Date of Collection: 3/20/2013
Date of Preparation: 3/21/2013
Date of Analysis: 3/26/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.103 grams

Lab Sample ID: AB38169
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: 10
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	490	J
62-44-2	Phenacetin	ND	490	J
85-01-8	Phenanthrene	ND	490	J
108-95-2	Phenol	ND	490	J
129-00-0	Pyrene	ND	490	J
110-86-1	Pyridine	ND	490	J
94-59-7	Safrole	ND	490	J

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	0	10 - 126
2-Fluorobiphenyl (SS4)	88	39 - 120
2-Fluorophenol (SS1)	4	15 - 78
Nitrobenzene-d5 (SS3)	83	30 - 120
Phenol-d6 (SS2)	15	10 - 65
p-Terphenyl-d14 (SS6)	98	60 - 133

Comments: This sample was prepped and analyzed multiple times. Three of the four analyses had internal standards out of spec, this analysis had no acid surrogate recoverie. All results are estimates.

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BNAs in Product

Client Sample ID:	R01-130227AJ-0017	Lab Sample ID:	AB38170
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.080 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	160	
120-82-1	1,2,4-Trichlorobenzene	ND	160	
95-50-1	1,2-Dichlorobenzene	ND	160	
541-73-1	1,3-Dichlorobenzene	ND	160	
99-65-0	1,3-Dinitrobenzene	ND	160	
106-46-7	1,4-Dichlorobenzene	ND	160	
130-15-4	1,4-Naphthoquinone	ND	160	
90-12-0	1-Methylnaphthalene	570	160	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	160	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	160	
95-95-4	2,4,5-Trichlorophenol	ND	160	
88-06-2	2,4,6-Trichlorophenol	ND	160	
120-83-2	2,4-Dichlorophenol	ND	160	
105-67-9	2,4-dimethylphenol	ND	160	
51-28-5	2,4-Dinitrophenol	ND	310	
121-14-2	2,4-Dinitrotoluene	ND	160	
87-65-0	2,6-Dichlorophenol	ND	160	
606-20-2	2,6-Dinitrotoluene	ND	160	
91-58-7	2-Chloronaphthalene	ND	160	
95-57-8	2-Chlorophenol	ND	160	
91-57-6	2-Methylnaphthalene	1000	160	
95-48-7	2-Methylphenol	ND	160	
88-74-4	2-Nitroaniline	ND	160	
88-75-5	2-Nitrophenol	ND	160	
108-39-4/106-44-5	3&4-Methylphenol	ND	310	
91-94-1	3,3'-Dichlorobenzidine	ND	160	
56-49-5	3-Methylcholanthrene	ND	160	
99-09-2	3-Nitroaniline	ND	160	
534-52-1	4,6-Dinitro-2-methylphenol	ND	310	
101-55-3	4-Bromophenyl-phenylether	ND	160	
59-50-7	4-Chloro-3-methylphenol	ND	160	
106-47-8	4-Chloroaniline	ND	160	
7005-72-3	4-Chlorophenyl-phenylether	ND	160	
100-01-6	4-Nitroaniline	ND	160	
100-02-7	4-Nitrophenol	ND	630	
56-57-5	4-nitroquinoline-1-oxide	ND	160	J
83-32-9	Acenaphthene	ND	160	
208-96-8	Acenaphthylene	ND	160	
98-86-2	Acetophenone	ND	160	
62-53-3	Aniline	ND	160	
120-12-7	Anthracene	ND	160	
140-57-8	Aramite	ND	160	
103-33-3	Azobenzene	ND	160	

Creative Paper - Worcester, MA

BNAs in Product

Client Sample ID:	R01-130227AJ-0017	Lab Sample ID:	AB38170
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.080 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	160	
56-55-3	Benzo(a)anthracene	ND	160	
50-32-8	Benzo(a)pyrene	ND	160	
205-99-2	Benzo(b)fluoranthene	ND	160	
191-24-2	Benzo(g,h,i)perylene	ND	160	
207-08-9	Benzo(k)fluoranthene	ND	160	
65-85-0	Benzoic acid	ND	310	
100-51-6	Benzyl alcohol	ND	160	
111-91-1	bis(-2-Chloroethoxy)methane	ND	160	
111-44-4	Bis(2-Chloroethyl)ether	ND	160	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	160	
85-68-7	Butylbenzylphthalate	ND	160	
86-74-8	Carbazole	ND	160	
510-15-6	Chlorobenzilate	ND	160	
218-01-9	Chrysene	ND	160	
53-70-3	Dibenz(a,h)anthracene	ND	160	
132-64-9	Dibenzofuran	ND	160	
84-66-2	Diethylphthalate	ND	160	
131-11-3	Dimethyl phthalate	ND	160	
84-74-2	Di-n-butylphthalate	ND	160	
117-84-0	Di-n-octyl phthalate	ND	310	
88-85-7	Dinoseb	ND	160	
62-50-0	Ethyl methanesulfonate	ND	160	
206-44-0	Fluoranthene	ND	160	
86-73-7	Fluorene	ND	160	
118-74-1	Hexachlorobenzene	ND	160	
87-68-3	Hexachlorobutadiene	ND	160	
77-47-4	Hexachlorocyclopentadiene	ND	160	
67-72-1	Hexachloroethane	ND	160	
1888-71-7	Hexachloropropene	ND	160	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	160	
465-73-6	Isodrin	ND	160	
78-59-1	Isophorone	ND	160	
120-58-1	Isosafrole	ND	160	
143-50-0	Kepone	ND	160	
66-27-3	Methyl methanesulfonate	ND	160	
91-20-3	Naphthalene	3500	160	
98-95-3	Nitrobenzene	ND	160	
62-75-9	N-nitrosodimethylamine	ND	160	
621-64-7	N-nitroso-di-n-propylamine	ND	160	
122-39-4	N-Nitrosodiphenylamine	ND	160	
608-93-5	Pentachlorobenzene	ND	160	
82-68-8	Pentachloronitrobenzene	ND	160	

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BNAs in Product

Client Sample ID: R01-130227AJ-0017
Date of Collection: 3/20/2013
Date of Preparation: 3/21/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.080 grams

Lab Sample ID: AB38170
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: N/A
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	160	
62-44-2	Phenacetin	ND	160	
85-01-8	Phenanthrene	ND	160	
108-95-2	Phenol	ND	160	
129-00-0	Pyrene	ND	160	
110-86-1	Pyridine	ND	160	
94-59-7	Safrole	ND	160	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	67	10 - 126
2-Fluorobiphenyl (SS4)	100	39 - 120
2-Fluorophenol (SS1)	98	15 - 78
Nitrobenzene-d5 (SS3)	125	30 - 120
Phenol-d6 (SS2)	95	10 - 65
p-Terphenyl-d14 (SS6)	110	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

Tentatively Identified non-Target Compounds

1,2,4,5-Tetramethyl-benzene 2,700 ppm J
1-ethyl-3,5-dimethyl-benzene 2,600 ppm J
Tetradecane 3,300 ppm J

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BNAs in Product

Client Sample ID:	R01-130227AJ-0018	Lab Sample ID:	AB38171
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.099 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	130	
120-82-1	1,2,4-Trichlorobenzene	ND	130	
95-50-1	1,2-Dichlorobenzene	ND	130	
541-73-1	1,3-Dichlorobenzene	ND	130	
99-65-0	1,3-Dinitrobenzene	ND	130	
106-46-7	1,4-Dichlorobenzene	ND	130	
130-15-4	1,4-Naphthoquinone	ND	130	
90-12-0	1-Methylnaphthalene	ND	130	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	130	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	130	
95-95-4	2,4,5-Trichlorophenol	ND	130	
88-06-2	2,4,6-Trichlorophenol	ND	130	
120-83-2	2,4-Dichlorophenol	ND	130	
105-67-9	2,4-dimethylphenol	ND	130	
51-28-5	2,4-Dinitrophenol	ND	250	
121-14-2	2,4-Dinitrotoluene	ND	130	
87-65-0	2,6-Dichlorophenol	ND	130	
606-20-2	2,6-Dinitrotoluene	ND	130	
91-58-7	2-Chloronaphthalene	ND	130	
95-57-8	2-Chlorophenol	ND	130	
91-57-6	2-Methylnaphthalene	ND	130	
95-48-7	2-Methylphenol	ND	130	
88-74-4	2-Nitroaniline	ND	130	
88-75-5	2-Nitrophenol	ND	130	
108-39-4/106-44-5	3&4-Methylphenol	ND	250	
91-94-1	3,3'-Dichlorobenzidine	ND	130	
56-49-5	3-Methylcholanthrene	ND	130	
99-09-2	3-Nitroaniline	ND	130	
534-52-1	4,6-Dinitro-2-methylphenol	ND	250	
101-55-3	4-Bromophenyl-phenylether	ND	130	
59-50-7	4-Chloro-3-methylphenol	ND	130	
106-47-8	4-Chloroaniline	ND	130	
7005-72-3	4-Chlorophenyl-phenylether	ND	130	
100-01-6	4-Nitroaniline	ND	130	
100-02-7	4-Nitrophenol	ND	510	
56-57-5	4-nitroquinoline-1-oxide	ND	130	J
83-32-9	Acenaphthene	ND	130	
208-96-8	Acenaphthylene	ND	130	
98-86-2	Acetophenone	ND	130	
62-53-3	Aniline	ND	130	
120-12-7	Anthracene	ND	130	
140-57-8	Aramite	ND	130	
103-33-3	Azobenzene	ND	130	

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BNAs in Product

Client Sample ID:	R01-130227AJ-0018	Lab Sample ID:	AB38171
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.099 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benzidine	ND	130	
56-55-3	Benzo(a)anthracene	ND	130	
50-32-8	Benzo(a)pyrene	ND	130	
205-99-2	Benzo(b)fluoranthene	ND	130	
191-24-2	Benzo(g,h,i)perylene	ND	130	
207-08-9	Benzo(k)fluoranthene	ND	130	
65-85-0	Benzoic acid	ND	250	
100-51-6	Benzyl alcohol	ND	130	
111-91-1	bis(-2-Chloroethoxy)methane	ND	130	
111-44-4	Bis(2-Chloroethyl)ether	ND	130	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	130	
85-68-7	Butylbenzylphthalate	ND	130	
86-74-8	Carbazole	ND	130	
510-15-6	Chlorobenzilate	ND	130	
218-01-9	Chrysene	ND	130	
53-70-3	Dibenz(a,h)anthracene	ND	130	
132-64-9	Dibenzofuran	ND	130	
84-66-2	Diethylphthalate	ND	130	
131-11-3	Dimethyl phthalate	ND	130	
84-74-2	Di-n-butylphthalate	ND	130	
117-84-0	Di-n-octyl phthalate	ND	250	
88-85-7	Dinoseb	ND	130	
62-50-0	Ethyl methanesulfonate	ND	130	
206-44-0	Fluoranthene	ND	130	
86-73-7	Fluorene	ND	130	
118-74-1	Hexachlorobenzene	ND	130	
87-68-3	Hexachlorobutadiene	ND	130	
77-47-4	Hexachlorocyclopentadiene	ND	130	
67-72-1	Hexachloroethane	ND	130	
1888-71-7	Hexachloropropene	ND	130	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	130	
465-73-6	Isodrin	ND	130	
78-59-1	Isophorone	ND	130	
120-58-1	Isosafrole	ND	130	
143-50-0	Kepone	ND	130	
66-27-3	Methyl methanesulfonate	ND	130	
91-20-3	Naphthalene	ND	130	
98-95-3	Nitrobenzene	ND	130	
62-75-9	N-nitrosodimethylamine	ND	130	
621-64-7	N-nitroso-di-n-propylamine	ND	130	
122-39-4	N-Nitrosodiphenylamine	ND	130	
608-93-5	Pentachlorobenzene	ND	130	
82-68-8	Pentachloronitrobenzene	ND	130	

Creative Paper - Worcester, MA

BNAs in Product

Client Sample ID: R01-130227AJ-0018
Date of Collection: 3/20/2013
Date of Preparation: 3/21/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.099 grams

Lab Sample ID: AB38171
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: N/A
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	130	
62-44-2	Phenacetin	ND	130	
85-01-8	Phenanthrene	ND	130	
108-95-2	Phenol	ND	130	
129-00-0	Pyrene	ND	130	
110-86-1	Pyridine	ND	130	
94-59-7	Safrole	ND	130	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	75	10 - 126
2-Fluorobiphenyl (SS4)	98	39 - 120
2-Fluorophenol (SS1)	91	15 - 78
Nitrobenzene-d5 (SS3)	100	30 - 120
Phenol-d6 (SS2)	81	10 - 65
p-Terphenyl-d14 (SS6)	106	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

Creative Paper - Worcester, MA

BNAs in Product

Client Sample ID:	R01-130227AJ-0019	Lab Sample ID:	AB38172
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.103 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	120	
120-82-1	1,2,4-Trichlorobenzene	ND	120	
95-50-1	1,2-Dichlorobenzene	ND	120	
541-73-1	1,3-Dichlorobenzene	ND	120	
99-65-0	1,3-Dinitrobenzene	ND	120	
106-46-7	1,4-Dichlorobenzene	ND	120	
130-15-4	1,4-Naphthoquinone	ND	120	
90-12-0	1-Methylnaphthalene	ND	120	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	120	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	120	
95-95-4	2,4,5-Trichlorophenol	ND	120	
88-06-2	2,4,6-Trichlorophenol	ND	120	
120-83-2	2,4-Dichlorophenol	ND	120	
105-67-9	2,4-dimethylphenol	ND	120	
51-28-5	2,4-Dinitrophenol	ND	240	
121-14-2	2,4-Dinitrotoluene	ND	120	
87-65-0	2,6-Dichlorophenol	ND	120	
606-20-2	2,6-Dinitrotoluene	ND	120	
91-58-7	2-Chloronaphthalene	ND	120	
95-57-8	2-Chlorophenol	ND	120	
91-57-6	2-Methylnaphthalene	ND	120	
95-48-7	2-Methylphenol	ND	120	
88-74-4	2-Nitroaniline	ND	120	
88-75-5	2-Nitrophenol	ND	120	
108-39-4/106-44-5	3&4-Methylphenol	ND	240	
91-94-1	3,3'-Dichlorobenzidine	ND	120	
56-49-5	3-Methylcholanthrene	ND	120	
99-09-2	3-Nitroaniline	ND	120	
534-52-1	4,6-Dinitro-2-methylphenol	ND	240	
101-55-3	4-Bromophenyl-phenylether	ND	120	
59-50-7	4-Chloro-3-methylphenol	ND	120	
106-47-8	4-Chloroaniline	ND	120	
7005-72-3	4-Chlorophenyl-phenylether	ND	120	
100-01-6	4-Nitroaniline	ND	120	
100-02-7	4-Nitrophenol	ND	490	
56-57-5	4-nitroquinoline-1-oxide	ND	120	J
83-32-9	Acenaphthene	ND	120	
208-96-8	Acenaphthylene	ND	120	
98-86-2	Acetophenone	ND	120	
62-53-3	Aniline	ND	120	
120-12-7	Anthracene	ND	120	
140-57-8	Aramite	ND	120	
103-33-3	Azobenzene	ND	120	

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BNAs in Product

Client Sample ID:	R01-130227AJ-0019	Lab Sample ID:	AB38172
Date of Collection:	3/20/2013	Matrix:	Drum Product
Date of Preparation:	3/21/2013	Amount Prepared:	0.10 mL
Date of Analysis:	3/25/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	0.103 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
92-87-5	Benidine	ND	120	
56-55-3	Benzo(a)anthracene	ND	120	
50-32-8	Benzo(a)pyrene	ND	120	
205-99-2	Benzo(b)fluoranthene	ND	120	
191-24-2	Benzo(g,h,i)perylene	ND	120	
207-08-9	Benzo(k)fluoranthene	ND	120	
65-85-0	Benzoic acid	ND	240	
100-51-6	Benzyl alcohol	ND	120	
111-91-1	bis(-2-Chloroethoxy)methane	ND	120	
111-44-4	Bis(2-Chloroethyl)ether	ND	120	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	120	
85-68-7	Butylbenzylphthalate	ND	120	
86-74-8	Carbazole	ND	120	
510-15-6	Chlorobenzilate	ND	120	
218-01-9	Chrysene	ND	120	
53-70-3	Dibenz(a,h)anthracene	ND	120	
132-64-9	Dibenzofuran	ND	120	
84-66-2	Diethylphthalate	ND	120	
131-11-3	Dimethyl phthalate	ND	120	
84-74-2	Di-n-butylphthalate	ND	120	
117-84-0	Di-n-octyl phthalate	ND	240	
88-85-7	Dinoseb	ND	120	
62-50-0	Ethyl methanesulfonate	ND	120	
206-44-0	Fluoranthene	ND	120	
86-73-7	Fluorene	ND	120	
118-74-1	Hexachlorobenzene	ND	120	
87-68-3	Hexachlorobutadiene	ND	120	
77-47-4	Hexachlorocyclopentadiene	ND	120	
67-72-1	Hexachloroethane	ND	120	
1888-71-7	Hexachloropropene	ND	120	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	120	
465-73-6	Isodrin	ND	120	
78-59-1	Isophorone	ND	120	
120-58-1	Isosafrole	ND	120	
143-50-0	Kepone	ND	120	
66-27-3	Methyl methanesulfonate	ND	120	
91-20-3	Naphthalene	ND	120	
98-95-3	Nitrobenzene	ND	120	
62-75-9	N-nitrosodimethylamine	ND	120	
621-64-7	N-nitroso-di-n-propylamine	ND	120	
122-39-4	N-Nitrosodiphenylamine	ND	120	
608-93-5	Pentachlorobenzene	ND	120	
82-68-8	Pentachloronitrobenzene	ND	120	

Creative Paper - Worcester, MA

BNAs in Product

Client Sample ID: R01-130227AJ-0019
Date of Collection: 3/20/2013
Date of Preparation: 3/21/2013
Date of Analysis: 3/25/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.103 grams

Lab Sample ID: AB38172
Matrix: Drum Product
Amount Prepared: 0.10 mL
Percent Solids: N/A
Extract Dilution: N/A
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
87-86-5	Pentachlorophenol	ND	120	
62-44-2	Phenacetin	ND	120	
85-01-8	Phenanthrene	ND	120	
108-95-2	Phenol	ND	120	
129-00-0	Pyrene	ND	120	
110-86-1	Pyridine	ND	120	
94-59-7	Safrole	ND	120	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,6-Tribromophenol (SS5)	77	10 - 126
2-Fluorobiphenyl (SS4)	102	39 - 120
2-Fluorophenol (SS1)	96	15 - 78
Nitrobenzene-d5 (SS3)	105	30 - 120
Phenol-d6 (SS2)	85	10 - 65
p-Terphenyl-d14 (SS6)	113	60 - 133

Comments: 4-nitroquinoline-1-oxide did not meet the initial calibration criterion.

Creative Paper - Worcester, MA

MATRIX SPIKE (MS) RECOVERY

Sample ID: AB38157

PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
1,2,4,5-Tetrachlorobenzene	1,389.0	ND	1574.0	113	40 - 140
1,2,4-Trichlorobenzene	1,389.0	ND	1636.6	118	40 - 140
1,2-Dichlorobenzene	1,389.0	ND	1640.2	118	40 - 140
1,3-Dichlorobenzene	1,389.0	ND	1584.8	114	40 - 140
1,3-Dinitrobenzene	1,389.0	ND	1498.8	108	40 - 140
1,4-Dichlorobenzene	1,389.0	ND	1647.5	119	40 - 140
1,4-Naphthoquinone	1,389.0	ND	1489.9	107	40 - 140
1-Methylnaphthalene	1,389.0	ND	1695.7	122	40 - 140
2,2'-oxybis(1-chloropropane)	1,389.0	ND	1535.4	111	40 - 140
2,3,4,6-Tetrachlorophenol	1,389.0	ND	1599.5	115	40 - 140
2,4,5-Trichlorophenol	1,389.0	ND	1536.0	111	40 - 140
2,4,6-Trichlorophenol	1,389.0	ND	1733.0	125	40 - 140
2,4-Dichlorophenol	1,389.0	ND	1731.2	125	40 - 140
2,4-Dinitrophenol	1,389.0	ND	1319.4	95	40 - 140
2,4-Dinitrotoluene	1,389.0	ND	1719.1	124	40 - 89
2,4-dimethylphenol	1,389.0	ND	1740.2	125	40 - 140
2,6-Dichlorophenol	1,389.0	ND	1765.4	127	40 - 140
2,6-Dinitrotoluene	1,389.0	ND	1640.0	118	40 - 140
2-Chloronaphthalene	1,389.0	ND	1594.3	115	40 - 140
2-Chlorophenol	1,389.0	ND	1195.8	86	40 - 102
2-Methylnaphthalene	1,389.0	ND	1669.5	120	40 - 140
2-Methylphenol	1,389.0	ND	1685.0	121	40 - 140
2-Nitroaniline	1,389.0	ND	1700.2	122	40 - 140
2-Nitrophenol	1,389.0	ND	1773.2	128	40 - 140
3&4-Methylphenol	2,778.0	ND	3395.8	122	40 - 140
3,3'-Dichlorobenzidine	1,389.0	ND	1737.5	125	40 - 140
3-Methylcholanthrene	1,389.0	ND	1748.0	126	40 - 140
3-Nitroaniline	1,389.0	ND	1674.9	121	40 - 140
4,6-Dinitro-2-methylphenol	1,389.0	ND	1384.9	100	40 - 140
4-Bromophenyl-phenylether	1,389.0	ND	1560.7	112	40 - 140
4-Chloro-3-methylphenol	1,389.0	ND	1726.4	124	40 - 103
4-Chloroaniline	1,389.0	ND	1681.1	121	40 - 140
4-Chlorophenyl-phenylether	1,389.0	ND	1580.4	114	40 - 140
4-Nitroaniline	1,389.0	ND	1754.1	126	40 - 140
4-Nitrophenol	1,389.0	ND	1539.9	111	40 - 114
4-nitroquinoline-1-oxide	1,389.0	ND	1512.2	109	40 - 140
Acenaphthene	1,389.0	ND	1645.0	118	40 - 137
Acenaphthylene	1,389.0	ND	1671.5	120	40 - 140
Acetophenone	1,389.0	ND	19475.3	1402	40 - 140
Aniline	1,389.0	ND	1678.2	121	40 - 140
Anthracene	1,389.0	ND	1658.4	119	40 - 140
Aramite	1,389.0	ND	1678.0	121	40 - 140
Azobenzene	1,389.0	ND	1562.9	113	40 - 140
Benzidine	1,389.0	ND	1508.8	109	40 - 140
Benzo(a)anthracene	1,389.0	ND	1655.1	119	40 - 140
Benzo(a)pyrene	1,389.0	ND	1701.3	123	40 - 140

Creative Paper - Worcester, MA

MATRIX SPIKE (MS) RECOVERY

Sample ID: AB38157

PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
Benzo(b)fluoranthene	1,389.0	ND	1600.1	115	40 - 140
Benzo(g,h,i)perylene	1,389.0	ND	1562.1	113	40 - 140
Benzo(k)fluoranthene	1,389.0	ND	1592.8	115	40 - 140
Benzoic acid	1,389.0	ND	1772.9	128	40 - 140
Benzyl alcohol	1,389.0	ND	1768.6	127	40 - 140
Bis(2-Chloroethyl)ether	1,389.0	ND	1704.6	123	40 - 140
Bis(2-ethylhexyl)phthalate	1,389.0	380.3	2230.5	133	40 - 140
Butylbenzylphthalate	1,389.0	ND	1723.1	124	40 - 140
Carbazole	1,389.0	ND	1712.4	123	40 - 140
Chlorobenzilate	1,389.0	ND	1599.5	115	40 - 140
Chrysene	1,389.0	ND	1622.8	117	40 - 140
Di-n-butylphthalate	1,389.0	190.8	2021.0	132	40 - 140
Di-n-octyl phthalate	1,389.0	ND	1707.2	123	40 - 140
Dibenz(a,h)anthracene	1,389.0	ND	1631.8	118	40 - 140
Dibenzofuran	1,389.0	ND	1603.1	115	40 - 140
Diethylphthalate	1,389.0	ND	1669.6	120	40 - 140
Dimethyl phthalate	1,389.0	ND	1627.9	117	40 - 140
Dinoseb	1,389.0	ND	1367.6	99	40 - 140
Ethyl methanesulfonate	1,389.0	ND	1857.0	134	40 - 140
Fluoranthene	1,389.0	ND	1741.0	125	40 - 140
Fluorene	1,389.0	ND	1618.4	117	40 - 140
Hexachlorobenzene	1,389.0	ND	1566.3	113	40 - 140
Hexachlorobutadiene	1,389.0	ND	1633.8	118	40 - 140
Hexachlorocyclopentadiene	1,389.0	ND	1698.5	122	40 - 140
Hexachloroethane	1,389.0	ND	6941.8	500	40 - 140
Hexachloropropene	1,389.0	ND	1631.6	118	40 - 140
Indeno(1,2,3-cd)pyrene	1,389.0	ND	1644.6	118	40 - 140
Isodrin	1,389.0	ND	1706.6	123	40 - 140
Isophorone	1,389.0	ND	1942.2	140	40 - 140
Isosafrole	1,389.0	ND	1699.3	122	40 - 140
Kepone	1,389.0	ND	1595.9	115	40 - 140
Methyl methanesulfonate	1,389.0	ND	1398.5	101	40 - 140
N-Nitrosodiphenylamine	1,389.0	ND	1552.3	112	40 - 140
N-nitroso-di-n-propylamine	1,389.0	ND	3364.2	242	40 - 126
N-nitrosodimethylamine	1,389.0	ND	1716.2	124	40 - 140
Naphthalene	1,389.0	ND	1767.7	127	40 - 140
Nitrobenzene	1,389.0	ND	1947.8	140	40 - 140
Pentachlorobenzene	1,389.0	ND	1545.5	111	40 - 140
Pentachloronitrobenzene	1,389.0	ND	1684.7	121	40 - 140
Pentachlorophenol	1,389.0	ND	1213.8	87	40 - 109
Phenacetin	1,389.0	ND	1798.9	130	40 - 140
Phenanthrene	1,389.0	ND	1622.9	117	40 - 140
Phenol	1,389.0	ND	1687.9	122	40 - 90
Pyrene	1,389.0	ND	1547.7	111	40 - 142
Pyridine	1,389.0	ND	1588.4	114	40 - 140
Safrole	1,389.0	ND	1795.4	129	40 - 140

Creative Paper - Worcester, MA

MATRIX SPIKE (MS) RECOVERY

Sample ID: AB38157

PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
bis(-2-Chloroethoxy)methane	1,389.0	ND	1660.4	120	40 - 140

Comments:

Creative Paper - Worcester, MA

Laboratory Duplicate Results

Sample ID: AB38157

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	50
1,2,4-Trichlorobenzene	ND	ND	ND	50
1,2-Dichlorobenzene	ND	ND	ND	50
1,3-Dichlorobenzene	ND	ND	ND	50
1,3-Dinitrobenzene	ND	ND	ND	50
1,4-Dichlorobenzene	ND	ND	ND	50
1,4-Naphthoquinone	ND	ND	ND	50
1-Methylnaphthalene	ND	ND	ND	50
2,2'-oxybis(1-chloropropane)	ND	ND	ND	50
2,3,4,6-Tetrachlorophenol	ND	ND	ND	50
2,4,5-Trichlorophenol	ND	ND	ND	50
2,4,6-Trichlorophenol	ND	ND	ND	50
2,4-Dichlorophenol	ND	ND	ND	50
2,4-Dinitrophenol	ND	ND	ND	50
2,4-Dinitrotoluene	ND	ND	ND	50
2,4-dimethylphenol	ND	ND	ND	50
2,6-Dichlorophenol	ND	ND	ND	50
2,6-Dinitrotoluene	ND	ND	ND	50
2-Chloronaphthalene	ND	ND	ND	50
2-Chlorophenol	ND	ND	ND	50
2-Methylnaphthalene	ND	ND	ND	50
2-Methylphenol	ND	ND	ND	50
2-Nitroaniline	ND	ND	ND	50
2-Nitrophenol	ND	ND	ND	50
3&4-Methylphenol	ND	ND	ND	50
3,3'-Dichlorobenzidine	ND	ND	ND	50
3-Methylcholanthrene	ND	ND	ND	50
3-Nitroaniline	ND	ND	ND	50
4,6-Dinitro-2-methylphenol	ND	ND	ND	50
4-Bromophenyl-phenylether	ND	ND	ND	50
4-Chloro-3-methylphenol	ND	ND	ND	50
4-Chloroaniline	ND	ND	ND	50
4-Chlorophenyl-phenylether	ND	ND	ND	50
4-Nitroaniline	ND	ND	ND	50
4-Nitrophenol	ND	ND	ND	50
4-nitroquinoline-1-oxide	ND	ND	ND	50
Acenaphthene	ND	ND	ND	50
Acenaphthylene	ND	ND	ND	50
Acetophenone	ND	ND	ND	50
Aniline	ND	ND	ND	50
Anthracene	ND	ND	ND	50
Aramite	ND	ND	ND	50
Azobenzene	ND	ND	ND	50
Benzidine	ND	ND	ND	50
Benzo(a)anthracene	ND	ND	ND	50
Benzo(a)pyrene	ND	ND	ND	50
Benzo(b)fluoranthene	ND	ND	ND	50
Benzo(g,h,i)perylene	ND	ND	ND	50
Benzo(k)fluoranthene	ND	ND	ND	50

Creative Paper - Worcester, MA

Laboratory Duplicate Results

Sample ID: AB38157

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Benzoic acid	ND	ND	ND	50
Benzyl alcohol	ND	ND	ND	50
Bis(2-Chloroethyl)ether	ND	ND	ND	50
Bis(2-ethylhexyl)phthalate	380.3	423.2	10.7	50
Butylbenzylphthalate	ND	ND	ND	50
Carbazole	ND	ND	ND	50
Chlorobenzilate	ND	ND	ND	50
Chrysene	ND	ND	ND	50
Di-n-butylphthalate	190.8	210.7	9.9	50
Di-n-octyl phthalate	ND	ND	ND	50
Dibenz(a,h)anthracene	ND	ND	ND	50
Dibenzofuran	ND	ND	ND	50
Diethylphthalate	ND	ND	ND	50
Dimethyl phthalate	ND	ND	ND	50
Dinoseb	ND	ND	ND	50
Ethyl methanesulfonate	ND	ND	ND	50
Fluoranthene	ND	ND	ND	50
Fluorene	ND	ND	ND	50
Hexachlorobenzene	ND	ND	ND	50
Hexachlorobutadiene	ND	ND	ND	50
Hexachlorocyclopentadiene	ND	ND	ND	50
Hexachloroethane	ND	ND	ND	50
Hexachloropropene	ND	ND	ND	50
Indeno(1,2,3-cd)pyrene	ND	ND	ND	50
Isodrin	ND	ND	ND	50
Isophorone	ND	ND	ND	50
Isosafrole	ND	ND	ND	50
Kepone	ND	ND	ND	50
Methyl methanesulfonate	ND	ND	ND	50
N-Nitrosodiphenylamine	ND	ND	ND	50
N-nitroso-di-n-propylamine	ND	ND	ND	50
N-nitrosodimethylamine	ND	ND	ND	50
Naphthalene	ND	ND	ND	50
Nitrobenzene	ND	ND	ND	50
Pentachlorobenzene	ND	ND	ND	50
Pentachloronitrobenzene	ND	ND	ND	50
Pentachlorophenol	ND	ND	ND	50
Phenacetin	ND	ND	ND	50
Phenanthrene	ND	ND	ND	50
Phenol	ND	ND	ND	50
Pyrene	ND	ND	ND	50
Pyridine	ND	ND	ND	50
Safrole	ND	ND	ND	50
bis(-2-Chloroethoxy)methane	ND	ND	ND	50

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Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED mg/Kg	LFB RESULT mg/Kg	LFB RECOVERY %	QC LIMITS %
1,2,4,5-Tetrachlorobenzene	1042	1092.0	105	40 - 160
1,2,4-Trichlorobenzene	1042	1090.1	105	40 - 160
1,2-Dichlorobenzene	1042	1089.2	105	40 - 160
1,3-Dichlorobenzene	1042	1085.3	104	40 - 160
1,3-Dinitrobenzene	1042	928.5	89	40 - 160
1,4-Dichlorobenzene	1042	1106.1	106	40 - 160
1,4-Naphthoquinone	1042	1037.1	100	40 - 160
1-Methylnaphthalene	1042	1102.0	106	40 - 160
2,2'-oxybis(1-chloropropane)	1042	1057.7	102	40 - 160
2,3,4,6-Tetrachlorophenol	1042	880.6	85	40 - 160
2,4,5-Trichlorophenol	1042	1028.9	99	40 - 160
2,4,6-Trichlorophenol	1042	1138.0	109	40 - 160
2,4-Dichlorophenol	1042	1104.2	106	40 - 160
2,4-Dinitrophenol	1042	958.5	92	40 - 160
2,4-Dinitrotoluene	1042	1122.6	108	40 - 160
2,4-dimethylphenol	1042	1124.2	108	40 - 160
2,6-Dichlorophenol	1042	1102.2	106	40 - 160
2,6-Dinitrotoluene	1042	1125.2	108	40 - 160
2-Chloronaphthalene	1042	1099.6	106	40 - 160
2-Chlorophenol	1042	1133.6	109	40 - 160
2-Methylnaphthalene	1042	1089.8	105	40 - 160
2-Methylphenol	1042	1126.5	108	40 - 160
2-Nitroaniline	1042	1173.3	113	40 - 160
2-Nitrophenol	1042	1156.3	111	40 - 160
3&4-Methylphenol	2084	2197.1	105	40 - 160
3,3'-Dichlorobenzidine	1042	1057.5	102	40 - 160
3-Methylcholanthrene	1042	1166.5	112	40 - 160
3-Nitroaniline	1042	1096.5	105	40 - 160
4,6-Dinitro-2-methylphenol	1042	979.0	94	40 - 160
4-Bromophenyl-phenylether	1042	1058.6	102	40 - 160
4-Chloro-3-methylphenol	1042	1117.9	107	40 - 160
4-Chloroaniline	1042	1022.2	98	40 - 160
4-Chlorophenyl-phenylether	1042	845.2	81	40 - 160
4-Nitroaniline	1042	899.0	86	40 - 160
4-Nitrophenol	1042	963.3	92	40 - 160
4-nitroquinoline-1-oxide	1042	1106.6	106	40 - 160
Acenaphthene	1042	1112.9	107	40 - 160
Acenaphthylene	1042	1118.2	107	40 - 160
Acetophenone	1042	1103.4	106	40 - 160
Aniline	1042	1041.9	100	40 - 160
Anthracene	1042	1121.1	108	40 - 160
Aramite	1042	869.6	84	40 - 160
Azobenzene	1042	1021.6	98	40 - 160
Benzidine	1042	476.4	46	40 - 160
Benzo(a)anthracene	1042	1082.4	104	40 - 160
Benzo(a)pyrene	1042	1209.0	116	40 - 160
Benzo(b)fluoranthene	1042	1338.7	129	40 - 160
Benzo(g,h,i)perylene	1042	883.9	85	40 - 160
Benzo(k)fluoranthene	1042	1302.5	125	40 - 160
Benzoic acid	1042	1179.9	113	40 - 160
Benzyl alcohol	1042	1106.6	106	40 - 160
Bis(2-Chloroethyl)ether	1042	1098.2	105	40 - 160

Creative Paper - Worcester, MA

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED mg/Kg	LFB RESULT mg/Kg	LFB RECOVERY %	QC LIMITS %
Bis(2-ethylhexyl)phthalate	1042	1166.7	112	40 - 160
Butylbenzylphthalate	1042	907.2	87	40 - 160
Carbazole	1042	1186.7	114	40 - 160
Chlorobenzilate	1042	872.1	84	40 - 160
Chrysene	1042	1087.6	104	40 - 160
Di-n-butylphthalate	1042	1442.3	138	40 - 160
Di-n-octyl phthalate	1042	1214.2	117	40 - 160
Dibenz(a,h)anthracene	1042	952.7	91	40 - 160
Dibenzofuran	1042	1023.9	98	40 - 160
Diethylphthalate	1042	923.7	89	40 - 160
Dimethyl phthalate	1042	1128.7	108	40 - 160
Dinoseb	1042	967.1	93	40 - 160
Ethyl methanesulfonate	1042	1087.1	104	40 - 160
Fluoranthene	1042	1313.0	126	40 - 160
Fluorene	1042	867.2	83	40 - 160
Hexachlorobenzene	1042	1095.0	105	40 - 160
Hexachlorobutadiene	1042	1091.2	105	40 - 160
Hexachlorocyclopentadiene	1042	1233.1	118	40 - 160
Hexachloroethane	1042	1117.1	107	40 - 160
Hexachloropropene	1042	1116.5	107	40 - 160
Indeno(1,2,3-cd)pyrene	1042	965.5	93	40 - 160
Isodrin	1042	1397.0	134	40 - 160
Isophorone	1042	1119.6	107	40 - 160
Isosafrole	1042	1108.4	106	40 - 160
Kepone	1042	876.6	84	40 - 160
Methyl methanesulfonate	1042	905.5	87	40 - 160
N-Nitrosodiphenylamine	1042	1033.9	99	40 - 160
N-nitroso-di-n-propylamine	1042	1126.7	108	40 - 160
N-nitrosodimethylamine	1042	1132.1	109	40 - 160
Naphthalene	1042	1113.5	107	40 - 160
Nitrobenzene	1042	1137.1	109	40 - 160
Pentachlorobenzene	1042	972.4	93	40 - 160
Pentachloronitrobenzene	1042	1203.2	116	40 - 160
Pentachlorophenol	1042	801.9	77	40 - 160
Phenacetin	1042	1178.7	113	40 - 160
Phenanthrene	1042	1128.5	108	40 - 160
Phenol	1042	1105.3	106	40 - 160
Pyrene	1042	806.8	77	40 - 160
Pyridine	1042	1043.8	100	40 - 160
Safrole	1042	1228.9	118	40 - 160
bis(-2-Chloroethoxy)methane	1042	1104.2	106	40 - 160

Comments:

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PN. 13030015

USEPA
Region I START
Creative Paper

CHAIN OF CUSTODY RECORD
Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001
Lab: NERL
Lab Phone:

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Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample_Remarks
	R01-130227AJ-0001	D-4	Metals +Cn +Hg	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0001	D-4	VOCs, SVOCs	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0001	D-4	PCBs	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0002	D-11	Metals +Cn +Hg	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0002	D-11	VOCs, SVOCs	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0002	D-11	PCBs	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0003	D-103	Metals +Cn +Hg	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0003	D-103	VOCs, SVOCs	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0003	D-103	PCBs	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0005	D-117	Metals +Cn +Hg	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0005	D-117	VOCs, SVOCs	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0005	D-117	PCBs	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0006	D-118	Metals +Cn +Hg	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0006	D-118	VOCs, SVOCs	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0006	D-118	PCBs	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0007	D-119	Metals +Cn +Hg	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0007	D-119	VOCs, SVOCs	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0007	D-119	PCBs	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0008	D-120	Metals +Cn +Hg	Drum Product	2013-03-20	13:45	1	4 oz Jar	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	J. Jarrell	3/21/13	[Signature]	3/21/13	09:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS

PN: 13030015

USEPA
Region I START
Creative Paper

CHAIN OF CUSTODY RECORD
Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001
Lab: NERL
Lab Phone:

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Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample_Remarks
	R01-130227AJ-0008	D-120	VOCs, SVOCs	Drum Product	2013-03-20	13:45	1	4 oz Jar	
	R01-130227AJ-0008	D-120	PCBs	Drum Product	2013-03-20	13:45	1	4 oz Jar	
	R01-130227AJ-0009	D-123	Metals +Cn +Hg	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0009	D-123	VOCs, SVOCs	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0009	D-123	PCBs	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	Metals +Cn +Hg	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	VOCs, SVOCs	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	PCBs	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0012	D-144	Metals +Cn +Hg	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0012	D-144	VOCs, SVOCs	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0012	D-144	PCBs	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0014	D-147	Metals +Cn +Hg	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0014	D-147	VOCs, SVOCs	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0014	D-147	PCBs	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0015	D-148	Metals +Cn +Hg	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0015	D-148	VOCs, SVOCs	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0015	D-148	PCBs	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0016	D-149	Metals +Cn +Hg	Drum Product	2013-03-20	10:40	1	4 oz Jar	
	R01-130227AJ-0016	D-149	VOCs, SVOCs	Drum Product	2013-03-20	10:40	1	4 oz Jar	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>J. Santos</i>	3/21/13	<i>Allen Jarrell</i>	3/21/13	09:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS



Laboratory Report

April 05, 2013

Allen Jarrell - Mail Code OSRR02-2
US EPA New England R1

Project Number: 13030015
Project: Creative Paper - Worcester, MA
Analysis: Metals by XRF
EPA Chemist: Janet Paquin

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-INGXRF0.

Samples were screened using a PANanalytical Epsilon 5 energy dispersive x-ray fluorescence (XRF) spectrometer. The spectrometer is a high resolution energy dispersive x-ray fluorescence spectrometer. It uses both direct and secondary targets to qualitatively and quantitatively analyze elements.

Date Samples Received by the Laboratory: 03/21/2013

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

Digitally signed by Dan Boudreau
DN: cn=Dan Boudreau, o=EPA,
ou=EIA,
email=boudreau.dan@epa.gov, c=US
Date: 2013.04.05 07:56:01 -04'00'

13030015\$XRF

Qualifiers:

- RL** Reporting limit
- ND** Not Detected above reporting limit
- NA** Not Applicable
- NC** Not calculated since analyte concentration is ND
- J1** Estimated value due to MS recovery outside acceptance criteria
- J2** Estimated value due to LFB result outside acceptance criteria
- J3** Estimated value due to RPD result outside acceptance criteria
- J4** Estimated value due to LCS result outside acceptance criteria
- B** Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
- R** No recovery was calculated since the analyte concentration is greater than four times the spike level.

Creative Paper - Worcester, MA

Metals by XRF

Client Sample ID: R01-130227AJ-0001
Date of Collection: 3/20/2013
Date of Analysis: 3/29/2013

Lab Sample ID: AB38157
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments:

Creative Paper - Worcester, MA

Metals by XRF

Client Sample ID: R01-130227AJ-0002
Date of Collection: 3/20/2013
Date of Analysis: 3/29/2013

Lab Sample ID: AB38158
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments:

Creative Paper - Worcester, MA

Metals by XRF

Client Sample ID: R01-130227AJ-0003
Date of Collection: 3/20/2013
Date of Analysis: 3/29/2013

Lab Sample ID: AB38159
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments:

Creative Paper - Worcester, MA

Metals by XRF

Client Sample ID: R01-130227AJ-0005
Date of Collection: 3/20/2013
Date of Analysis: 3/29/2013

Lab Sample ID: AB38160
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments:

Creative Paper - Worcester, MA

Metals by XRF

Client Sample ID: R01-130227AJ-0006
Date of Collection: 3/20/2013
Date of Analysis: 4/01/2013

Lab Sample ID: AB38161
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments:

Creative Paper - Worcester, MA

Metals by XRF

Client Sample ID: R01-130227AJ-0007
Date of Collection: 3/20/2013
Date of Analysis: 3/26/2013

Lab Sample ID: AB38162
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments:

Creative Paper - Worcester, MA

Metals by XRF

Client Sample ID: R01-130227AJ-0008
Date of Collection: 3/20/2013
Date of Analysis: 3/26/2013

Lab Sample ID: AB38163
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments:

Creative Paper - Worcester, MA

Metals by XRF

Client Sample ID: R01-130227AJ-0009
Date of Collection: 3/20/2013
Date of Analysis: 3/26/2013

Lab Sample ID: AB38164
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments: Sample AB38164 was inhomogeneous.

Creative Paper - Worcester, MA

Metals by XRF

Client Sample ID: R01-130227AJ-0010
Date of Collection: 3/20/2013
Date of Analysis: 3/26/2013

Lab Sample ID: AB38165
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments:

Creative Paper - Worcester, MA

Metals by XRF

Client Sample ID: R01-130227AJ-0012
Date of Collection: 3/20/2013
Date of Analysis: 3/26/2013

Lab Sample ID: AB38166
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments:

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Metals by XRF

Client Sample ID: R01-130227AJ-0014
Date of Collection: 3/20/2013
Date of Analysis: 3/26/2013

Lab Sample ID: AB38167
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments:

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Metals by XRF

Client Sample ID: R01-130227AJ-0015
Date of Collection: 3/20/2013
Date of Analysis: 3/28/2013

Lab Sample ID: AB38168
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments:

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Metals by XRF

Client Sample ID: R01-130227AJ-0016
Date of Collection: 3/20/2013
Date of Analysis: 3/28/2013

Lab Sample ID: AB38169
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments:

Creative Paper - Worcester, MA

Metals by XRF

Client Sample ID: R01-130227AJ-0017
Date of Collection: 3/20/2013
Date of Analysis: 3/28/2013

Lab Sample ID: AB38170
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments:

Creative Paper - Worcester, MA

Metals by XRF

Client Sample ID: R01-130227AJ-0018
Date of Collection: 3/20/2013
Date of Analysis: 3/28/2013

Lab Sample ID: AB38171
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments: Sample AB38171 was inhomogeneous.

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Metals by XRF

Client Sample ID: R01-130227AJ-0019
Date of Collection: 3/20/2013
Date of Analysis: 4/01/2013

Lab Sample ID: AB38172
Matrix: Drum Product

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
7440-38-2	Arsenic	ND	10	
7440-39-3	Barium	ND	50	
7440-43-9	Cadmium	ND	10	
7440-47-3	Chromium	ND	40	
7439-92-1	Lead	ND	5.0	
7439-97-6	Mercury	ND	20	
7782-49-2	Selenium	ND	10	
7440-22-4	Silver	ND	10	

Comments: Sample AB38172 was inhomogeneous.

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Laboratory Duplicate Results

Sample ID: AB38158

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Arsenic	ND	ND	NC	35
Barium	ND	ND	NC	35
Cadmium	ND	ND	NC	35
Chromium	ND	ND	NC	35
Lead	ND	ND	NC	35
Mercury	ND	ND	NC	35
Selenium	ND	ND	NC	35
Silver	ND	ND	NC	35

Comments:

Laboratory Duplicate Results

Sample ID: AB38162

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Arsenic	ND	ND	NC	35
Barium	ND	ND	NC	35
Cadmium	ND	ND	NC	35
Chromium	ND	ND	NC	35
Lead	ND	ND	NC	35
Mercury	ND	ND	NC	35
Selenium	ND	ND	NC	35
Silver	ND	ND	NC	35

Comments:

Laboratory Duplicate Results

Sample ID: AB38168

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Arsenic	ND	ND	NC	35
Barium	ND	ND	NC	35
Cadmium	ND	ND	NC	35
Chromium	ND	ND	NC	35
Lead	ND	ND	NC	35
Mercury	ND	ND	NC	35
Selenium	ND	ND	NC	35
Silver	ND	ND	NC	35

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Comments:

Laboratory Duplicate Results

Sample ID: AB38172

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Arsenic	ND	ND	NC	35
Barium	ND	ND	NC	35
Cadmium	ND	ND	NC	35
Chromium	ND	ND	NC	35
Lead	ND	ND	NC	35
Mercury	ND	ND	NC	35
Selenium	ND	ND	NC	35
Silver	ND	ND	NC	35

Comments:

p. 1 of 6

Quality Control Check Sample Results for LiquidsConostan S-21 Oil Standard (03/26/13 #1)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Ag	82	100	82
Ba	110	100	110
Cd	83	100	83
Cr	110	100	110
Pb	82	100	82

Conostan S-21 Oil Standard (03/26/13 #2)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Ag	82	100	82
Ba	110	100	110
Cd	83	100	83
Cr	110	100	110
Pb	80	100	80

*Results are in mg/Kg

p. 2 of 6

Quality Control Check Sample Results for Liquids (cont.)Conostan S-21 Oil Standard (03/28/13 #1)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Ag	81	100	81
Ba	110	100	110
Cd	80	100	80
Cr	110	100	110
Pb	81	100	81

Conostan S-21 Oil Standard (03/28/13 #2)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Ag	83	100	83
Ba	110	100	110
Cd	84	100	84
Cr	110	100	110
Pb	81	100	81

*Results are in mg/Kg

p. 3 of 6

Quality Control Check Sample Results for Liquids (cont.)Conostan S-21 Oil Standard (03/29/13 #1)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Ag	90	100	90
Ba	120	100	120
Cd	89	100	89
Cr	110	100	110
Pb	86	100	86

Conostan S-21 Oil Standard (03/29/13 #2)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Ag	90	100	90
Ba	120	100	120
Cd	92	100	92
Cr	110	100	110
Pb	86	100	86

*Results are in mg/Kg

p. 4 of 6

Quality Control Check Sample Results for Liquids (cont.)Conostan S-21 Oil Standard (04/01/13 #1)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Ag	94	100	94
Ba	130	100	130
Cd	96	100	96
Cr	110	100	110
Pb	88	100	88

Conostan S-21 Oil Standard (04/01/13 #2)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Ag	95	100	95
Ba	130	100	130
Cd	94	100	94
Cr	110	100	110
Pb	89	100	89

*Results are in mg/Kg

p. 5 of 6

Quality Control Check Sample Results for Liquids (cont.)Conostan 100 ppm As Oil Standard (3/26/13)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
As	100	100	100

Conostan 100 ppm Hg Oil Standard (3/26/13)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Hg	78	100	78

Conostan 100 ppm Se Oil Standard (3/26/13)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Se	91	100	91

Conostan 100 ppm As Oil Standard (3/28/13)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
As	110	100	110

Conostan 100 ppm Hg Oil Standard (3/28/13)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Hg	85	100	85

Conostan 100 ppm Se Oil Standard (3/28/13)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Se	90	100	90

*Results are in mg/Kg

p. 6 of 6

Quality Control Check Sample Results for Liquids (cont.)Conostan 100 ppm As Oil Standard (3/29/13)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
As	110	100	110

Conostan 100 ppm Hg Oil Standard (3/29/13)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Hg	90	100	90

Conostan 100 ppm Se Oil Standard (3/29/13)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Se	92	100	100

Conostan 100 ppm As Oil Standard (4/1/13)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
As	120	100	120

Conostan 100 ppm Hg Oil Standard (4/1/13)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Hg	96	100	96

Conostan 100 ppm Se Oil Standard (4/1/13)

<u>Parameter</u>	<u>Found*</u>	<u>Certified Value*</u>	<u>% Recovery</u>
Se	100	100	100

*Results are in mg/Kg

PN. 13030015

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CHAIN OF CUSTODY RECORD
Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001
Lab: NERL
Lab Phone:

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Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample_Remarks
	R01-130227AJ-0001	D-4	Metals +Cn +Hg	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0001	D-4	VOCs, SVOCs	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0001	D-4	PCBs	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0002	D-11	Metals +Cn +Hg	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0002	D-11	VOCs, SVOCs	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0002	D-11	PCBs	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0003	D-103	Metals +Cn +Hg	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0003	D-103	VOCs, SVOCs	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0003	D-103	PCBs	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0005	D-117	Metals +Cn +Hg	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0005	D-117	VOCs, SVOCs	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0005	D-117	PCBs	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0006	D-118	Metals +Cn +Hg	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0006	D-118	VOCs, SVOCs	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0006	D-118	PCBs	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0007	D-119	Metals +Cn +Hg	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0007	D-119	VOCs, SVOCs	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0007	D-119	PCBs	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0008	D-120	Metals +Cn +Hg	Drum Product	2013-03-20	13:45	1	4 oz Jar	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	J. Jarrell	3/21/13	[Signature]	3/21/13	09:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS

PN: 13030015

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CHAIN OF CUSTODY RECORD
Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001
Lab: NERL
Lab Phone:

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Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample_Remarks
	R01-130227AJ-0008	D-120	VOCs, SVOCs	Drum Product	2013-03-20	13:45	1	4 oz Jar	
	R01-130227AJ-0008	D-120	PCBs	Drum Product	2013-03-20	13:45	1	4 oz Jar	
	R01-130227AJ-0009	D-123	Metals +Cn +Hg	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0009	D-123	VOCs, SVOCs	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0009	D-123	PCBs	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	Metals +Cn +Hg	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	VOCs, SVOCs	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	PCBs	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0012	D-144	Metals +Cn +Hg	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0012	D-144	VOCs, SVOCs	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0012	D-144	PCBs	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0014	D-147	Metals +Cn +Hg	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0014	D-147	VOCs, SVOCs	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0014	D-147	PCBs	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0015	D-148	Metals +Cn +Hg	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0015	D-148	VOCs, SVOCs	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0015	D-148	PCBs	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0016	D-149	Metals +Cn +Hg	Drum Product	2013-03-20	10:40	1	4 oz Jar	
	R01-130227AJ-0016	D-149	VOCs, SVOCs	Drum Product	2013-03-20	10:40	1	4 oz Jar	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>J. Santos</i>	3/21/13	<i>Allen Jarrell</i>	3/21/13	09:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS

PN: 13030015

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CHAIN OF CUSTODY RECORD

Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001

Lab: NERL
Lab Phone:

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Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample Remarks
	R01-130227AJ-0016	D-149	PCBs	Drum Product	2013-03-20	10:40	1	4 oz Jar	
	R01-130227AJ-0017	D-152	Metals +Cn +Hg	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0017	D-152	VOCs, SVOCs	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0017	D-152	PCBs	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0018	D-167	Metals +Cn +Hg	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0018	D-167	VOCs, SVOCs	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0018	D-167	PCBs	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0019	D-187	Metals +Cn +Hg	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0019	D-187	VOCs, SVOCs	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0019	D-187	PCBs	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0023	ASB-01	Bulk Asbestos	ACM	2013-03-20	15:25	1	Bag	
	R01-130227AJ-0024	ASB-02	Bulk Asbestos	ACM	2013-03-20	15:30	1	Bag	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>J. Banta</i>	3/21/13	<i>Allen Jarrell</i>	3/21/13	09:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS



Laboratory Results

April 10, 2013

Allen Jarrell - Mail Code OSRR02-2
US EPA New England R1

Project Number: 13030015
Project: Creative Paper - Worcester, MA
Analysis: Total Cyanide in Soil
Analyst: Inna Germansderfer

Date Samples Received by the Laboratory: 03/21/2013

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-INGCN14.

The Cyanide SOP is Based on Lachat Method 10-204-00-1-X.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340.

Sincerely,

Digitally signed by Dan Boudreau
DN: cn=Dan Boudreau, o=EPA,
ou=EIA,
email=boudreau.dan@epa.gov, c=US
Date: 2013.04.10 10:56:04 -04'00'

13030015CYANS

Qualifiers:

RL = Reporting limit

ND = Not Detected above Reporting limit

NA = Not Applicable due to high sample dilutions or sample interferences

NC = Not calculated since analyte concentration is ND.

J = Estimated value

E = Estimated value exceeds the calibration range

L = Estimated value is below the calibration range

B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 5 times the concentration in the blank.

R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

Creative Paper - Worcester, MA

Total Cyanide in Soil

Matrix: Drum Product

Sample Number	Lab ID	Collected	Extracted	Analysis	Concentration mg/Kg	RL mg/Kg	Qualifier
R01-130227AJ-0001	AB38157	03/20/2013	03/28/2013	03/29/2013	ND	0.22	
Comments:							
R01-130227AJ-0002	AB38158	03/20/2013	03/28/2013	03/29/2013	NA	2.5	
Comments: This sample is not amenable to analysis.							
R01-130227AJ-0003	AB38159	03/20/2013	03/28/2013	03/29/2013	NA	2.5	
Comments: This sample is not amenable to analysis.							
R01-130227AJ-0005	AB38160	03/20/2013	03/28/2013	03/29/2013	ND	0.21	
Comments:							
R01-130227AJ-0006	AB38161	03/20/2013	03/28/2013	03/29/2013	NA	2.5	
Comments: This sample is not amenable to analysis.							
R01-130227AJ-0007	AB38162	03/20/2013	03/28/2013	03/29/2013	ND	0.25	
Comments:							
R01-130227AJ-0008	AB38163	03/20/2013	03/28/2013	03/29/2013	NA	2.5	
Comments: This sample is not amenable to analysis.							
R01-130227AJ-0009	AB38164	03/20/2013	03/28/2013	03/29/2013	ND	0.21	
Comments:							
R01-130227AJ-001C	AB38165	03/20/2013	03/28/2013	03/29/2013	NA	2.5	
Comments: This sample is not amenable to analysis.							
R01-130227AJ-0012	AB38166	03/20/2013	03/28/2013	03/29/2013	ND	0.23	
Comments:							

Creative Paper - Worcester, MA

Total Cyanide in Soil

Matrix: Drum Product

Sample Number	Lab ID	Collected	Extracted	Analysis	Concentration mg/Kg	RL mg/Kg	Qualifier
R01-130227AJ-0014	AB38167	03/20/2013	03/28/2013	03/29/2013	0.95	0.22	
Comments:							
R01-130227AJ-0015	AB38168	03/20/2013	03/28/2013	03/29/2013	ND	0.20	
Comments:							
R01-130227AJ-0016	AB38169	03/20/2013	03/28/2013	03/29/2013	ND	0.19	
Comments:							
R01-130227AJ-0017	AB38170	03/20/2013	03/28/2013	03/29/2013	0.61	0.19	
Comments:							
R01-130227AJ-0018	AB38171	03/20/2013	03/28/2013	03/29/2013	ND	0.20	
Comments:							
R01-130227AJ-0019	AB38172	03/20/2013	03/28/2013	03/29/2013	ND	0.20	
Comments:							
Blank			03/28/2013	03/29/2013	ND	0.10	
Comments:							

Creative Paper - Worcester, MA

MATRIX SPIKE (MS) Results

SAMPLE ID	PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
AB38162	Total Cyanide in Soil	4.17	ND	4.33	104	54 - 132
AB38167	Total Cyanide in Soil	4.54	0.95	5.13	92.1	54 - 132

Comments:

Creative Paper - Worcester, MA

Laboratory Duplicate Results

SAMPLE ID	PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPE RESULT mg/Kg	PRECISION RPD %	QC LIMITS (%RPD)
AB38157	Total Cyanide in Soil	ND	ND	NC	20

Comments:

Creative Paper - Worcester, MA

Low/High Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED mg/Kg	LFB RESULT mg/Kg	LFB RECOVERY %	QC LIMITS %
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High Level

Total Cyanide in Soil	4.00	4.10	102	90 - 110
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Low Level

Total Cyanide in Soil	0.400	0.427	107	90 - 110
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Comments:

PN. 13030015

USEPA
Region I START
Creative Paper

CHAIN OF CUSTODY RECORD
Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001
Lab: NERL
Lab Phone:

Page 8 of 10

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample_Remarks
	R01-130227AJ-0001	D-4	Metals +Cn +Hg	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0001	D-4	VOCs, SVOCs	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0001	D-4	PCBs	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0002	D-11	Metals +Cn +Hg	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0002	D-11	VOCs, SVOCs	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0002	D-11	PCBs	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0003	D-103	Metals +Cn +Hg	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0003	D-103	VOCs, SVOCs	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0003	D-103	PCBs	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0005	D-117	Metals +Cn +Hg	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0005	D-117	VOCs, SVOCs	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0005	D-117	PCBs	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0006	D-118	Metals +Cn +Hg	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0006	D-118	VOCs, SVOCs	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0006	D-118	PCBs	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0007	D-119	Metals +Cn +Hg	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0007	D-119	VOCs, SVOCs	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0007	D-119	PCBs	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0008	D-120	Metals +Cn +Hg	Drum Product	2013-03-20	13:45	1	4 oz Jar	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	J. Carter	3/21/13	[Signature]	3/21/13	09:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS

PN: 13030015

USEPA
Region I START
Creative Paper

CHAIN OF CUSTODY RECORD

Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001

Lab: NERL
Lab Phone:

Page 9 of 10

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample_Remarks
	R01-130227AJ-0008	D-120	VOCs, SVOCs	Drum Product	2013-03-20	13:45	1	4 oz Jar	
	R01-130227AJ-0008	D-120	PCBs	Drum Product	2013-03-20	13:45	1	4 oz Jar	
	R01-130227AJ-0009	D-123	Metals +Cn +Hg	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0009	D-123	VOCs, SVOCs	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0009	D-123	PCBs	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	Metals +Cn +Hg	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	VOCs, SVOCs	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	PCBs	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0012	D-144	Metals +Cn +Hg	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0012	D-144	VOCs, SVOCs	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0012	D-144	PCBs	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0014	D-147	Metals +Cn +Hg	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0014	D-147	VOCs, SVOCs	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0014	D-147	PCBs	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0015	D-148	Metals +Cn +Hg	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0015	D-148	VOCs, SVOCs	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0015	D-148	PCBs	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0016	D-149	Metals +Cn +Hg	Drum Product	2013-03-20	10:40	1	4 oz Jar	
	R01-130227AJ-0016	D-149	VOCs, SVOCs	Drum Product	2013-03-20	10:40	1	4 oz Jar	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>J. Santos</i>	3/21/13	<i>Allen Jarrell</i>	3/21/13	09:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS

PN: 13030015

USEPA
Region I START
Creative Paper

CHAIN OF CUSTODY RECORD
Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001
Lab: NERL
Lab Phone:

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample Remarks
	R01-130227AJ-0016	D-149	PCBs	Drum Product	2013-03-20	10:40	1	4 oz Jar	
	R01-130227AJ-0017	D-152	Metals +Cn +Hg	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0017	D-152	VOCs, SVOCs	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0017	D-152	PCBs	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0018	D-167	Metals +Cn +Hg	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0018	D-167	VOCs, SVOCs	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0018	D-167	PCBs	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0019	D-187	Metals +Cn +Hg	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0019	D-187	VOCs, SVOCs	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0019	D-187	PCBs	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0023	ASB-01	Bulk Asbestos	ACM	2013-03-20	15:25	1	Bag	
	R01-130227AJ-0024	ASB-02	Bulk Asbestos	ACM	2013-03-20	15:30	1	Bag	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>J. Banta</i>	3/21/13	<i>Allen Jarrell</i>	3/21/13	07:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS



Laboratory Report

April 10, 2013

Allen Jarrell - Mail Code OSRR02-2
US EPA New England R1

Project Number: 13030015
Project: Creative Paper - Worcester, MA
Analysis: PCBs in Oils
EPA Chemist: Paul Carroll

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, PCBOIL1.SOP.

The SOP is based on EPA SW-846 Method 8082

PCBs or Aroclors were extracted from oil and solvent soluble samples using a waste dilution technique using hexane as a solvent. Samples were then purified to reduce interferences by using a sulfuric acid clean-up followed by a florisisil column elution. Sample extracts were directly injected into an Agilent 6890 gas chromatograph system equipped with dual 30M x 0.25mm capillary columns DB-5 and DB-1701. Detection is by electron capture detectors, and quantitation is performed using an external standard calibration method. This procedure follows EPA SW-846 Method 8082, Rev 0, December 1996.

Date Samples Received by the Laboratory: 03/21/2013

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

Digitally signed by Dan Boudreau
DN: cn=Dan Boudreau, o=EPA, ou=EIA,
email=boudreau.dan@epa.gov, c=US
Date: 2013.04.10 10:42:05 -04'00'

13030015\$PCBP

Qualifiers:

- RL** Reporting limit
- ND** Not Detected above reporting limit
- NA** Not Applicable
- NC** Not calculated since analyte concentration is ND
- J1** Estimated value due to MS recovery outside acceptance criteria
- J2** Estimated value due to LFB result outside acceptance criteria
- J3** Estimated value due to RPD result outside acceptance criteria
- J4** Estimated value due to LCS result outside acceptance criteria
- B** Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
- R** No recovery was calculated since the analyte concentration is greater than four times the spike level.

Creative Paper - Worcester, MA

PCBs in Oils

Client Sample ID: R01-130227AJ-0001
Date of Collection: 3/20/2013
Date of Preparation: 3/28/2013
Date of Analysis: 4/04/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.102 grams

Lab Sample ID: AB38157
Matrix: Drum Product
Amount Prepared: N/A
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	10	
11104-28-2	Aroclor-1221	ND	10	
11141-16-5	Aroclor-1232	ND	10	
53469-21-9	Aroclor-1242	ND	10	
12672-29-6	Aroclor-1248	ND	10	
11097-69-1	Aroclor-1254	ND	10	
11096-82-5	Aroclor-1260	ND	10	
11100-14-4	Aroclor-1262	ND	10	
37324-23-5	Aroclor-1268	ND	10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	83	59 - 108
Decachlorobiphenyl	82	54 - 100

Comments:

Creative Paper - Worcester, MA

PCBs in Oils

Client Sample ID: R01-130227AJ-0002
Date of Collection: 3/20/2013
Date of Preparation: 3/28/2013
Date of Analysis: 4/04/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.112 grams

Lab Sample ID: AB38158
Matrix: Drum Product
Amount Prepared: N/A
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	9.0	
11104-28-2	Aroclor-1221	ND	9.0	
11141-16-5	Aroclor-1232	ND	9.0	
53469-21-9	Aroclor-1242	ND	9.0	
12672-29-6	Aroclor-1248	ND	9.0	
11097-69-1	Aroclor-1254	ND	9.0	
11096-82-5	Aroclor-1260	ND	9.0	
11100-14-4	Aroclor-1262	ND	9.0	
37324-23-5	Aroclor-1268	ND	9.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	80	59 - 108
Decachlorobiphenyl	95	54 - 100

Comments:

Creative Paper - Worcester, MA

PCBs in Oils

Client Sample ID: R01-130227AJ-0003
Date of Collection: 3/20/2013
Date of Preparation: 3/28/2013
Date of Analysis: 4/05/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.099 grams

Lab Sample ID: AB38159
Matrix: Drum Product
Amount Prepared: N/A
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	10	
11104-28-2	Aroclor-1221	ND	10	
11141-16-5	Aroclor-1232	ND	10	
53469-21-9	Aroclor-1242	ND	10	
12672-29-6	Aroclor-1248	ND	10	
11097-69-1	Aroclor-1254	ND	10	
11096-82-5	Aroclor-1260	ND	10	
11100-14-4	Aroclor-1262	ND	10	
37324-23-5	Aroclor-1268	ND	10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	76	59 - 108
Decachlorobiphenyl	97	54 - 100

Comments:

Creative Paper - Worcester, MA

PCBs in Oils

Client Sample ID: R01-130227AJ-0005
 Date of Collection: 3/20/2013
 Date of Preparation: 3/28/2013
 Date of Analysis: 4/05/2013
 Dry Weight Prepared: N/A
 Wet Weight Prepared: 0.103 grams

Lab Sample ID: AB38160
 Matrix: Drum Product
 Amount Prepared: N/A
 Percent Solids: N/A
 Extract Dilution: 1
 pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	10	
11104-28-2	Aroclor-1221	ND	10	
11141-16-5	Aroclor-1232	ND	10	
53469-21-9	Aroclor-1242	ND	10	
12672-29-6	Aroclor-1248	ND	10	
11097-69-1	Aroclor-1254	ND	10	
11096-82-5	Aroclor-1260	ND	10	
11100-14-4	Aroclor-1262	ND	10	
37324-23-5	Aroclor-1268	ND	10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	73	59 - 108
Decachlorobiphenyl	94	54 - 100

Comments:

Creative Paper - Worcester, MA

PCBs in Oils

Client Sample ID: R01-130227AJ-0006
Date of Collection: 3/20/2013
Date of Preparation: 3/28/2013
Date of Analysis: 4/05/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.107 grams

Lab Sample ID: AB38161
Matrix: Drum Product
Amount Prepared: N/A
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	9.0	
11104-28-2	Aroclor-1221	ND	9.0	
11141-16-5	Aroclor-1232	ND	9.0	
53469-21-9	Aroclor-1242	ND	9.0	
12672-29-6	Aroclor-1248	ND	9.0	
11097-69-1	Aroclor-1254	ND	9.0	
11096-82-5	Aroclor-1260	ND	9.0	
11100-14-4	Aroclor-1262	ND	9.0	
37324-23-5	Aroclor-1268	ND	9.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	73	59 - 108
Decachlorobiphenyl	95	54 - 100

Comments:

Creative Paper - Worcester, MA

PCBs in Oils

Client Sample ID: R01-130227AJ-0007
Date of Collection: 3/20/2013
Date of Preparation: 3/28/2013
Date of Analysis: 4/05/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.104 grams

Lab Sample ID: AB38162
Matrix: Drum Product
Amount Prepared: N/A
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	10	
11104-28-2	Aroclor-1221	ND	10	
11141-16-5	Aroclor-1232	ND	10	
53469-21-9	Aroclor-1242	ND	10	
12672-29-6	Aroclor-1248	ND	10	
11097-69-1	Aroclor-1254	ND	10	
11096-82-5	Aroclor-1260	ND	10	
11100-14-4	Aroclor-1262	ND	10	
37324-23-5	Aroclor-1268	ND	10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	80	59 - 108
Decachlorobiphenyl	104	54 - 100

Comments: The decachlorobiphenyl surrogate recovery was above the QC limit.

Creative Paper - Worcester, MA

PCBs in Oils

Client Sample ID: R01-130227AJ-0008
Date of Collection: 3/20/2013
Date of Preparation: 3/28/2013
Date of Analysis: 4/05/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.107 grams

Lab Sample ID: AB38163
Matrix: Drum Product
Amount Prepared: N/A
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	9.0	
11104-28-2	Aroclor-1221	ND	9.0	
11141-16-5	Aroclor-1232	ND	9.0	
53469-21-9	Aroclor-1242	ND	9.0	
12672-29-6	Aroclor-1248	ND	9.0	
11097-69-1	Aroclor-1254	ND	9.0	
11096-82-5	Aroclor-1260	ND	9.0	
11100-14-4	Aroclor-1262	ND	9.0	
37324-23-5	Aroclor-1268	ND	9.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	71	59 - 108
Decachlorobiphenyl	92	54 - 100

Comments:

Creative Paper - Worcester, MA

PCBs in Oils

Client Sample ID: R01-130227AJ-0009
Date of Collection: 3/20/2013
Date of Preparation: 3/28/2013
Date of Analysis: 4/05/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.107 grams

Lab Sample ID: AB38164
Matrix: Drum Product
Amount Prepared: N/A
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	9.0	
11104-28-2	Aroclor-1221	ND	9.0	
11141-16-5	Aroclor-1232	ND	9.0	
53469-21-9	Aroclor-1242	ND	9.0	
12672-29-6	Aroclor-1248	ND	9.0	
11097-69-1	Aroclor-1254	ND	9.0	
11096-82-5	Aroclor-1260	ND	9.0	
11100-14-4	Aroclor-1262	ND	9.0	
37324-23-5	Aroclor-1268	ND	9.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	75	59 - 108
Decachlorobiphenyl	96	54 - 100

Comments:

Creative Paper - Worcester, MA

PCBs in Oils

Client Sample ID: R01-130227AJ-0010
Date of Collection: 3/20/2013
Date of Preparation: 3/28/2013
Date of Analysis: 4/05/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.108 grams

Lab Sample ID: AB38165
Matrix: Drum Product
Amount Prepared: N/A
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	9.0	
11104-28-2	Aroclor-1221	ND	9.0	
11141-16-5	Aroclor-1232	ND	9.0	
53469-21-9	Aroclor-1242	ND	9.0	
12672-29-6	Aroclor-1248	ND	9.0	
11097-69-1	Aroclor-1254	ND	9.0	
11096-82-5	Aroclor-1260	ND	9.0	
11100-14-4	Aroclor-1262	ND	9.0	
37324-23-5	Aroclor-1268	ND	9.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	63	59 - 108
Decachlorobiphenyl	74	54 - 100

Comments:

Creative Paper - Worcester, MA

PCBs in Oils

Client Sample ID: R01-130227AJ-0012
Date of Collection: 3/20/2013
Date of Preparation: 3/28/2013
Date of Analysis: 4/05/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.107 grams

Lab Sample ID: AB38166
Matrix: Drum Product
Amount Prepared: N/A
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	9.0	
11104-28-2	Aroclor-1221	ND	9.0	
11141-16-5	Aroclor-1232	ND	9.0	
53469-21-9	Aroclor-1242	ND	9.0	
12672-29-6	Aroclor-1248	ND	9.0	
11097-69-1	Aroclor-1254	ND	9.0	
11096-82-5	Aroclor-1260	ND	9.0	
11100-14-4	Aroclor-1262	ND	9.0	
37324-23-5	Aroclor-1268	ND	9.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	78	59 - 108
Decachlorobiphenyl	105	54 - 100

Comments: The decachlorobiphenyl surrogate recovery was above the QC limit.

Creative Paper - Worcester, MA

PCBs in Oils

Client Sample ID: R01-130227AJ-0014
Date of Collection: 3/20/2013
Date of Preparation: 3/28/2013
Date of Analysis: 4/05/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.101 grams

Lab Sample ID: AB38167
Matrix: Drum Product
Amount Prepared: N/A
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	10	
11104-28-2	Aroclor-1221	ND	10	
11141-16-5	Aroclor-1232	ND	10	
53469-21-9	Aroclor-1242	ND	10	
12672-29-6	Aroclor-1248	ND	10	
11097-69-1	Aroclor-1254	ND	10	
11096-82-5	Aroclor-1260	ND	10	
11100-14-4	Aroclor-1262	ND	10	
37324-23-5	Aroclor-1268	ND	10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	84	59 - 108
Decachlorobiphenyl	112	54 - 100

Comments: The decachlorobiphenyl surrogate recovery was above the QC limit.

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PCBs in Oils

Client Sample ID: R01-130227AJ-0015
 Date of Collection: 3/20/2013
 Date of Preparation: 3/28/2013
 Date of Analysis: 4/05/2013
 Dry Weight Prepared: N/A
 Wet Weight Prepared: 0.101 grams

Lab Sample ID: AB38168
 Matrix: Drum Product
 Amount Prepared: N/A
 Percent Solids: N/A
 Extract Dilution: 1
 pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	10	
11104-28-2	Aroclor-1221	ND	10	
11141-16-5	Aroclor-1232	ND	10	
53469-21-9	Aroclor-1242	ND	10	
12672-29-6	Aroclor-1248	ND	10	
11097-69-1	Aroclor-1254	ND	10	
11096-82-5	Aroclor-1260	ND	10	
11100-14-4	Aroclor-1262	ND	10	
37324-23-5	Aroclor-1268	ND	10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	88	59 - 108
Decachlorobiphenyl	110	54 - 100

Comments: The decachlorobiphenyl surrogate recovery was above the QC limit.

Creative Paper - Worcester, MA

PCBs in Oils

Client Sample ID: R01-130227AJ-0016
Date of Collection: 3/20/2013
Date of Preparation: 3/28/2013
Date of Analysis: 4/05/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.108 grams

Lab Sample ID: AB38169
Matrix: Drum Product
Amount Prepared: N/A
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	9.0	
11104-28-2	Aroclor-1221	ND	9.0	
11141-16-5	Aroclor-1232	ND	9.0	
53469-21-9	Aroclor-1242	ND	9.0	
12672-29-6	Aroclor-1248	ND	9.0	
11097-69-1	Aroclor-1254	ND	9.0	
11096-82-5	Aroclor-1260	ND	9.0	
11100-14-4	Aroclor-1262	ND	9.0	
37324-23-5	Aroclor-1268	ND	9.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	92	59 - 108
Decachlorobiphenyl	110	54 - 100

Comments: The decachlorobiphenyl surrogate recovery was above the QC limit.

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PCBs in Oils

Client Sample ID: R01-130227AJ-0017
Date of Collection: 3/20/2013
Date of Preparation: 3/28/2013
Date of Analysis: 4/05/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.113 grams

Lab Sample ID: AB38170
Matrix: Drum Product
Amount Prepared: N/A
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	9.0	
11104-28-2	Aroclor-1221	ND	9.0	
11141-16-5	Aroclor-1232	ND	9.0	
53469-21-9	Aroclor-1242	ND	9.0	
12672-29-6	Aroclor-1248	ND	9.0	
11097-69-1	Aroclor-1254	ND	9.0	
11096-82-5	Aroclor-1260	ND	9.0	
11100-14-4	Aroclor-1262	ND	9.0	
37324-23-5	Aroclor-1268	ND	9.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	82	59 - 108
Decachlorobiphenyl	106	54 - 100

Comments: The decachlorobiphenyl surrogate recovery was above the QC limit.

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PCBs in Oils

Client Sample ID: R01-130227AJ-0018
Date of Collection: 3/20/2013
Date of Preparation: 3/28/2013
Date of Analysis: 4/05/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.117 grams

Lab Sample ID: AB38171
Matrix: Drum Product
Amount Prepared: N/A
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	9.0	
11104-28-2	Aroclor-1221	ND	9.0	
11141-16-5	Aroclor-1232	ND	9.0	
53469-21-9	Aroclor-1242	ND	9.0	
12672-29-6	Aroclor-1248	ND	9.0	
11097-69-1	Aroclor-1254	ND	9.0	
11096-82-5	Aroclor-1260	ND	9.0	
11100-14-4	Aroclor-1262	ND	9.0	
37324-23-5	Aroclor-1268	ND	9.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	85	59 - 108
Decachlorobiphenyl	118	54 - 100

Comments: The decachlorobiphenyl surrogate recovery was above the QC limit.

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PCBs in Oils

Client Sample ID: R01-130227AJ-0019
Date of Collection: 3/20/2013
Date of Preparation: 3/28/2013
Date of Analysis: 4/05/2013
Dry Weight Prepared: N/A
Wet Weight Prepared: 0.109 grams

Lab Sample ID: AB38172
Matrix: Drum Product
Amount Prepared: N/A
Percent Solids: N/A
Extract Dilution: 1
pH: N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	9.0	
11104-28-2	Aroclor-1221	ND	9.0	
11141-16-5	Aroclor-1232	ND	9.0	
53469-21-9	Aroclor-1242	ND	9.0	
12672-29-6	Aroclor-1248	ND	9.0	
11097-69-1	Aroclor-1254	ND	9.0	
11096-82-5	Aroclor-1260	ND	9.0	
11100-14-4	Aroclor-1262	ND	9.0	
37324-23-5	Aroclor-1268	ND	9.0	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	94	59 - 108
Decachlorobiphenyl	114	54 - 100

Comments: The decachlorobiphenyl surrogate recovery was above the QC limit.

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Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Drum Product
Date of Preparation:	3/28/2013	Amount Prepared:	N/A
Date of Analysis:	4/04/2013	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	1
Wet Weight Prepared:	0.100 grams	pH:	N/A

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	10	
11104-28-2	Aroclor-1221	ND	10	
11141-16-5	Aroclor-1232	ND	10	
53469-21-9	Aroclor-1242	ND	10	
12672-29-6	Aroclor-1248	ND	10	
11097-69-1	Aroclor-1254	ND	10	
11096-82-5	Aroclor-1260	ND	10	
11100-14-4	Aroclor-1262	ND	10	
37324-23-5	Aroclor-1268	ND	10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	87	55 - 106
Decachlorobiphenyl	108	47 - 120

Comments:

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MATRIX SPIKE (MS) RECOVERY

Sample ID: AB38157

PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
Aroclor-1016	56.6	ND	60.5	107	
Aroclor-1260	56.6	ND	48.6	86	50 - 127

Comments:

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Laboratory Duplicate Results

Sample ID: AB38157

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Aroclor-1016	ND	ND		50
Aroclor-1221	ND	ND		50
Aroclor-1232	ND	ND		50
Aroclor-1242	ND	ND		50
Aroclor-1248	ND	ND		50
Aroclor-1254	ND	ND		50
Aroclor-1260	ND	ND		50
Aroclor-1262	ND	ND		50
Aroclor-1268	ND	ND		50

Comments:

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Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED mg/kg	LFB RESULT mg/kg	LFB RECOVERY %	QC LIMITS %
Aroclor-1016	60.0	66.0	110	70 - 130
Aroclor-1260	60.0	66.9	112	70 - 130

Comments:

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LABORATORY FORTIFIED DUPLICATE (LFB Dup) RECOVERY

COMPOUND	LFB Dup CONCENTRATION mg/Kg	LFB Dup RECOVERY %	RPD %	QC LIMITS RPD
Aroclor-1016	68.4	114	4	50
Aroclor-1260	68.6	114	2	50

Samples in Batch AB38157, AB38158, AB38159, AB38160, AB38161, AB38162, AB38163, AB38164, AB38165, AB38166,
AB38167, AB38168, AB38169, AB38170, AB38171, AB38172

PN. 13030015

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CHAIN OF CUSTODY RECORD
Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001
Lab: NERL
Lab Phone:

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Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample_Remarks
	R01-130227AJ-0001	D-4	Metals +Cn +Hg	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0001	D-4	VOCs, SVOCs	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0001	D-4	PCBs	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0002	D-11	Metals +Cn +Hg	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0002	D-11	VOCs, SVOCs	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0002	D-11	PCBs	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0003	D-103	Metals +Cn +Hg	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0003	D-103	VOCs, SVOCs	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0003	D-103	PCBs	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0005	D-117	Metals +Cn +Hg	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0005	D-117	VOCs, SVOCs	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0005	D-117	PCBs	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0006	D-118	Metals +Cn +Hg	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0006	D-118	VOCs, SVOCs	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0006	D-118	PCBs	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0007	D-119	Metals +Cn +Hg	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0007	D-119	VOCs, SVOCs	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0007	D-119	PCBs	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0008	D-120	Metals +Cn +Hg	Drum Product	2013-03-20	13:45	1	4 oz Jar	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	J. Jarrell	3/21/13	[Signature]	3/21/13	09:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS

PN: 13030015

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CHAIN OF CUSTODY RECORD
Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001
Lab: NERL
Lab Phone:

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Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample_Remarks
	R01-130227AJ-0008	D-120	VOCs, SVOCs	Drum Product	2013-03-20	13:45	1	4 oz Jar	
	R01-130227AJ-0008	D-120	PCBs	Drum Product	2013-03-20	13:45	1	4 oz Jar	
	R01-130227AJ-0009	D-123	Metals +Cn +Hg	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0009	D-123	VOCs, SVOCs	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0009	D-123	PCBs	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	Metals +Cn +Hg	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	VOCs, SVOCs	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	PCBs	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0012	D-144	Metals +Cn +Hg	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0012	D-144	VOCs, SVOCs	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0012	D-144	PCBs	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0014	D-147	Metals +Cn +Hg	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0014	D-147	VOCs, SVOCs	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0014	D-147	PCBs	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0015	D-148	Metals +Cn +Hg	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0015	D-148	VOCs, SVOCs	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0015	D-148	PCBs	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0016	D-149	Metals +Cn +Hg	Drum Product	2013-03-20	10:40	1	4 oz Jar	
	R01-130227AJ-0016	D-149	VOCs, SVOCs	Drum Product	2013-03-20	10:40	1	4 oz Jar	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>J. Santos</i>	3/21/13	<i>Allen Jarrell</i>	3/21/13	09:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS

PN: 13030015

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CHAIN OF CUSTODY RECORD
Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001

Lab: NERL
Lab Phone:

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Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample Remarks
	R01-130227AJ-0016	D-149	PCBs	Drum Product	2013-03-20	10:40	1	4 oz Jar	
	R01-130227AJ-0017	D-152	Metals +Cn +Hg	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0017	D-152	VOCs, SVOCs	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0017	D-152	PCBs	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0018	D-167	Metals +Cn +Hg	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0018	D-167	VOCs, SVOCs	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0018	D-167	PCBs	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0019	D-187	Metals +Cn +Hg	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0019	D-187	VOCs, SVOCs	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0019	D-187	PCBs	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0023	ASB-01	Bulk Asbestos	ACM	2013-03-20	15:25	1	Bag	
	R01-130227AJ-0024	ASB-02	Bulk Asbestos	ACM	2013-03-20	15:30	1	Bag	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>J. Benter</i>	3/21/13	<i>Allen Jarrell</i>	3/21/13	07:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS



Laboratory Report

March 22, 2013

Allen Jarrell - Mail Code OSRR02-2
US EPA New England R1

Project Number: 13030015
Project: Creative Paper - Worcester, MA
Analysis: Bulk Asbestos Analysis by PLM
EPA Chemist:

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-INGASBSD2.

Analytical Method: Polarized Light Microscope (PLM) with Dispersion Staining.
All quantities are estimated volume percent.

Date Samples Received by the Laboratory: 03/21/2013

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340

Sincerely,

Digitally signed by Dan Boudreau
DN: cn=Dan Boudreau, o=EPA, ou=EIA,
email=boudreau.dan@epa.gov, c=US
Date: 2013.03.22 13:30:25 -04'00'

13030015\$ASBES

Qualifiers:

- RL** Reporting limit
- ND** Not Detected above reporting limit
- NA** Not Applicable
- NC** Not calculated since analyte concentration is ND
- J1** Estimated value due to MS recovery outside acceptance criteria
- J2** Estimated value due to LFB result outside acceptance criteria
- J3** Estimated value due to RPD result outside acceptance criteria
- J4** Estimated value due to LCS result outside acceptance criteria
- B** Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
- R** No recovery was calculated since the analyte concentration is greater than four times the spike level.

Creative Paper - Worcester, MA

Bulk Asbestos Analysis by PLM

Client Sample ID: R01-130227AJ-0023

Lab Sample ID: AB38173

Date of Collection: 3/20/2013

Matrix: ACM

Date of Preparation: 2/22/2013

Date of Analysis: 3/22/2013

CAS Number	Compound	Concentration %	RL %	Qualifier
	Actinolite	ND	1.0	
	Amosite	4	1.0	
	Anthophyllite	ND	1.0	
	Chrysotile	2	1.0	
	Crocidolite	ND	1.0	
	Tremolite	ND	1.0	

Comments:

Creative Paper - Worcester, MA

Bulk Asbestos Analysis by PLM

Client Sample ID: R01-130227AJ-0024
Date of Collection: 3/20/2013
Date of Preparation: 2/22/2013
Date of Analysis: 3/22/2013

Lab Sample ID: AB38174
Matrix: ACM

CAS Number	Compound	Concentration %	RL %	Qualifier
	Actinolite	ND	1.0	
	Amosite	4	1.0	
	Anthophyllite	ND	1.0	
	Chrysotile	2	1.0	
	Crocidolite	ND	1.0	
	Tremolite	ND	1.0	

Comments:

Creative Paper - Worcester, MA

Laboratory Blank for Bulk Asbestos

Client Sample ID: N/A
Date of Collection: N/A
Date of Preparation: 2/22/2013
Date of Analysis: 3/22/2013

Lab Sample ID: N/A
Matrix: ACM
NA mL

CAS Number	Compound	Concentration %	RL %	Qualifier
	Actinolite	ND		
	Amosite	ND		
	Anthophyllite	ND		
	Chrysotile	ND		
	Crocidolite	ND		
	Tremolite	ND		

Comments:

PN. 13030015

USEPA
Region I START
Creative Paper

CHAIN OF CUSTODY RECORD
Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001
Lab: NERL
Lab Phone:

Page 6 of 8

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample_Remarks
	R01-130227AJ-0001	D-4	Metals +Cn +Hg	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0001	D-4	VOCs, SVOCs	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0001	D-4	PCBs	Drum Product	2013-03-20	11:25	1	4 oz Jar	
	R01-130227AJ-0002	D-11	Metals +Cn +Hg	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0002	D-11	VOCs, SVOCs	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0002	D-11	PCBs	Drum Product	2013-03-20	13:15	1	4 oz Jar	High VOC
	R01-130227AJ-0003	D-103	Metals +Cn +Hg	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0003	D-103	VOCs, SVOCs	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0003	D-103	PCBs	Drum Product	2013-03-20	14:35	1	4 oz Jar	
	R01-130227AJ-0005	D-117	Metals +Cn +Hg	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0005	D-117	VOCs, SVOCs	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0005	D-117	PCBs	Drum Product	2013-03-20	13:25	1	4 oz Jar	
	R01-130227AJ-0006	D-118	Metals +Cn +Hg	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0006	D-118	VOCs, SVOCs	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0006	D-118	PCBs	Drum Product	2013-03-20	13:30	1	4 oz Jar	
	R01-130227AJ-0007	D-119	Metals +Cn +Hg	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0007	D-119	VOCs, SVOCs	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0007	D-119	PCBs	Drum Product	2013-03-20	13:40	1	4 oz Jar	
	R01-130227AJ-0008	D-120	Metals +Cn +Hg	Drum Product	2013-03-20	13:45	1	4 oz Jar	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	J. Jarrell	3/21/13	[Signature]	3/21/13	09:20						

13030015\$XRF
13030015\$PCBP
13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS

PN: 13030015

USEPA
Region I START
Creative Paper

CHAIN OF CUSTODY RECORD
Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001

Lab: NERL
Lab Phone:

Page 7 of 8

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample_Remarks
	R01-130227AJ-0008	D-120	VOCs, SVOCs	Drum Product	2013-03-20	13:45	1	4 oz Jar	
	R01-130227AJ-0008	D-120	PCBs	Drum Product	2013-03-20	13:45	1	4 oz Jar	
	R01-130227AJ-0009	D-123	Metals +Cn +Hg	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0009	D-123	VOCs, SVOCs	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0009	D-123	PCBs	Drum Product	2013-03-20	13:55	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	Metals +Cn +Hg	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	VOCs, SVOCs	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0010	D-135	PCBs	Drum Product	2013-03-20	14:10	1	4 oz Jar	High VOC
	R01-130227AJ-0012	D-144	Metals +Cn +Hg	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0012	D-144	VOCs, SVOCs	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0012	D-144	PCBs	Drum Product	2013-03-20	10:20	1	4 oz Jar	
	R01-130227AJ-0014	D-147	Metals +Cn +Hg	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0014	D-147	VOCs, SVOCs	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0014	D-147	PCBs	Drum Product	2013-03-20	10:30	1	4 oz Jar	
	R01-130227AJ-0015	D-148	Metals +Cn +Hg	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0015	D-148	VOCs, SVOCs	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0015	D-148	PCBs	Drum Product	2013-03-20	10:35	1	4 oz Jar	
	R01-130227AJ-0016	D-149	Metals +Cn +Hg	Drum Product	2013-03-20	10:40	1	4 oz Jar	
	R01-130227AJ-0016	D-149	VOCs, SVOCs	Drum Product	2013-03-20	10:40	1	4 oz Jar	

Special Instructions: Please return results to OSC Allen Jarrell.	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>J. Santos</i>	3/21/13	<i>Allen Jarrell</i>	3/21/13	09:20						

13030015\$XRF
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13030015\$BNAP

13030015\$CYANS
13030015\$ASBES
13030015 \$VOAHS

PN: 13030015

USEPA
Region I START
Creative Paper

CHAIN OF CUSTODY RECORD

Site #: R01-130227AJ
Contact Name: Allen Jarrell
Contact Phone: 617-312-4717

No: 0862-20133020-0001

Lab: NERL
Lab Phone:

Page 8 of 8

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Sample Remarks
	R01-130227AJ-0016	D-149	PCBs	Drum Product	2013-03-20	10:40	1	4 oz Jar	
	R01-130227AJ-0017	D-152	Metals +Cn +Hg	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0017	D-152	VOCs, SVOCs	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0017	D-152	PCBs	Drum Product	2013-03-20	10:45	1	4 oz Jar	
	R01-130227AJ-0018	D-167	Metals +Cn +Hg	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0018	D-167	VOCs, SVOCs	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0018	D-167	PCBs	Drum Product	2013-03-20	11:15	1	4 oz Jar	
	R01-130227AJ-0019	D-187	Metals +Cn +Hg	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0019	D-187	VOCs, SVOCs	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0019	D-187	PCBs	Drum Product	2013-03-20	14:45	1	4 oz Jar	
	R01-130227AJ-0023	ASB-01	Bulk Asbestos	ACM	2013-03-20	15:25	1	Bag	
	R01-130227AJ-0024	ASB-02	Bulk Asbestos	ACM	2013-03-20	15:30	1	Bag	

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13030015\$PCBP
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