AECOM Environment

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USEPA

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Chelmsford, MA
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June 2019

Draft Final

Remedial Investigation Report
Walton & Lonsbury Superfund Site
Attleboro, Massachusetts

Volume I: Text, Tables, and Figures

EPA Contract No. EP-S1-06-01
EPA Task Order No. 0065-RICO-01GM

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1.0 Introduction

This Remedial Investigation (RI) Report for the Walton & Lonsbury Superfund Site in Attleboro, Massachusetts has been prepared by AECOM under Task Order No. 0065-RICO-01GM of EPA's Remedial Action Contract (RAC2) No. EP-S1-06-01. The report presents the results from multiple phases of field investigation that were performed between June 2014 and October 2018 to support completion of a Remedial Investigation and Feasibility Study (RI/FS). The report includes a comprehensive evaluation of all phases of RI data as well as historic data determined to be useable for the human health and ecological risk assessments. Summaries of the risk assessments are included as well.

1.1 Report Organization

This report is organized into this introduction (Section 1) and the following sections:

Section 2 – Description of Remedial Investigation Activities – A description and presentation of the data collected at the property and surrounding areas to be used in the Remedial Investigation, including both previous investigations and the Phases 1 through 5 of the Remedial Investigation, is presented in this section.

Section 3 – Physical Characteristics of the Site - The environmental setting of the Site is presented in the following subsections: Geologic Setting; Hydrologic Setting; Hydrogeologic Setting; and Climatological Conditions.

Section 4 – Nature and Extent of Contamination - The presentation and discussion of the nature and extent of contaminants has been divided into the following subsections: Surface Soil, Subsurface Soil, Sediment, Groundwater, and Surface Water. A brief discussion of the usability of the data (RI and pre-RI) is also included.

Section 5 – Contaminant Fate and Transport - This section provides information on the fate and transport processes and migration pathways relevant to the contaminants identified at the Site.

Section 6 – Baseline Risk Assessment Summary – This section summarizes the conclusions of the baseline human health risk assessment and baseline ecological risk assessment.

Section 7 – Summary of RI Findings – An overall summary of the findings of the RI and risk assessments is presented.

Section 8 – References – A listing of applicable references is provided.

The report sections (Sections 1 through 8) complete with text, tables, and figures are provided as Volume I. The report appendices are provided as Volume II.

1.2 Site Description

The former Walton & Lonsbury (W&L) chromium plating facility was located on a 2.72-acre parcel of land with the following street address: 78 North Avenue, Attleboro, Bristol County, Massachusetts (Figures 1-1, 1-2, and 1-3). The plating operations were performed in a 13,500-square-foot building that was demolished and removed as part of a United States Environmental Protection Agency (EPA) time-critical removal action implemented between October 2010 and August 2014.

The 78 North Avenue property is currently owned by Walhard Realty Trust. It is bounded to the north by Walton Street, to the south by wetlands and wooded areas, to the east by North Avenue with residences beyond, and to the west by industrial/commercial properties [TtNUS, 2005]. The primary contaminants of interest at the property are chromium and chlorinated volatile organic compounds (cVOCs).

1.3 Terminology

The following terms are used throughout this report to describe the property itself and adjacent areas that were included in previous investigations and/or this RI.

W&L property, **W&L facility**, and **property**: These terms refer to the 78 North Avenue property itself (see Figure 1-2), inclusive of the portion of the property that is leased to a tenant (the hatched portion of the property as shown on Figure 1-2).

Site and **study area**: These terms refer to the 78 North Avenue property and adjoining areas that were investigated in the RI and/or previous investigations, including: the wetland south of the 78 North Avenue property and abutting residential yards as far south as Deanville Road; the residential area immediately east of the 78 North Avenue property along Paulette Lane and North Avenue; Bliss Brook and its banks, including residential yards that border the brook from the Paulette Lane area south to its confluence with the Bungay River; the Bungay River just upstream of its confluence with Bliss Brook; Mechanics Pond; and the storm water piping that drains the wetland north of Deanville Road south to its discharge into Bliss Brook at West Street (see Figure 1-3). "Study area" also includes reference soil and sediment sampling locations that are nearby that were selected to be representative of conditions of similar habitat, but not impacted by releases from the W&L property.

Southern Wetland: This term refers to the wetland area just south of the W&L property as far south as Deanville Road, including the northernmost portion excavated by the removal program that is now an open water area.

Covered Area: This term refers to the area behind residences along Paulette Lane and North Avenue that was covered under an EPA time-critical removal action to prevent upwelling of chromium-contaminated groundwater to the ground surface and to prevent direct exposure to chromium-contaminated soil. See Figure 1-3 – Limit of Cover Installed by Removal Program.

1.4 Operational History (1940-2007)

The property is zoned for industrial use, and while in operation it was used as a specialty parts industrial plating facility. Electroplating operations had been conducted at the property since 1940, and W&L performed chromium plating until it closed in 2007. Copper plating was also conducted at the property until the building was remodeled in the late 1950s [Weston, October 2012].

Facility operations included parts degreasing using solvents, hard chrome plating, stripping with acids, aqueous rinsing, grinding, and polishing. Chemical usage at the facility reportedly included trichloroethene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), chromic oxide, chromic acid, hydrochloric acid, sulfuric acid, phosphoric acid, paint thinner, aluminum oxide, sodium hydroxide, sodium bisulfate, sodium hydrosulfate, and lead sulfate [as listed in TtNUS, 2005 – original references provided in that document]. Wastes generated at the facility reportedly included hydrochloric acid, chromium hydroxide sludge, chromic acid wastewater, chromic acid contaminated solids, TCE, 1,1,1-TCA, aluminum oxide dust, and cyanide plating bath solution [as listed in TtNUS, 2005 – original references provided in that document]. After W&L ceased copper plating operations in the 1950s, cyanide was no longer used in the plating process [Weston, October 2012 – original reference not provided].

The following description of the hard electroplating process is adapted from USEPA, 1995 (AP-42, Fifth Edition, accessed at https://www3.epa.gov/ttn/chief/ap42/ch12/final/c12s20.pdf), and is consistent with the chemical usage reported for the W&L facility:

> *In hard chromium electroplating, a relatively thick layer of chromium is deposited directly on a base metal (usually steel). Hard plating is used for items such as hydraulic cylinders and rods, industrial rolls, zinc die castings, plastic molds, engine components, and marine hardware. The process typically consists of pretreatment, alkaline cleaning, acid dipping, chromic acid anodizing, and chromium electroplating. The pretreatment step may include polishing, grinding, and degreasing. Degreasing consists of either dipping the part in organic solvents, such as trichloroethylene or perchloroethylene,*

or using the vapors from organic solvents to remove surface grease. Alkaline cleaning is used to dislodge surface soil with inorganic cleaning solutions, such as sodium carbonate, sodium phosphate, or sodium hydroxide. Acid dipping, which is optional, is used to remove tarnish or oxide films formed in the alkaline cleaning step and to neutralize the alkaline film. Acid dip solutions typically contain 10 to 30 percent hydrochloric or sulfuric acid. Chromic acid anodic treatment, which also is optional, cleans the metal surface and enhances the adhesion of chromium in the electroplating step.

The final step in the process is the electroplating operation itself. The plating tanks typically are equipped with some type of heat exchanger. Mechanical agitators or compressed air supplied through pipes on the tank bottom provide uniformity of bath temperature and composition.

Hexavalent chromium plating baths are the most widely used baths to deposit chromium on metal. Hexavalent chromium baths are composed of chromic acid, sulfuric acid, and water. The chromic acid is the source of the hexavalent chromium that reacts and deposits on the metal and is also emitted to the atmosphere as part of the process. The sulfuric acid in the bath catalyzes the chromium deposition reactions. The evolution of hydrogen gas from chemical reactions at the cathode causes misting at the surface of the plating bath, which results in the loss of chromic acid to the atmosphere.

Wastes typically generated from the hard electroplating process include the following:

- Spent plating bath solutions
- Spent degreasing solvents
- Spent acid and alkaline cleaning/dipping solutions
- Grinding residues
- Wastewater from rinsing of parts
- Precipitated metals sludge from pretreatment of wastewater prior to discharge

From 1940 until 1970, wastewater and waste streams generated at the facility were directly discharged without treatment via an underground pipe from the plating room into the wetlands located on the southern portion of the property [RCA, 1989]. The wetlands extend onto southern abutting properties. Figure 1-3 shows the historic extent of standing water in the wetland where this discharge took place, based on aerial photo analysis [Lockheed Martin, April 2013. *Aerial Photographic Analysis, Land Use/Land Cover Analysis, Wetland Analysis, and Fracture Trace Analysis of Walton & Lonsbury Site, Attleboro, Massachusetts, TS-OEI-21201026S*].

In 1970, W&L abandoned and plugged its underground discharge pipe and installed a batch wastewater treatment system for metals removal and pH adjustment. Following start-up of the treatment system, treated wastewater was discharged to a surface impoundment that was located west of the facility building (Figure 1-2). The impoundment was used to remove suspended solids remaining in the final discharge after chemical treatment [RCA, 1989]. Wastewater flowing through the surface impoundment was then discharged to a storm water trench located on the west side of the facility building. The discharge from the storm water trench flowed through the wetland area, into several storm water culverts, and into the Ten Mile River [TtNUS, 2005]. This practice continued until the mid-1980s. In addition, during the period of 1970 to the mid 1980's, chromium hydroxide sludges generated by the batch wastewater treatment system were discharged into an earthen sludge lagoon south of the surface impoundment for dewatering [RCA, 1989].

In 1984, W&L was ordered by the Massachusetts Department of Environmental Protection (MassDEP) to cease discharge to both the surface impoundment and the sludge lagoon. A closure plan was prepared and was approved by MassDEP. Sludge and visibly-contaminated soil were excavated and disposed at the Stablex Canada facility [TtNUS, 2005]. The extent of excavation was based on Extraction Procedure (EP) Toxicity metals results rather than total metals results. Total metals analysis for samples from the bottom of the excavation indicated elevated concentrations of chromium, copper, and lead [TtNUS, 2005]. The impoundment and lagoon were reportedly backfilled with clean sand and gravel and capped with a 6- to 12-inch clay cap, followed by loam and grass seed, but TtNUS could not locate any records of final excavation dimensions [TtNUS, 2005]. The wastewater treatment system was converted to a closed-loop for process water, while chromium

hydroxide sludge was accumulated and shipped off-site for disposal (approximately 4,000 gallons of sludge were shipped off-site every 90 days) [Weston, November 2013].

During a 2004 inspection of the property by TtNUS, it was noted that W&L was leasing the portion of the property that includes the capped surface impoundment and lagoon. The tenant had filled, graded, and paved the area so it could be used for parking and storage of vehicles and equipment [TtNUS, 2005].

Two above-ground storage tanks containing TCE and 1,1,1-TCA were located on the west side of the former building and supplied solvents for internal degreasing operations. TCE was used on the property from an unknown period of time until 1983, at which time 1,1,1-TCA was determined to be a more environmentally permissible alternative. Several overflow spills of solvents reportedly occurred during the early 1980s. An abandoned dry-well located on the south side of the facility was reportedly used for the disposal of waste solvents including TCE and 1,1,1-TCA [Weston, November 2013].

Three underground storage tanks (USTs) were also present at the property and have all been removed, but details regarding the removals were located for only one UST [TtNUS, 2005]. A release of oil to soils was observed during removal of this UST in 1995. Approximately 20 cubic yards of petroleum-contaminated soil were removed from the excavation and a Response Action Outcome pursuant to the Massachusetts Contingency Plan (MCP) was filed by W&L's consultant indicating No Significant Risk remained based on soil samples from the excavation that were analyzed for Total Petroleum Hydrocarbons [TtNUS, 2005].

The W&L facility ceased all operations in 2007. During the 2004 inspection by TtNUS, wastes being managed at the facility included a one to two percent chromic acid solution stored in four above-ground tanks, and chromium-contaminated solid waste stored in open-top, one-ton plastic totes. These wastes were being shipped off-site by licensed contractors. Mineral spirits and a proprietary degreasing agent were also being disposed by Safety Kleen on an as-needed basis [TtNUS, 2005].

1.5 Previous Investigations

The W&L property was initially investigated under the State cleanup program (i.e., the Massachusetts Contingency Plan or "MCP") and was assigned release tracking number (RTN) 4-23. W&L retained a consultant (RCA) to perform the required MCP Phase I and Phase II investigations in addition to other compliance activities. The site, as described in the MCP Phase IIC Comprehensive Site Assessment Report [RCA, 2001], included the property itself and the land south and west of the facility, extending to the southeast up to and possibly beyond Bliss Brook. RCA identified the potential on-property sources depicted on Figure 1-2. At that time, it was believed that the southern extent of groundwater contamination was the northern edge of the Brookside Apartments, but it was acknowledged that the full extent of contamination had not been defined, either vertically (with respect to deep overburden and bedrock groundwater) or along Bliss Brook and the Bungay River (soil, sediments, and surface water). Chromium contamination was found in sediment samples as far south as Mechanics Pond (nearly a mile south of the W&L property line) during a Site Inspection performed by EPA in 2005 [TtNUS, 2005].

1.5.1 EPA Remedial Program, Initial Site Inspection

In 2005, a Draft Site Inspection Report was prepared for the EPA Remediation and Restoration Branch ("remedial program") by Tetra Tech NUS [TtNUS, 2005]. This report summarized past work done and included a reconnaissance of the W&L property, nearby residential neighborhoods, and the adjacent wetlands and Bliss Brook. In addition, interviews were conducted and soil, sediment, surface water, and groundwater samples were collected. The surface water and sediment samples were collected from Bliss Brook as well as further downstream (Bungay River, Ten Mile River, and Mechanics Pond). The soil samples were collected from residential properties in areas along Bliss Brook that are subject to flooding. A well couplet was also installed on the eastern side of Bliss Brook downgradient of the known contaminated groundwater plume at that time, to determine the vertical gradient in the vicinity of the brook to assess whether the brook was a groundwater divide. The sampling confirmed that contaminants released at the W&L property were present in sediments and surface water (including downstream water bodies Bungay River and Ten Mile River/Mechanics Pond). Results from the

well couplet indicated that the contaminant plume discharges to Bliss Brook but does not cross below it. The soil sampling showed elevated concentrations of chromium and hexavalent chromium.

1.5.2 Vapor Intrusion Evaluations

In December 2008 and again in March 2009, EPA's Office of Environmental Measurement and Evaluation (OEME) performed indoor air sampling within nearby residences to assess the possibility of vapor intrusion [OEME, 2008; OEME, 2009]. Sub-slab soil gas samples and indoor air samples were collected at 69 North Avenue. Basement air samples were collected at 73 North Avenue, which was noted to have a radon mitigation system present. TCE and other cVOCs were detected in the basement air at 69 North Avenue. A sub-slab depressurization system (SSDS) was installed by MassDEP at 69 North Avenue while the radon mitigation system already present at 73 North Avenue appeared to be effective since TCE was not detected in the basement air.

In February 2010, MassDEP's Field Assessment and Support Team (FAST) performed a vapor intrusion study for five other homes: 27 Paulette Lane, 37 Paulette Lane, 50-52 North Avenue, 51 North Avenue, and 60 North Avenue [MassDEP, February 2010]. The work consisted of sub-slab soil gas and indoor air sampling. The study reached the following conclusions (as stated in the MassDEP report):

1. There is no evidence or reason to believe that vapor intrusion is occurring at 27 or 37 Paulette Lane.

2. Site-related contaminants (i.e., TCE and dichloroethanes) were identified in the soil gas beneath the basements at 50-52 and 51 North Avenue at concentrations consistent with levels of these contaminants reported in the underlying groundwater.

3. Site-related contaminants were not identified in the soil gas beneath the basement at 60 North Avenue, but there is reason to believe that detectable levels of these contaminants may exist under other areas of this structure.

4. Site-related contaminants were not identified in the indoor air at any of the five homes sampled. While it is possible that site contaminants may be present below the method detection limits (10-20 $\mu g/m^3$), such concentrations would probably not represent an immediate health risk (i.e., would not be above MCP short-term metrics for cancer or non-cancer risks).

5. The homes with the highest degree of uncertainty regarding potential impacts from vapor intrusion are 50-52 North Avenue, given the levels of site contaminants in the sub-slab soil gas and the home condition, and 60 North Avenue, given its proximity to the Walton and Lonsbury site and the limitations of the sub-slab soil gas sampling effort. The 50-52 North Avenue home is older, with a fieldstone/brick/ mortar foundation, concrete floor, and unfinished basement. Some cracks and void spaces were observed in the foundation/floor system. Indoor air sampling via EPA Method TO-15 was recommended for these structures. (This indoor air sampling was performed by EPA OEME as part of the RI; see Section 4.8.2).

In December 2010, the MassDEP conducted a second vapor intrusion study that included several additional homes along Paulette Lane (5, 27, 29, 30, and 37) and North Avenue (51, 50-52, and 65) [MassDEP, December 2010]. It was planned to also sample at 60 North Avenue but this could not be done due to a scheduling conflict. A radon mitigation system was observed to be present and operating at 65 North Avenue. This study included sub-slab soil gas sampling but not indoor air sampling. Conclusions were similar to those from the earlier study.

1.5.3 Other MassDEP Actions

MassDEP performed an emergency removal action consisting of emptying and over-packing the contents of various containers, totes, and drums that had been left on the W&L property. All of the liquid waste from the wastewater treatment system and most of the liquid waste from plating tanks was siphoned off and disposed. In 2011 and 2012, ESM, a contractor to MassDEP, installed shallow and deep well couplets and also installed piezometers and staff gauges in Bliss Brook [ESM, 2011; ESM, 2012]. The work established that groundwater

was discharging to Bliss Brook. All of the MassDEP monitoring wells and selected older wells were sampled for hexavalent chromium, lead, and VOCs in early March 2012.

1.5.4 EPA Removal Program PA/SI and Time-Critical Removal Action

In August 2010, the EPA Emergency Planning and Response Branch ("removal program") performed a removal program preliminary assessment/site investigation (PA/SI) that documented the presence of chromic acid in on-property tanks [Weston, October 2012]. In addition, high concentrations of metals were found in surface soils along the western bank of Bliss Brook and in the backyards of several residences along Paulette Lane and North Avenue. The contamination found in these soils is from migration of contaminated groundwater from the original on-property release areas to this area, wicking up into the unsaturated soil behind these homes and eventually discharging to Bliss Brook [Weston, November 2013]. As a result of the findings of the initial phases of the PA/SI, EPA initiated a Time-Critical Removal Action in October 2010 with the objective of mitigating ongoing human health exposure to metals-impacted soil and groundwater and preventing potential future releases. Activities conducted as part of the Time-Critical Removal Action included removal of the W&L buildings and residual waste materials, excavation and off-site disposal of contaminated sediment from wetlands south of the former building where the wastewater was historically discharged, and construction of an engineered cover to isolate surficial soils adjacent to Bliss Brook (behind the North Avenue/Paulette Lane residential area) to mitigate future dermal contact risk (see Figure 1-3). Chromium-contaminated soil and groundwater remain under the cover. A permeable reactive barrier (PRB) wall was constructed on the downgradient edge of the cover, with the goal of reducing hexavalent chromium to the less toxic trivalent chromium in the groundwater before it discharged to Bliss Brook.

The engineered cover was designed to serve several purposes: provide physical separation from chromium-impacted soils that remain, raise the ground surface elevation above the water table to limit influence of chromium-impacted groundwater on the near surface soils, and promote enhanced movement of groundwater beneath the cover. The existing grade in the area of the cover was excavated to the proposed grade and "hot spot" excavation was performed to remove chromium-impacted soils. The existing soil under the cover was stabilized with Portland cement for subsequent placement of cover materials and regraded to the specified preparatory grade. The soil cover is comprised of a 6-inch granular fill layer (common fill) over a woven geotextile above the regraded soils. Above the granular fill is a geocomposite drainage layer to provide a low-profile layer of high groundwater transmissivity. Above the drainage layer is a minimum 8-inch layer of crushed stone to serve as a capillary break to limit migration of impacted groundwater upward into surface soils. Overlying the crushed stone is a geotextile warning layer and then 6 inches vegetated support sand and a 4-inch topsoil layer to provide physical separation and media for vegetation [Weston, November 2013]. A typical section of the engineered cover (abstracted from the Record Drawings for the removal action) is shown in Figure 1-4.

The PRB consists of a mixture of zero-valent iron (ZVI) particles and granular fill at a ratio of 1:20 by volume. Remediation of this entire area by excavation of the contaminated soil was not a feasible option since it would have become re-contaminated via the migration of contaminated groundwater from the original source areas [Weston, November 2013].

The site was listed on the National Priorities List on May 21, 2013 (Site No. MAD001197755). Restoration activities for the removal action were completed in August 2014.

1.5.5 EPA Remedial Program Site Reassessment

During implementation of the Time-Critical Removal Action between October 2010 and 2012, EPA also conducted additional soil, sediment and surface water sampling to further assess the extent of the chromium contamination. The EPA Site Reassessment work [Weston, April 2012] focused on the surface water pathway and included sampling of sediment and surface water in the wetlands between the W&L property and the drainage culvert beneath Deanville Road, and downstream along Bliss Brook as far as south as West Street (approximately 1,800 feet south of the W&L property). Surface and shallow soil samples were also collected from upland areas along these water courses to assess possible flood plain impacts. The results were presented in the Expanded Trip Report [Weston, April 2012] and indicated that chromium impacts from the W&L property exist as far downstream as West Street [Weston, November 2013]. It had already been previously documented

that chromium impacts are present as far south as the southeastern outlet of Mechanics Pond, nearly a mile downstream of the W&L property [TtNUS, 2005].

In September 2012, EPA completed the Hazardous Ranking System (HRS) evaluation [USEPA, 2012] and, with community and State support, the W&L site was proposed to the NPL. The W&L site was added to the Final list of NPL sites on May 21, 2013.

1.6 Potential Sources of Contamination

The 1990 MCP Phase IIA report prepared by W&L's consultant for RTN 4-23 [RCA, 1990] identified nine potential sources of contamination at the W&L property – see Figure 1-2 for approximate locations:

1. Original wastewater discharge to wetland area
2. Closed surface impoundment area and lagoon
3. Former outside TCE storage tank
4. Outside drum storage pad
5. Roof runoff
6. Grinder exhaust area
7. Plating room floor trenches
8. Abandoned dry well
9. Former fuel oil USTs

1.6.1 Original Wastewater Discharge to Wetland Area South of Property

The majority of contamination is believed to have occurred prior to 1970 as a result of the direct discharge of wastes to an abutting wetland on the southern side of the property (hereinafter referred to as the Southern Wetland). The untreated wastewater was historically discharged via an underground pipe. Standing water was historically present in this wetland in aerial photos taken prior to 1970 (Figure 1-3). The pipe was abandoned and plugged in 1970, when a wastewater treatment system was constructed.

1.6.2 Closed Surface Impoundment Area and Lagoon

These areas are mostly in the portion of the W&L property now occupied by Walsh Construction Company (a tenant), and are covered by pavement (Figure 1-2). After 1970, treated wastewater was discharged to a storm water trench located on the west side of the building, after flowing through the surface impoundment, the purpose of which was to remove suspended solids remaining in the discharge after chemical treatment. Chrome hydroxide sludge generated by the wastewater treatment process was also discharged to the surface impoundment. The impoundment area and an associated lagoon were capped in place in 1985, after excavation and disposal of sludges off-site at a facility in Canada. The Phase IIA report [RCA, 1990] concluded that these areas were not significant contributors to groundwater contamination. Samples collected from the bottom of the impoundment/lagoon area were analyzed for total chromium, lead, nickel, copper, hexavalent chromium, and VOCs [RCA, 2001]. Total chromium and lead concentrations ranged from 150 to 6,900 milligrams per kilogram (mg/kg) and 230 to 10,500 mg/kg, respectively, and no VOCs were detected [RCA, 2001]. Samples for EP Toxicity, however, met the approved closure goal [RCA, 1990].

1.6.3 Former Outside TCE Storage Tank

The Phase IIA report states that a number of overflow spills were known to have occurred in the early 1980s. This location was identified as a major source of contamination.

1.6.4 Outside Drum Storage Pad

This pad historically was used to store process chemicals and wastes. Results of the Phase IIA investigation suggested that this area was a potential source of both cVOCs and chromium.

1.6.5 Roof Runoff

Emissions from plating operations exhausted to the roof of the former plating building, and the roof was noted to be stained with chromium. Runoff from the roof discharged to the ground in several places. Roof runoff samples were found to contain significant concentrations of chromium.

1.6.6 Grinder Exhaust Area

Exhaust to the roof from the area of the former building where grinding operations were performed was also suspected to be a source of metals contamination to soil, but it was concluded that this exhaust was not likely to be a significant contributor.

1.6.7 Plating Room Floor Trenches

Concrete floor trenches collected drippings from plating tanks and the liquid was pumped into on-property holding tanks then shipped off site as hazardous waste. Soil and groundwater impacts were detected immediately downgradient of the plating room area [RCA, 2001].

1.6.8 Abandoned Dry Well

This abandoned dry well was located on the south side of the former building. A former employee stated it had been used for disposal of TCE, but the Phase II investigations did not note cVOCs in soil near this area [RCA, 1990; 2001], and the dry well itself was not located during these investigations.

1.6.9 Former Fuel Oil USTs

A total of three fuel oil USTs were present at the W&L property, which have all reportedly been removed. Localized soil and groundwater contamination with petroleum hydrocarbons was detected during the 2001 Phase IIC investigation [RCA, 2001]. A release of petroleum to soil was confirmed during removal of one of the tanks and the contaminated soil was removed under RTN 4-11408 in 1995.

Of the above potential sources, those associated with the former building (e.g., former tanks, dry well, drum storage pad, roof runoff, and trenches), are no longer present as they were removed by W&L or by EPA and MassDEP removal actions. Residual contamination associated with these sources remains in the subsurface. The original wetland discharge area was partially excavated by the EPA removal action, but contamination remains to the south of the immediate discharge area.

1.7 Covered Area, Paulette Lane

An engineered cover was constructed as a Time-Critical Removal Action to isolate surficial soils adjacent to Bliss Brook (behind the Paulette Lane residential area) and mitigate future dermal contact risk (Figure 1-3). A description of the engineered cover construction is provided in Section 1.5.4 and a typical section is shown in Figure 1-4. Chromium-contaminated soil and groundwater remain under the cover. Contaminated groundwater migrating from the W&L property and through the covered material is the primary source of contamination to this soil and to Bliss Brook. A PRB wall constructed on the downgradient edge of the cover was installed, with the goal of reducing hexavalent chromium to the less toxic trivalent chromium in the groundwater before it discharges to Bliss Brook. Remediation of this entire area by excavation of the contaminated soil was not a feasible option since it would have become re-contaminated via the migration of contaminated groundwater from the original source areas.

1.8 Media and Contaminants Released

The analytes that W&L's consultant identified as contaminants to have been released at the property included metals (total chromium, hexavalent chromium, and lead), cVOCs (TCE; 1,1,1-TCA; PCE; and breakdown products), and petroleum hydrocarbons and associated polycyclic aromatic hydrocarbons (PAHs). Metals and VOCs were detected in surface soil, subsurface soil, groundwater, sediment, and surface water samples from Bliss Brook [RCA, 2001].

Subsequent investigations by EPA and MassDEP have confirmed that metals (primarily chromium) and cVOCs (primarily TCE) are present in soil, groundwater, sediment, and surface water. VOCs were also detected in indoor air, likely due to vapor intrusion into buildings above or near the VOC plume. One home was equipped with an SSDS as a result and two other homes were found to have existing radon mitigation systems that appeared to be effective in addressing vapor intrusion from VOCs.

Sampling and analysis for other constituents (PCBs, SVOCs, and pesticides) traditionally has not been performed due to W&L's operational history (i.e., hard chrome plating). However, there has been some soil sampling for other constituents by the EPA removal program [as reported in Weston, October 2012, and for excavated soil disposal characterization purposes]. Limited sampling for constituents other than metals and VOCs was also performed for the initial Site Inspection [TtNUS, 2005]. PCBs were not detected. SVOCs other than PAHs were infrequently detected. No pesticides were detected. No evidence of releases of PCBs, pesticides, or SVOCs other than PAHs was located in the documents that have been reviewed. As a result, samples collected during this remedial investigation were predominantly (but not exclusively) submitted for metals and VOCs only.

1.9 Upgradient MCP Site with VOC Contamination

The Stergis Glass Co. (Stergis) MCP site, located at 79 Walton Street, is upgradient of the W&L property, but is not believed to be currently impacting the W&L property. Stergis acquired the property in 2010. The previous owners/occupants of the on-site building (built circa 1960) performed activities such as metal stamping, plating, and degreasing that are believed to have resulted in releases of VOCs to the groundwater. Environmental investigations in 2004 revealed a VOC plume that was migrating off the property toward the south and the southeast. At that time (circa 2004) the plume had only been investigated as far as Walton Street and had concentrations of TCE of approximately 500 micrograms per liter (µg/L). Several remedial actions, including groundwater extraction, dual phase extraction, and chemical injection, were implemented at the Stergis site between 1997 and 2008. Between 2013 and 2015, additional investigations were conducted including the installation of downgradient monitoring wells to determine the extent of the plume on properties to the south of Walton Street [SAGE, 2016]. Groundwater elevation measurements indicate that the flow direction in both the overburden and bedrock is to the southeast. Groundwater sampling in 2015 indicated that the plume is migrating in the same general direction as groundwater flow beneath the Walton Site (generally to the south-southeast) and it passes immediately west of the W&L property. TCE, the primary Stergis site contaminant, was not detected in a shallow bedrock/shallow overburden well cluster (SAGE-12) located approximately 200 feet west of the DEP-04 cluster on the W&L property. However, TCE was detected at two well clusters to the north of the SAGE-12 cluster, at concentrations of 16 to 40 µg/L in overburden and 24 to 120 µg/L in the bedrock. It is possible that the TCE plume could (over time) migrate onto the W&L property in that area.

2.0 Description of Remedial Investigation Activities

This section summarizes the sources of previous investigation data determined to be "usable" for the risk assessments and describes the phases of RI field work performed between June 2014 and October 2018.

2.1 Prior Data Usable for Risk Assessments

As discussed in Section 1, there have been numerous investigations and a significant amount of sampling data has been collected across and adjacent to the W&L property over the years. To aid in determining the "usability" of this data in the RI, the following information was reviewed:

- laboratory analytical methods to ensure samples were analyzed following standard analytical methods and would be comparable to data collected in the RI;
- data documentation (e.g., laboratory data sheets, boring logs, etc.);
- data validation records to ensure data is usable for its intended purpose; and
- soil/sediment sample locations and dates of sampling relative to the EPA removal actions performed, to determine if the sample can be considered representative of current conditions or was removed.

Table 2-1 lists the historic data collection events and data that have been determined to be "usable" for this RI, with respect to incorporating the data into the human health and ecological risk assessments. Other historic data sources that were used for planning the RI were summarized in the Sampling and Analysis Plan, Revision 1 [AECOM, June 2014].

2.2 Remedial Investigation Phases

RI field activities were conducted in several phases: Phases 1, 2, and 3: June 2014-December 2015, Phase 4: October 2016-May 2017, and Phase 5: November 2017 -October 2018.

The primary objective of the first three phases of the remedial investigation was filling data gaps from previous investigations regarding the nature and extent of contamination in soil, sediment, surface water, and groundwater. Details regarding the selection of sampling locations, well locations, sampling procedures, and analyses can be found in the Sampling and Analysis Plans and plan addenda prepared for each phase: Phase 1 [AECOM, June 2014], Phase 2 [AECOM, October 2014 and AECOM, November 2014], and Phase 3 [AECOM, July 2015].

Phase 4 and Phase 5 were focused investigations designed to address data gaps that were identified after completion of the draft risk assessments and draft RI report. Phase 4 involved the collection of surface soil samples for plant and earthworm toxicity testing to provide additional data to reduce the uncertainty in conclusions of ecological risk. The plan for Phase 4 was presented in the Ecotoxicity Sampling and Analysis Plan (SAP) [AECOM, October 2016]. Phase 5 included surface soil sampling to support the human health risk assessment for lead in soil in accordance with new EPA guidance that recommends analyses for fine fraction (less than 150 microns) total lead and In Vitro Bioaccessibility (IVBA) lead. Phase 5 also included installation of new piezometers and staff gauges along Bliss Brook and in the Southern Wetland, a comprehensive survey of well and staff gauge locations and elevations, and sampling of the piezometers for hexavalent chromium, all directed at gaining a greater understanding of the interaction between surface water and shallow overburden groundwater at the Site for use in the RI and FS. The plan for the first part of the Phase 5 investigation was presented in the Soil Fine Fraction Lead Testing and Micro-Well SAP [AECOM, November 2017], and the plan for supplemental soil fine fraction lead sampling performed in October 2018 was presented in the SAP for Soil Fine Fraction Lead Testing: Residential Yards West of North Avenue [AECOM, October 2018].

Figures 2-1 through 2-10 show the locations of samples of all media that were collected in Phases 1 through 3, along with the locations of samples collected in previous investigations for which the data were judged usable for

risk assessment purposes. Soil sample locations are shown on Figures 2-1 through 2-5; monitoring well locations on Figure 2-6 (this figure also includes Phase 5 piezometer and staff gauge locations); sediment and pore water sample locations on Figures 2-7 and 2-8; surface water sample locations on Figure 2-9; and indoor air sample locations on Figure 2-10.

The Phase 4 soil toxicity test locations are shown on Figures 2-11, 2-12, 2-13, and 2-14, along with the historic soil sample locations and total/hexavalent chromium results that were used to help select the Phase 4 locations.

The locations for soil sampling for Phase 5 are shown on Figures 2-15 and 2-16, along with the historic soil sampling locations and total lead and chromium results that were used to help select the Phase 5 locations.

The locations for the piezometers and staff gauges that were installed, monitored and surveyed during Phase 5 are shown on Figure 2-17, overlaid on historic groundwater elevation data for the shallow overburden (September 2015 results), as these results were used to help select the locations for the Phase 5 monitoring points.

Further details regarding each phase of investigation are provided below.

2.3 Phase 1 Investigation

Phase 1 field work consisted of the installation of monitoring wells and the collection of samples of groundwater, surface water, soil, and sediment. One objective of Phase 1 was to obtain sufficient data within likely exposure areas (EAs) to support the Human Health Risk Assessment (HHRA) and the Screening Level Ecological Risk Assessment (SLERA). Another objective of Phase 1 was to attempt to determine the extent of chromium and cVOC contamination, and to determine whether contaminants other than metals and cVOCs may also be present and attributable to the past releases that occurred on the W&L property.

Phase 1 surface soil and subsurface soil sampling took place between June 18 and July 10, 2014. A total of 50 surface/subsurface soil samples were collected in Phase 1. Field worksheets and logbook notes are included in Appendix B. Worksheets including supplemental observations used for habitat evaluation are included in Appendix C.

Phase 1 sediment and surface water sampling took place between June 18 and July 9, 2014, concurrent with surface and subsurface soil sampling. For the purposes of the RI and the risk assessments, “sediment” is defined as solid material that is below normal water elevation (areas typically having standing water during the year) and in locations that the materials were deposited within a water body. All other solid samples were designated “soil”.

AECOM collected all surface water and sediment samples except for those requiring use of a boat; these latter samples were collected by EPA’s OEME and their subcontractor and preserved, packaged and shipped by AECOM. A total of 36 sediment samples and 36 co-located surface water samples were collected. The depth of overlying water was measured at each sediment sampling location to determine accessibility for human receptors. Field worksheets and logbook notes are included in Appendix D for sediment and Appendix E for surface water. Worksheets for supplemental observations made at sediment sample locations are included in Appendix F.

Sixteen (16) new monitoring wells were installed during this phase between June 2 and June 13, 2014. Two shallow overburden wells, 4 deep overburden wells, and 8 bedrock wells were drilled using conventional drilling methods, and two shallow wells (on residential properties) were installed using a direct push drill rig. The 16 new wells along with 13 of the 38 pre-existing wells observed to have silt build up were developed (or redeveloped) between June 18 and July 2, 2014. Soil boring/well logs for pre-existing wells are included in Appendix G. Boring logs and well installation logs for wells installed by AECOM during Phase 1 are included in Appendix H.

Table 2-2 summarizes information on pre-existing wells and wells installed for all phases of the RI, including surveyed locations and elevations, screened intervals, and other construction details.

Groundwater samples were collected between August 9 and August 19, 2014. Fifty-four (54) wells were sampled: the 16 newly installed wells and 38 pre-existing wells. All groundwater samples were analyzed for the following: total and dissolved target analyte list (TAL) metals, total and dissolved hexavalent chromium, cyanide, VOCs, and 1,4-dioxane. The groundwater sampling field worksheets are included as Appendix I. A summary of the field chemistry data for the wells, showing the stabilized values for dissolved oxygen, temperature, specific conductance, oxidation-reduction potential, and turbidity is provided in Appendix J.

2.4 Phase 2 Investigation

Phase 2 field activities took place in October-December 2014 and consisted of additional soil, sediment, and surface water sampling, the installation of several new monitoring wells, and sampling of the new wells along with the wells previously sampled in Phase 1. The primary objective of Phase 2 was to fill data gaps identified after reviewing Phase 1 data and that could affect the risk assessments and the nature and extent determinations.

A total of 19 surface soil samples, 27 sediment samples, and 30 surface water samples were collected site-wide. Most Phase 2 soil and sediment locations were either reference samples or were selected with the objective of obtaining more full-suite data for each exposure area, but some were also selected to obtain more data on extent. Phase 2 surface water samples were primarily located within Bliss Brook to better refine the horizontal extent of shallow groundwater discharge to the brook. Field notes and field worksheets are included in Appendix B (soil), Appendix D (sediment), and Appendix E (surface water).

Phase 2 well installation took place between November 6 and November 26, 2014. Thirteen new wells were installed: six bedrock wells (later revised to 5 wells, when it was discovered that AE-12B was actually screened mostly in a boulder in till and just the top of bedrock), 2 deep overburden wells (later revised to 3 wells), and 5 shallow overburden wells. The 13 new wells were developed between November 10 and December 2, 2014. Soil boring logs and well installation logs are included in Appendix H. Well construction details are presented in Table 2-2.

In general, new wells were located either to help delineate the limits of the chromium plume in the bedrock and overburden, or to further delineate the TCE plume in shallow groundwater near homes where existing data were not sufficient to determine whether TCE concentrations within 100 feet of homes were likely to exceed the EPA groundwater Vapor Intrusion Screening Level (VISL) that was in effect at that time.

Phase 2 wells were sampled along with the wells sampled in Phase 1 (with the exception of PZ-02S, which recharged extremely slowly during Phase 1 sampling and was, therefore, not considered “usable” for successive sampling events). A total of 66 wells were sampled during the Phase 2 groundwater sampling effort. A synoptic water level round was completed the following week. Samples from all wells were analyzed for the same parameters analyzed in Phase 1: TAL metals (filtered and unfiltered), hexavalent chromium (filtered and unfiltered), cyanide, VOCs, and 1,4-dioxane. The groundwater sampling field worksheets are included as Appendix K. A summary of the field chemistry data for the wells showing the stabilized values for dissolved oxygen, temperature, specific conductance, oxidation-reduction potential, and turbidity is provided in Appendix L.

In March of 2015, EPA’s OEME performed the final Phase 2 activity consisting of sub-slab soil gas and indoor air sampling of several residences proximal to the groundwater VOC plume. The results from Phase 1 and Phase 2 groundwater sampling for VOCs (primarily TCE) were used to determine which homes would be included in this effort. The purpose of the sampling was to evaluate possible vapor intrusion of volatile contaminants from groundwater to indoor air and (if present) determine the corresponding human health risk. The report prepared by OEME [OEME, May 2015] is included in Appendix A.

In September 2016, EPA’s OEME sampled one additional home that had not been sampled during the March 2015 vapor intrusion investigation because the home had been abandoned. In 2016, access was granted to EPA to perform sub-slab sampling and indoor air sampling. The report prepared by OEME [OEME, October 2016] is included in Appendix A.

The homes where indoor air sampling was conducted in 2015 and 2016 are shown on Figure 2-10. This figure also shows three homes that were not sampled due the presence of existing radon mitigation systems or, in one instance, the presence of an SSDS that had been previously installed by MassDEP.

2.5 Phase 3 Investigation

The Phase 3 investigation had three primary objectives:

- To obtain additional data for sediment and surface water and also collect pore water samples, as well as samples for toxicity testing, to support the BERA
- To obtain additional data on the lateral and vertical extent of contamination in groundwater, specifically with respect to the bedrock aquifer
- To obtain groundwater data immediately upgradient and downgradient of the Permeable Reactive Barrier (PRB) installed as part of the EPA time-critical removal action to evaluate its effectiveness in reducing hexavalent chromium to trivalent chromium

Phase 3 field activities were performed during the summer and fall of 2015, and consisted of collection of sediment, pore water, and surface water samples for toxicity testing and chemical analysis; installation of multi-level wells to investigate the vertical extent of contamination in bedrock; installation of micro-wells (piezometers) to investigate the effectiveness of the PRB; and a groundwater sampling event that included the new wells and a subset of pre-existing wells.

The Phase 3 sediment, pore water, and surface water sampling was performed jointly by AECOM and EPA from July 21 to July 29, 2015. Field sampling worksheets are included in Appendix M (sediment), Appendix N (pore water), and Appendix O (surface water).

Because chromium (as well as other analytes) was confirmed to be present in sediment and surface water above ecological screening criteria during Phases 1 and 2, toxicity testing of these media was determined to be needed to evaluate whether there is an actionable ecological risk. The results of the toxicity testing of sediment and surface water are described in the BERA.

Collection of pore water samples was also determined to be needed to evaluate the forms and bioavailability of COPCs, mainly chromium, in the sediments. Literature predicts that chromium in sediment may be largely present as trivalent chromium (Cr^{3+}), tightly bound to the solid sediment matrix, rendering it essentially non-toxic to organisms present in or on the sediment. The purpose of the pore water analyses was to document if there is evidence of dissolved chromium and in particular, the more toxic hexavalent chromium, present in pore water. Directly measuring the presence and level of chromium in pore water allows a better interpretation of sediment toxicity results to support conclusions about the potential toxicity represented by high concentrations of sediment chromium, and associated risk posed to sediment receptors. The results of the pore water sampling are described in the BERA.

Three multi-level bedrock wells were planned for the purpose of determining the extent of contamination within the bedrock. Locations for the wells were spaced along the centerline of the hexavalent chromium plume where contamination was known to be present in the shallow bedrock (based on the Phase 1 and Phase 2 data). The placement of the three sampling zones in each well was based on borehole geophysics that was conducted on each bedrock borehole within a few days after completion of the borehole. The geophysical study used four different probes to analyze rock fractures, clay filled fractures, and flow within the borehole. Based on the results, and in consultation with EPA, the zones with the greatest inflow to the well were targeted for screens (ports). The Solinst CMT sampling system was used for well installation so that multiple zones could be sampled within a single borehole.

The drilling, borehole geophysics, and well installations for multi-level wells AE-ML-01, AE-ML-02, and AE-ML-03 took place in mid-July through early September 2015. AE-ML-01 and AE-ML-03 were completed as multi-level

wells with 3 levels each, as originally planned. For AE-ML-02, it was decided not to complete the boring as a multi-level well because of a lack of water-yielding fractures in the borehole. This location was instead completed as an open bedrock borehole within competent bedrock. Because AE-ML-02 was not completed as a multi-level well, a fourth location (AE-ML-04) was drilled near existing well AE-06B, using the same methods and installed to the same depths as the other wells. This well was completed with three Solinst CMT intervals and a single shallow bedrock well within the same casing, for a total of four sampling intervals. Boring logs and well construction details for all multi-level wells are included in Appendix P. Well construction details are also summarized in Table 2-2.

In mid-September 2015, during the sampling of the multi-level well AE-ML-03, AECOM observed conditions suggesting that there could be interconnections among some of the zones that were likely caused by driller errors during the installation of the CMT. The driller agreed with this assessment and removed the faulty well, cleaned out the borehole, and installed a new CMT multi-level well according to the design specifications. This work was completed in early October 2015, and testing of the re-built AE-ML-03 was performed and confirmed that no interconnections among the zones were present.

In summary, at the completion of the multi-level bedrock well effort, there were four new bedrock well locations as follows:

- AE-ML-01 A, B, and C (Solinst CMT - 3 sampling intervals within the bedrock)
- AE-ML-02 (open bedrock borehole)
- AE-ML-02 A, B, and C (Solinst CMT - 3 sampling intervals within the bedrock)
- AE-ML-04 A, B, C, and E (Solinst CMT - 3 sampling intervals within the bedrock; plus one conventional well at the shallowest bedrock interval – identified as interval E. Note that Port D is the bottom of the CMT)

The borehole geophysical logging report from the geophysical subcontractor (Geophysical Applications Inc.) is included as Appendix Q.

Phase 3 also included the installation of up to ten shallow overburden wells in the vicinity of the PRB, the purpose of which was to determine if the zero-valent iron (present in the PRB) is reducing hexavalent chromium to trivalent chromium as groundwater flows through it. Locations were selected to be spaced along the PRB on both the up gradient and down gradient sides. Based on field observations, only 4 transects (8 shallow wells) were installed on August 5 through August 7, 2015, concurrent with the multi-level well installation effort. Logs for these wells are included in Appendix R and construction details are included in Table 2-2.

Phase 3 groundwater sampling consisted of the newly installed (Phase 3) wells and up to 21 existing wells. Several wells that had not been sampled in either Phase 1 or Phase 2 were included to help define the extent of the chromium plume, as the extent to the north was greater than originally thought based on the results from wells in this area.

The Phase 3 groundwater sampling effort was performed between September 15 and September 23, 2015. All groundwater samples were analyzed for the following: total and dissolved TAL metals, total and dissolved hexavalent chromium, cyanide, VOCs, and 1,4-dioxane, with the following exceptions. AE-17S was sampled for VOCs only because additional data were needed for vapor intrusion screening purposes. Samples from the PRB wells were analyzed for total metals and cyanide, hexavalent chromium, dissolved metals, and dissolved hexavalent chromium. The groundwater sampling field worksheets are included as Appendix S.

In September 2015, information about emerging contaminants (i.e., PFOA and PFOS) was shared that described how some electroplating operators had used surfactants containing perfluorinated chemicals (PFCs) to reduce hexavalent chromium emissions from plating vats. PFOA (Perfluorooctanoic Acid) and PFOS (Perfluorooctane Sulfonate) are two of the most common PFCs. It is not known if these chemicals were used at the W&L facility and therefore, it was decided that selected source area wells should be sampled for these analytes.

PFOA and PFOS are the only PFCs for which reference values are available. The project quantitation limit goal (0.1 µg/L) was based on the EPA's Provisional Health Advisory values for PFOA and PFOS that were in effect at the time of sampling of 0.4 µg/L for PFOA and 0.2 µg/L for PFOS [USEPA, 2009].

The following four wells were selected: AE-01S, AE-04D, AE-06B, and AE-12B. These wells were selected because of their location along the centerline of the hexavalent chromium plume based on Phase 1 and Phase 2 groundwater sampling results.

This sampling effort was performed on October 20, 2015. The groundwater sampling field worksheets and data validation memorandum with data summary table are included as Appendix T. Using the reporting limits of 0.1 µg/L for individual PFOA and PFOS based on the 2009 Provisional Health Advisories, PFOA and PFOS were not detected in any of the 2015 groundwater samples.

In May 2016, EPA released lifetime health advisories (HAs) and health effects support documents for PFOA and PFOS to assist federal, state, tribal and local officials, and managers of drinking water systems in protecting public health when these chemicals are present in drinking water. These HAs reflect EPA's assessment of the best available peer-reviewed science and supersede the 2009 provisional HAs.

Using the toxicity value Reference Dose of 2E-05 mg/kg-day for PFOA and PFOS individually from the health effects support documents [USEPA, 2016a and b], risk-based screening values of 0.04 µg/L for PFOA and 0.04 µg/L for PFOS individually and combined were developed based on a target non-cancer hazard quotient (HQ) of 0.1 for a child resident drinking water scenario. A qualitative review of the 2015 groundwater sampling results from wells AE-01S, AE-04D, AE-06B, and AE-12B shows that individual PFOA and PFOS reporting limits of 0.089 µg/L, 0.089 µg/L, 0.088 µg/L, and 0.086 µg/L respectively at these wells, are slightly above the target screening values of 0.04 µg/L for PFOA or PFOS. The field blank reporting limit of 0.096 µg/L also exceeds the screening values. However, at the individual maximum levels of 0.096 µg/L, the estimated HQ would be 0.2 for PFOA and PFOS individually, below EPA acceptable HQ level of 1. It is recommended that in situations where both PFOA and PFOS are present, the concentrations of these two compounds be added together for a combined concentration. When the maximum levels of 0.096 µg/L for PFOA and PFOS are added to yield a concentration of 0.192 µg/L, the estimated HQ would be 0.5, still below EPA acceptable HQ level of 1.

Since currently all the residential and commercial properties in the area are on public water supplies and there is no drinking of water from the contaminated plume, there is no current exposure to groundwater. Based on the qualitative review of 2015 groundwater data, the presence of PFOA and PFOS in groundwater at these four source area wells does not indicate any significant concern of developing health effects from exposure to these levels if consumed in the future due to HQ levels below 1. Thus, there is no need to further sample and analyze for PFCs in groundwater at the Site.

2.6 Phase 4 Investigation

Phase 4 field activities were performed in October 2016 and included the collection of 20 soil samples from two ecological exposure areas (W&L Property and Southern Wetland, and Bliss Brook) in the vicinity of locations previously sampled, with the goal of providing a range of chromium concentrations and habitats for future toxicity testing. The sampling locations (identified as SO-501, SO-502, etc.) are shown on Figures 2-11, 2-12, 2-13, and 2-14, along with locations and total and hexavalent chromium results from earlier phases that were used as a guide for selecting the Phase 4 locations.

After review of chemical analytical data and discussion with EPA, 12 of the 20 samples were selected for toxicity testing to represent both exposure areas and a range of total chromium concentrations. The toxicity testing included earthworm survival testing, earthworm bioaccumulation testing, and seedling germination and growth tests using rye grass. The toxicity testing was performed to reduce the uncertainty in the conclusions of the Draft BERA regarding ecological risk from soil exposure.

2.7 Phase 5 Investigation

As noted above, the remedial investigation has been performed in phases beginning in the summer of 2014, leading to the completion and submission of a draft BERA (submitted in April 2016), draft baseline HHRA

(submitted in June 2016), and draft RI report (submitted in June 2016). During EPA review of these documents, it was determined that additional sampling and analysis were needed. This additional work, collectively described as Phase 5, included the sampling of surface soil for fine fraction lead to provide data needed to evaluate human health risks from exposure to lead in soil in accordance with updates in EPA guidance (USEPA, 2017) (two events, December 2017 and October 2018), and additional data collection to better understand the interaction of shallow groundwater and surface water at the Site.

2.7.1 Soil Sampling for Fine Fraction Lead

Current EPA guidance requires collection of fine-fraction (less than 150 µm) surface soil samples with analysis for total lead, followed by In-Vitro Bioaccessibility (IVBA) lead testing if the total fine fraction soil lead concentration (based on an average of results within an exposure point) is above 200 mg/kg. The 200 mg/kg value is a screening level developed using default blood lead level modeling parameters for children at a target blood lead level of 5 ug/dL for a residential exposure scenario[1] (OLEM Directive 9285.6-56, USEPA, 2017). Because RI Phases 1 through 4 did not include sieving of soil samples and analysis of the fine fraction, it was determined that additional samples needed to be collected for sieving and analysis of the fine fraction. This additional sample collection was done in December 2017 for the four exposure points where the draft baseline HHRA indicated there was no actionable risk from soil exposure, but lead could be present at levels above 200 mg/kg in fine fraction soil, based on un-sieved soil lead results that occasionally exceeded this value. These exposure points are the yards in the two residential areas west and east of North Avenue, the wetland south of the W&L property and west of North Avenue known as the Southern Wetland, and Bliss Brook. A fifth exposure point (the Walton & Lonsbury property and immediate area to the south, as far as the southern end of the fence installed by EPA along North Avenue) was determined to have actionable risk due to soil constituents other than lead that are co-located with lead. Therefore, soil remedial alternatives were already planned to be included in the FS for this exposure point, and additional data collection for fine fraction soil lead from this exposure point was deemed unnecessary. The fine fraction lead surface soil sampling was performed in early December 2017 in accordance with the *Sampling and Analysis Plan (SAP) for Soil Fine Fraction Lead Testing and Micro-Well Installation and Sampling* [AECOM, November 2017]. The rationale for the selection of these locations was presented in the November 2017 SAP, Worksheet 17. The sampling depth for each location was 0 to 6 inches. A total of 51 samples were collected at 48 locations (12 locations per exposure point plus 3 field duplicates). Sampling locations (identified as SO-601, SO-602, etc.) are shown on Figure 2-15 (Southern Wetland and Residential Area West of North Avenue) and Figure 2-16 (Bliss Brook and Residential Area East of North Avenue). The figures also show sampling locations and total lead results for soil samples from prior phases that were used as a guide in selecting the new locations.

The results of the December 2017 soil sampling for fine fraction lead indicated a potential human health risk from lead in the residential area west of North Avenue. The conceptual site model is that lead may have been transported to these properties due to flooding from the Southern Wetland that borders this residential area to the west, although the possibility of other sources of lead also exists. The number of sampling locations on each individual property was limited however, with some properties having no more than 2 samples. The extent of the lead contamination on each individual property (and whether it is associated with the flood zone on each property) needed to be determined, and sufficient samples were needed to be able to calculate an average fine fraction lead concentration for each property so that the potential for risk due to lead exposure could be evaluated on a property-by-property basis. Therefore, a second surface soil sampling event for fine fraction lead was conducted on the six properties west of North Avenue where lead is a potential concern. The number of samples needed was determined in consideration of the existing samples already collected, and attempting to have a ratio of at least 2 samples per 1000 square feet of “flood plain” area on each property, where “flood plain” is defined by the FEMA flood zone designation AE (1% annual chance of flooding, with Base Flood Elevation). Further details explaining the rationale for sample location selections and the procedures used to collect and analyze the samples are presented in the *Sampling and Analysis Plan for Soil Fine Fraction Lead Testing:*

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[1] Concentrations higher than 200 mg/kg are acceptable for recreational areas where less soil exposure occurs than in a residential yard, or for residential soils with lower absolute bioavailability for lead than the default assumption of 30-percent.

Residential Yards West of North Avenue [AECOM, October 2018] and the companion SAP prepared by the New England Regional Laboratory (NERL) entitled *Collection of Soil Samples for Analyses of Fine Fraction Lead, and Metals: Sampling and Analysis Plan* [NERL, October 2018].This second event was completed in October 2018 by NERL with assistance from AECOM. The sampling locations (identified by abbreviated property addresses) are shown on Figure 2-15. Field sampling worksheets for the first fine fraction lead sampling event and the Summary of Field Activities memorandum prepared by NERL for the second fine fraction lead sampling event are included in Appendix X-2.

2.7.2 Groundwater/Surface Water Interactions

This effort involved installing additional piezometers and staff gauges, sampling the piezometers, surveying these new installations and also all existing wells in use for the RI, and conducting a synoptic water level round shortly after the surveying was completed. The purpose of the effort was to close data gaps in the understanding of the shallow overburden groundwater plume and its interaction with nearby surface water bodies (the ponded area south of the Walton & Lonsbury property and Bliss Brook). The piezometers and staff gauges were installed and the piezometers were sampled in late November 2017. The locations of the piezometers and staff gauges are shown on Figure 2-17. Surveying and one synoptic water level round was performed in January 2018. A second synoptic water level round was performed in early April 2018 to obtain a comprehensive round including all staff gauges and piezometers, since some piezometers were frozen during the January 2018 round. Field worksheets for the piezometer installation and sampling are included in Appendix X-3.

2.8 Disposal of Investigation-Derived Waste

Investigation-derived waste (IDW) from Phases 1 through 3 consisted of soil cuttings, drilling water, well development water, and well purge water. The IDW was containerized in 55-gallon drums or a frac tank and stored inside the fenced area of the site until it could be characterized for disposal. There was no containerized IDW from Phase 4 or Phase 5.

Containerized IDW was disposed of in the spring of 2016. As directed by EPA, Phase 1 and Phase 2 aqueous IDW containing less than 5,000 ppb total chromium (based on analytical results from the wells that contributed water to the drum) was recharged back to the W&L property using the pit which formerly was the location of a plating vat. Phase 3 aqueous IDW, consisting of well development water that was stored within the fenced area in a frac tank, was also recharged back to the pit, after it was confirmed to contain less than 5,000 ppb total chromium.

Aqueous IDW that contained more than 5,000 ppb total chromium (based on sampling results from contributing wells) was categorized as characteristically hazardous due to chromium above the toxicity characteristic leachate procedure (TCLP) limit. This IDW was also categorized as a “listed waste” with the F006 waste code (wastewater treatment sludge from electroplating operations). This IDW was transported to a RCRA-permitted treatment, storage, and disposal facility (Tradebe Treatment & Recycling Northeast, LLC, Meriden, CT, facility ID number CTD 021 816 889).

Solid IDW (drill cuttings and silt) from all three phases was sampled and analyzed for VOCs, SVOCs, pesticides, PCBs, MCP-regulated metals, TCLP metals, ignitability, reactivity, total petroleum hydrocarbons, pH, and specific conductance. These results were used to evaluate which solid IDW (if any) would need to be classified as a hazardous waste. Based on the analytical results (which showed that contaminant concentrations were below MCP Method 1 S-1/GW-1 standards) a contained-in determination was prepared by EPA to document that the material could be reused or disposed of as a non-hazardous waste. The silt remaining in the frac tank as well as soil-containing drums were transported to Turnkey Landfill (Rochester, NH) for disposal as non-hazardous waste.

3.0 Physical Characteristics of the Site

The environmental and geological characteristics of the study area are presented in this section. This information is based on the review and interpretation of available reports, both published and unpublished, and on data obtained by AECOM during five phases of field investigations beginning in June of 2014 and ending in October of 2018.

3.1 Geologic Setting

The Walton & Lonsbury study area is located in the Seaboard Lowland Section of the New England physiographic province. The regional geology in the vicinity of the study area is characterized by Paleozoic metasedimentary rocks of the Narragansett Basin overlain by unconsolidated glacial deposits of Pleistocene age. The general topography of the area is flat to gently sloping with scattered prominent hills (glacial drumlins) elongated in a north-northwest to south-southeast direction. The valleys are typically occupied by semi-continuous marshes. Geologic cross sections are included as figures in Section 4.

3.1.1 Overburden

The unconsolidated deposits that overlie the bedrock, collectively called overburden, consist mostly of Pleistocene glacial deposits. The relatively old glacial deposits are overlain by post-glacial alluvium and wetland deposits in topographically lower areas, and by fill in areas where the natural ground surface has been altered by construction activities.

Only shallow and deep overburden wells were drilled in previous investigations in the study area. However, with the data from new (bedrock) borings drilled during the RI and the pattern of refusal depths (the depth beyond which the augers or casing would not penetrate) obtained during the earlier investigations, the overburden appears to be thickest east of North Avenue and south or east of Paulette Lane, in particular along Bliss Brook and further south of the W&L property where depths to bedrock are 40 to 50 feet below grade. On the W&L property and just east and south of that property, the depths to bedrock below ground surface are shallower (25 to 35 feet below grade). The bedrock surface appears to slope slightly toward the south and southeast, from elevations of 100 to104 feet in the area of, and just east of, the W&L property to elevations of 80 to 83 feet in the areas along Bliss Brook.

The geology in the vicinity of the W&L property is consistent with a filled wetland area that had developed on glacial outwash after the last glacial period. The geologic units identified are as follows (in descending order from the ground surface):

- Fill: Consists of fine to coarse sand with varying amounts of silt, gravel, cobbles, and boulders. Typically dry and well compacted (medium dense). Fill was observed in all upland boring locations at the surface and varied in thickness from about 3 to 9 feet.

- Recent Wetland Deposits: Consist of silty fine sand that was light grey with mottled orange-brown coloration. This layer was typically found near the elevation of the water table and was moist to wet and soft. This layer is believed to represent the former wetland soils upon which the fill was placed. The recent wetland deposits are not present in all locations, suggesting there were isolated areas that were excavated prior to placement of the fill. The wetland deposits vary in thickness from 0 to nearly 4 feet.

- Organic Silt and Clay: These deposits were found only in the area immediately adjacent to Bliss Brook and are believed to be recent organic deposits that formed in a depression in the glacial outwash deposits (see below) possibly related to a kettle hole. These deposits are saturated and extremely soft, with little to no bearing strength. They vary in thickness from 0 to more than 12 feet along Bliss Brook behind #27

Paulette Lane. Most were removed or buried during the removal action and placement of the engineered cover in this area.

- Fine sand and silt: Found to overlay the glacial outwash deposits and are likely later stage deposits as the glaciers withdrew from this area. These deposits tend to contain a greater proportion of silt and are not as permeable as the coarser underlying deposits. This layer is sometimes thin or missing.

- Glacial Outwash Deposits: Consist of very coarse to fine sand with little silt. These deposits are saturated and fairly dense, generally exhibiting an orange-brown color. They represent material deposited during the last glacial period in a fairly high-energy environment in the presence of significant amounts of water, though not far from the glacier based on the relatively angular nature of the particles. The outwash extends to a depth of about 25 to 40 feet depending on the elevation of the ground surface and the depth to bedrock.

- Glacial Till: Consists of fine to coarse sand with higher amounts of silt and clay as well as angular gravel and cobbles. The contact between the till and the outwash is not distinct but rather is transitional and can be difficult to identify. The same can also be true of the transition from till into weathered bedrock at the base of the till. It is likely that the study area is located in an area where the terminus of the glacier advanced and retreated several times, reworking the underlying till. In general, the till is very dense, is more gray to red than the overlying outwash, and contains larger, more angular gravel. The till varies in thickness from about 10 to 20 feet.

3.1.2 Bedrock

The bedrock beneath the study area is mapped as the Wamsutta Formation, which is a sequence of sandstone, greywacke, shale, and conglomerates that are slightly metamorphosed. During the drilling for Phase 1 and 2 well installations, the upper 10 to 15 feet of bedrock was cored at 14 locations where shallow bedrock wells were installed. Later during Phase 3 multi-level well installations, four boreholes were cored to a depth of 90 to120 feet into bedrock (150 feet total depth).

In the immediate vicinity of the W&L property, the predominant bedrock type encountered in the first 20 feet is a highly fractured grey to black siltstone/mudstone. To the east and southeast of that property, the lithology changes toward greywacke and sandstones, with siltstone/mudstone interbedded with the greywacke in some places. Near the eastern edge of the study area, along Bliss Brook, weathered sandstone was noted to lie above the siltstone at locations AE-07B, AE-08B, AE-11B, AE-12B, and AE-13B. When AE-ML-03 was drilled adjacent to AE-12B, the rock core samples provided a more complete sample record and showed what appeared to be either a very highly weathered zone in the bedrock at the interface between the sandstone and the siltstone/mudstone, or a thin till layer; weathered bedrock seems more likely. Based on observations and geophysical data collected from the multi-level boreholes, the contact zones between facies are generally weathered and are the most likely intervals to contain water-bearing fractures.

The deeper bedrock boreholes (AE-ML-01 through 04) indicated that overall, bedrock was predominantly the finer siltstone/mudstone interlayered with conglomerates, sandstones, and greywacke to a depth of 150 feet below ground surface. Only at AE-ML-03 was any other rock type encountered, a volcanic (basalt) that was found near the bottom of the borehole. Volcanics are known to be found in the Wamsutta Formation in some areas.

In summary, the bedrock types encountered during the course of the investigation include:

- Sandstone: typically highly weathered when found near surface, particularly along Bliss Brook.
- Conglomerate: typically with fine to medium sized sub-rounded gravel clasts.
- Greywacke: similar to the conglomerates with more angular clasts.
- Siltstone/Mudstone (Shale): predominantly underlying the site and at greater depths off-site. Often highly fractured at high angles.
- Basalt: found only at depth (~145 feet) in AE-ML-03.
- Red siltstone/shale: encountered only at AE-ML-02 at a depth of ~145 feet.

3.2 Hydrologic Setting

The study area lies within the Ten Mile River watershed, which covers approximately 54 square miles in southeastern Massachusetts and a small area of northeastern Rhode Island. From its headwaters in the Town of Plainville, the Ten Mile River flows generally south, eventually crossing the Massachusetts-Rhode Island border and reaching the Seekonk and Providence Rivers which empty into the Narragansett Bay approximately 12 miles from the study area. Two major tributaries empty into the Ten Mile River along the way, the Seven Mile River and the Bungay River. The latter originates approximately five miles to the north in the Town of North Attleboro at the outlet of Greenwood Lake. The Bungay River flows south-southwesterly through an extensive wetland system until it joins the Ten Mile River just upstream of Mechanics Pond.

Bliss Brook, which receives essentially all the drainage from the W&L property, appears to originate about 1.3 miles to the north of the W&L property, although its uppermost reaches have been significantly affected by the presence of the Exit 5 interchange on Route 95 and by commercial development to the northwest. From its headwaters, the brook flows generally south, passes approximately 500 feet east of the W&L property, and ends in the Bungay River just upstream of its confluence with the Ten Mile River. Just upstream of the study area, Bliss Brook flows through a large wetland area that contains a small pond. The watershed of Bliss Brook encompasses only about one square mile or less and is thus a relatively small portion of the Ten Mile River basin.

Surface drainage in the vicinity of the study area is divided by North Avenue. To the west of North Avenue, including the W&L property, surface water flows to the south through a large wetland complex (Southern Wetland). The primary outlet of this complex is a culvert under Deanville Road that eventually discharges into Bliss Brook near its confluence with the Bungay River. To the east of North Avenue, surface water drains into Bliss Brook.

Land use along Bliss Brook is mostly residential, while land use along the Bungay River is primarily forest [MassDEP, 2005]. Mechanics Pond, one of several impoundments along the Ten Mile River, is very shallow and is considered to be a “run-of-the-river impoundment” by MassDEP (2005) since it has a retention time of < 0.7 days.

The City of Attleboro has enacted zoning controls for the purpose of protecting future potential water supplies east of Bliss Brook within an area referred to as the “Bungay River Water Resource Protection District” (Protection District or the “District”). Figure 1-3 shows the northernmost portion of the District, which is in the vicinity of the study area.

Figure 3-1 shows the extent of the 100-year and 500-year floodplains on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map for the City of Attleboro (last revised July 16, 2015). The majority of the Southern Wetland and areas along either side of Bliss Brook are located within the 100-year floodplain. The W&L Property itself is not depicted as within a floodplain.

3.3 Hydrogeologic Setting

Overburden aquifers in the Narragansett Basin area of eastern Massachusetts were formed during the last (Wisconsin) glaciation, during which glaciers scoured out valleys in the basin that were later filled by outwash deposits during the glaciers’ retreat. Most of the high-yielding aquifers of eastern Massachusetts consist of water table aquifers formed by these stratified glacial deposits of sand and gravel.

Groundwater at the study area exists as a water table aquifer under unconfined conditions in the outwash and wetland deposits (where present). The water table is generally encountered at a depth of two to 13 feet below grade. It is deepest in the residential areas adjacent to North Avenue and shallowest in the wetlands south of the W&L property and along Bliss Brook. Shallow groundwater flow is generally to the southeast across the study area toward Bliss Brook and the associated wetlands. Groundwater flow in the deeper overburden is slightly more southerly and is not as strongly influenced by Bliss Brook. The horizontal gradients range from 0.010-0.015

on the W&L property and in the residential neighborhood near Paulette Lane to 0.002-0.003 in the areas closer to Bliss Brook.

Vertical gradients measured in well couplets/triplets throughout the study area show variable results that are seasonally affected at some locations. Vertical gradients measured during the RI are presented in Table 4-21. In general, immediately east of North Avenue, little or no vertical gradients exist between shallow and deep overburden. However, further east, along Bliss Brook, vertical gradients are non-existent to weakly-upward along the northern reach of Bliss Brook but are more strongly upward in the southern reach (at and beyond the Attleboro housing complex). Piezometers installed in Bliss Brook by MassDEP showed that the shallow groundwater discharges into the brook, which agrees with base-flow gauging results from Bliss Brook that show increasing flow moving downstream [Weston, November 2013]. These results were confirmed by the results of the Phase 5 (January and April 2018) water level rounds that included additional piezometers and new staff gauges installed along the brook, and a comprehensive survey of all monitoring well, piezometer, and staff gauge measuring point elevations. West of North Avenue in the vicinity of the W&L property, gradients seem to be a combination of upward from shallow bedrock to deep overburden and downward from shallow overburden to deep overburden.

Hydraulic conductivity estimates made by Weston [November, 2013] of the outwash deposits at the study area range from 1 to 5 feet/day, though the Weston report stated that these values appeared to be very low based on visual inspection of the soil and on pumping rates employed for dewatering during construction activities. Subsequent slug tests estimated the hydraulic conductivity of the outwash deposits near Bliss Brook to range from 20 to 440 feet/day with an average of about 140 feet/day [Weston, November 2013]. According to Weston, these higher values are more consistent with the dewatering rates observed during construction and the pumping rates observed from the irrigation well behind the home at #51 North Avenue. This irrigation well was abandoned by the removal program in October 2013. Slug tests conducted for a Supplemental Phase II Comprehensive Site Assessment Report [Sage, 2016] for a property located northwest of the W&L property on Walton Street suggest that hydraulic conductivities on the W&L property are likely much lower than those along Bliss Brook. Hydraulic conductivity values measured were on the order of 0.5-3.2 feet/day (0.7 feet/day average) in the upper silty sands and 4.4-5.5 feet/day in the lower medium-coarse sands and gravel. Although AECOM did not conduct additional slug tests, our experience and knowledge of the soils west of North Avenue versus soils east of North Avenue indicate that the sands to the east are better sorted and therefore should have higher hydraulic conductivities. The higher pumping rates for wells east of North Avenue may also be due to the greater saturated thickness of the overburden in that area, particularly the deeper medium-coarse sand and gravel layer which is thicker by 30-50 percent.

An estimate of the linear seepage velocity can be calculated using site-specific data and the following equation:

$$\mathbf{V=Ki/n_e,}$$

Where:

V=linear seepage velocity
K=hydraulic conductivity
i=horizontal hydraulic gradient
n_e=effective porosity

Based on the values reported by Sage and using an effective porosity of 22% for non-uniform sand and gravel [Fetter, 1994], the estimated seepage velocity of groundwater west of North Avenue is about 0.34 feet/day or 124 feet/yr. East of North Avenue, using an effective porosity of 30% for well sorted sands [Fetter, 1994] and a K of 140 feet/day [Weston, November 2013], the estimated seepage velocity is 1.4 feet/day or 511 feet/year. The higher transmissivities (T=Kb, hydraulic conductivity times aquifer thickness) to the east may explain the rather abrupt decrease in the hydraulic gradient that occurs just to the east of North Avenue.

3.4 Climatological Conditions

Climatological data for 1981-2016 was obtained from the National Weather Service (NOAA), Taunton Weather Station, located approximately 12 miles east southeast of the study area.

The total average annual precipitation recorded over this period was 48.34 inches of rain with a median of 3.97 inches monthly and 36.3 inches of snow, predominantly from November to March. The mean temperatures over a 12-month period from January to December range from a low of 18° F to a high of 81° F, with a record low temperature of -21° F in January of 1961 and a record high of 102° F in August 1975.

Based on the information, Attleboro, Massachusetts is a temperate, relatively humid location with generally cool temperatures.

4.0 Nature and Extent of Contamination

4.1 Introduction

This section summarizes the analytical data collected throughout the RI, along with historical investigation data determined to be usable for the RI, and describes the nature and extent of contamination identified by these investigations.

Detected concentrations of analytes for historic sampling efforts for which the data were deemed usable for use in the RI and risk assessments are presented in the following tables:

- Table 4-1 Historical Soil Analytical Results – Detected Analytes Only
- Table 4-2 Historical Sediment Analytical Results – Detected Analytes Only
- Table 4-3 Historical Surface Water Analytical Results – Detected Analytes Only

Detected concentrations of analytes for RI sampling efforts for which the data were deemed usable for use in the RI and risk assessments are presented in the following tables:

- Table 4-4 RI Soil Analytical Results, Phases 1 and 2 – Detected Analytes Only
- Table 4-5 RI Sediment Analytical Results, Phases 1, 2, and 3 – Detected Analytes Only
- Table 4-6 RI Surface Water Analytical Results, Phases 1, 2, and 3 – Detected Analytes Only
- Table 4-7 RI Groundwater Analytical Results, Phases 1, 2, and 3 – Detected Analytes Only
- Table 4-8 RI Pore Water Analytical Results, Phase 3 – Detected Analytes Only
- Table 4-9 RI Air Analytical Results – Detected Analytes Only
- Table 4-10 Phase 4 Ecological Toxicity Soil Analytical Results – Detects Only
- Table 4-11 Phase 4 Ecological Toxicity Tissue Analytical Results
- Table 4-12 RI Groundwater Analytical Results, November/December 2017 – Detects Only
- Table 4-13 RI Soil Analytical Results, November/December 2017 – All Analytes

Data qualifiers applied during validation of the data are included on the tables. Tables that present results for all analytes (detected and not detected) in RI samples are included in Appendix V for historical samples and in Appendix W for RI samples.

Fine fraction lead results from the October 2018 surface soil sampling event (residential area west of North Avenue) are included in Table 4-16. Table W-11 in Appendix W includes results for all analytes from the October 2018 sampling effort (TAL metals for unsieved samples as well as fine fraction lead).

Nature and extent are discussed according to the medium sampled: Surface Soil (Section 4.2), Subsurface Soil (Section 4.3), Sediment (Section 4.4), Groundwater (Section 4.5), and Surface Water (Section 4.6). The data are presented and discussed in terms of both the locations of the contaminants found and the concentrations that are present.

This section concludes with a summary of the nature and extent of contamination (Section 4.7) and a data quality evaluation for the historic and RI data (Section 4.8). Discussion of migration pathways and descriptions of the relationships between chemical concentrations in various media can be found in the discussion of contaminant fate and transport (Section 5).

4.2 Surface Soil

This section presents the results of surface soil sampling (generally 1 foot below ground surface or less) from the RI and from pre-RI EPA investigations for which the data were determined to be usable. Note that for the purposes of the RI, “soil” is defined as solid material from locations that are not covered by standing water most

of the year. Samples of solid material from locations that are covered by standing water most of the year are defined as “sediment” samples; sediment sampling results are presented in Section 4.4.

Figures illustrating the distribution of concentrations in surface soil are presented for total chromium, hexavalent chromium, and several other metals for which concentrations are elevated above background (i.e., reference soil sample) concentrations (Figures 4-1 through 4-11). Total PAHs (suspected to be from former W&L facility operations, but also likely attributable to other sources such as historic fill and road runoff) are presented in Figure 4-12. Chlorinated VOCs [TCE, 1,1,1-TCA, and their daughter products] were detected in historic and RI soil samples to a much more limited extent, and these results are summarized for both surface soil and subsurface soil on Figure 4-13.

The BERA [AECOM, 2019a] has estimated Reasonable Maximum Exposure (RME) concentrations for chemicals of potential concern in the reference soil samples, where “reference” areas are locations selected for the purpose of evaluating contaminant concentrations present in areas near the site but not likely to have been impacted by the site. These concentrations are presented in Table 18 of the BERA and are summarized for chromium, lead, silver, copper, and PAHs in Table 4-14. These analytes were selected for presentation on the figures based on knowledge of their release or use at the W&L property based on past investigations and facility history (chromium, lead, copper, and PAHs), and observations of elevated concentrations in soil and/or sediment that were identified (silver).

The RME concentrations in Table 4-14 were used to help generate the figures presenting soil concentrations as ranges, to help visualize where the concentrations exceed levels that are likely to be consistent with those that would be present in the absence of the releases to the W&L property. For locations where the detected concentration is below the reference sample RME concentration, the sample location is color-coded green. Ranges of higher concentrations (color-coded yellow, orange, or red) were established for each analyte to attempt to illustrate patterns of contamination in relation to the Site.

For hexavalent chromium, a reference soil RME concentration was not calculated in the BERA because hexavalent chromium was determined not to be a COPC for soil. In the reference soil samples (a dataset of 15 samples), hexavalent chromium was not detected with the exception of one sample at a concentration of 0.05 mg/kg. For the majority of the soil samples analyzed for the RI, the reporting limit for hexavalent chromium was higher than 0.05 mg/kg. For the lowest range for hexavalent chromium, a concentration of <0.2 mg/kg (or not detected, but with a reporting limit exceeding 0.2 mg/kg) was used in preparing figures, which is slightly less than the EPA human health Regional Screening Level for hexavalent chromium in residential soil (0.3 mg/kg).

Results are discussed by analyte below.

4.2.1 Total Chromium and Hexavalent Chromium

The total chromium and hexavalent chromium concentrations in historic and RI surface soil samples are presented in four figures representing four quadrants of the study area: Northwest (including the former W&L property and the northern portion of the Southern Wetland – Figure 4-1); Northeast (residential yards along Bliss Brook, where the removal action was performed – Figure 4-2); Southwest (Southern Wetland to Deanville Road – Figure 4-3); and Southeast (along Bliss Brook from Brookside Apartments to its confluence with the Bungay River – Figure 4-4). RI samples are shown as red symbols and historic samples are shown as green symbols. The sample ID number, total chromium concentration (black text), and hexavalent chromium concentration (green text) are presented. For locations where a field duplicate was collected, both concentrations are included.

Figure 4-5 summarizes the total chromium results for all quadrants on a single figure, with the sample IDs color-coded based on the range into which the reported total chromium concentration(s) for that location fell. For situations where two results were available for the same sample location and the two results fell into different ranges, the higher of the two ranges (concentrations) was assigned. Locations where the total chromium result was less than the reference soil RME concentration (16 mg/kg) are color-coded green. Higher ranges are 16 to 1,000 mg/kg (yellow), 1,000 to 5,000 mg/kg (orange), and >5,000 mg/kg (red).

The highest total chromium concentrations (greater than 5,000 mg/kg) are found in samples from the part of the study area that has been covered by the removal program, and therefore these locations are not currently at the ground surface. The presence of elevated total chromium in this soil is consistent with the conceptual site model that chromium migrated to this area via the upwelling of contaminated groundwater originating from the W&L property (see Section 4.5 for discussion of groundwater contamination and migration pathways). Some areas of the Southern Wetland also contain wetland surface soil with total chromium concentrations above 5,000 mg/kg. Nearby upland soil samples that border the wetland area are also somewhat elevated in total chromium (above background but less than 1,000 mg/kg, as indicated by yellow symbols). This is consistent with the conceptual site model that the Southern Wetland soil and sediment became contaminated by direct discharge of chromium-contaminated wastewater to the wetland prior to 1970, with some migration of the contamination via overland flow and flooding to upland areas bordering the wetland.

Total chromium concentrations in surface soil on the property itself are also elevated, which is consistent with sources such as emissions from former stacks and building exhausts of the facility impacting the roof with subsequent runoff onto the ground. In general, concentrations are highest closest to the former building footprint. It is noted that the on-property RI samples are not at the immediate ground surface, as these locations were covered by a six-inch layer of clean soil during the removal action, as a barrier to this contamination. However, for the purposes of the RI the samples are classified as surface soil (less than 1 foot below ground surface).

Along Bliss Brook downstream of the covered area, total chromium concentrations are higher in wetland soil along the banks, consistent with the conceptual site model that the contamination is being transported in the brook water. Section 4.6.1 discusses impacts to the surface water in the brook from discharge of contaminated groundwater. Upland soil along the downstream (southern) portion of the brook shows little evidence of impact from total chromium.

Figure 4-6 summarizes the hexavalent chromium results for all quadrants on a single figure, with the sample location symbols color-coded based on the range into which the reported hexavalent chromium concentration(s) for that location fell. For situations where two results were available and the results fell into different ranges, the higher of the two ranges (concentrations) was assigned. Locations where the hexavalent chromium result was either non-detect or detected, but less than 0.2 mg/kg, are color-coded green. Higher ranges are 0.2 to 100 mg/kg (yellow) and >100 mg/kg (red). Gray symbols are locations for which the soil sample was analyzed for total chromium but not for hexavalent chromium.

Similar to the pattern for total chromium, hexavalent chromium concentrations in soil are highest in the area covered by the removal program. Because the chromium in the groundwater is almost entirely in the hexavalent form (see Section 4.5 for discussion of groundwater), and because the soil in this area is contaminated because of groundwater upwelling, it was expected that the soil in this area would contain hexavalent chromium, although examination of Figure 4-2 (which allows comparison of total and hexavalent concentrations at the same location) shows that soil samples in this area contain more trivalent chromium than hexavalent chromium. It is likely that the pore water within the soil matrix contains predominantly hexavalent chromium, and that the soil matrix itself contains chromium in the trivalent form.

For areas of the site other than under the cover, hexavalent chromium is infrequently detected in soil at levels greater than 0.2 mg/kg. There are several such detections on the property itself, as would be expected at the original source area, and a few detections in the wetland to the south, but for the most part, hexavalent chromium is not detected in surface soil other than on the property itself or under the cover. It is possible that over time, hexavalent chromium in surface soil has become reduced to the trivalent form in locations that are not subject to a continuing source of hexavalent chromium via migration in the groundwater.

4.2.2 Lead

Lead was identified as a possible contaminant of concern during initial MCP investigations at the site by W&L's consultant, and lead sulfate was reportedly used at the facility. For this reason, a significant number of historic surface soil samples collected for chromium analysis were also analyzed for lead, including most of the samples

collected in support of the removal action. These were bulk (unsieved) samples, as were the samples for Phases 1 through 4 of the RI. Fine fraction samples were analyzed during Phase 5 only.

Total Lead in Unsieved Soil Samples: Figure 4-7 presents concentration ranges for total lead in historic and RI surface soil samples (unsieved), color-coded as follows: green = less than the reference soil RME concentration (101 mg/kg), yellow = greater than 101 mg/kg but less than 500 mg/kg, and red = greater than 500 mg/kg. Most of the surface soil samples with lead concentrations above 500 mg/kg are located either on the property itself, or in wetland soil of the Southern Wetland, although no clear pattern is evident. Few soil samples in the covered area show substantially elevated lead concentrations, indicating that unlike chromium, lead has not migrated to this area via groundwater.

Total Lead, Extractable Lead, and IVBA Lead in Fine Fraction (< 150 µm) Soil Samples: The initial Phase 5 surface soil sampling (December 2017) involved the collection of 51 additional samples at 48 locations to evaluate human health risk due to lead in surface soil using current EPA guidance. This guidance involves analysis of the less than 150 µm fraction (fine fraction) for total lead, and potentially IVBA lead. Both of these analyses were performed on all of the Phase 5 surface soil samples (0 to 6 inches was the sampling interval). Figure 4-8 presents the fine fraction total lead results from the December 2017 sampling effort. Concentrations of fine fraction total lead are generally greater than 200 mg/kg, and are also generally greater in wetland soil samples (indicated by red symbols on Figure 4-8) than in upland soil samples (indicated by green symbols). In upland soil samples representing the residential area west of North Avenue, fine fraction total lead concentrations were high enough to result in actionable human health risk (see Section 6.1 for a summary of this evaluation).

Table 4-15 presents the fine fraction total lead and extractable lead results and IVBA lead results from December 2017, along with bulk (unsieved) results for total lead and total chromium for the same sample locations. The purpose of showing lead and total chromium results in this table is to help evaluate whether there is a correlation between elevated lead and elevated chromium, which would be an indication that the lead is associated with known releases of chromium from the site. Results for total lead and total chromium in unsieved samples are also compared to their respective RME concentrations as found in soil samples from reference areas.

There appears to be a weak correlation between elevated total lead and elevated total chromium concentrations. Nearly all samples with elevated total lead also have elevated total chromium. However, there are a significant number of samples where the total chromium concentration is elevated but the total lead concentration is consistent with reference area concentrations. Therefore, an elevated total chromium concentration is not necessarily indicative of a higher total lead concentration. Bulk (unsieved) total lead concentrations and fine fraction total lead concentrations are strongly correlated, with the fine fraction nearly always having a higher concentration of total lead than was detected in the bulk soil sample.

After evaluation of the December 2017 data, EPA determined that additional sampling for fine fraction lead should be performed for residential (floodplain) soil west of North Avenue to refine the understanding of extent and to provide a sufficient number of samples on each individual property so that risk could be evaluated on a property-by-property basis. The conceptual site model is that lead may have been transported to these properties due to flooding from the Southern Wetland that borders this residential area to the west, although the possibility of other sources of lead also exists, such as road runoff, historic fill, and lead-based paint. The additional sampling was performed in October 2018 by EPA NERL staff with assistance from AECOM. The results are presented on Figure 4-9. This figure also includes the previous (December 2017) results from west of North Avenue. Table 4-16 presents the fine fraction lead and bulk (unsieved sample) total lead and total chromium results for the October 2018 sampling event, along with earlier (December 2017) results for the same properties, for any soil sample classified as residential (either within the floodplain or at a higher elevation outside the floodplain). As with the December 2017 data, there appears to be only a weak correlation between elevated levels of lead (bulk and fine fraction) and elevated levels of total chromium.

Two soil samples within the flood plain that are south of Deanville Road (10-DE-10 and 28-NO-01) appear to be outliers (inconsistent with other nearby results), and the soil in these locations may be impacted by other sources. Sample 28-NO-01 is close to the road and where the property owner currently parks recreational vehicles. Sample 10-DE-10 is in the rear of the lot in an area that appears to have been a disturbed area, based

on examination of historic aerial photos from before the home was built. Unlike the other properties north of Deanville Road, it appears that the lead on these two properties is localized to two areas (one on each lot) rather than being present throughout the flood plain.

4.2.3 Silver

Silver was identified as a contaminant of potential concern in soil and sediment in the draft BERA. Historic reports that identify chemicals that were used at the facility do not mention silver, although it is possible that silver plating was practiced there at one time.

Figure 4-10 presents concentration ranges for silver in historic and RI surface soil samples, color-coded as follows: green = less than the reference soil RME concentration (3.4 mg/kg), yellow = greater than 3.4 mg/kg but less than 100 mg/kg, and red = greater than 100 mg/kg. Only one on-property surface soil sample had a silver concentration above 3.4 mg/kg. Sporadic exceedances were reported for samples in lower Bliss Brook (south of West Street), but there were no exceedances along the portions of the brook where significant chromium impacts were found. The highest exceedances (greater than 100 mg/kg) were for three wetland soil samples from the Southern Wetland. Multiple other wetland soil samples had silver concentrations in excess of 3.4 mg/kg but less than 100 mg/kg. A strong association of silver concentrations in wetland soil with activities on the property itself is not apparent from the surface soil data, given that only one on-property sample exceeded 3.4 mg/kg. Sediment silver concentrations show a greater likelihood of association with former W&L facility activities, because elevated concentrations are clustered in the Southern Wetland (see Section 4.4).

4.2.4 Copper

Copper plating is reported to have been conducted at the facility until the building was remodeled in the late 1950s [Weston, October 2012]. Therefore, it was postulated that copper-contaminated wastewaters (in addition to chromium-contaminated wastewaters) may have been discharged to the Southern Wetland in the past.

Figure 4-11 presents concentration ranges for copper in historic and RI surface soil samples, color-coded as follows: green = less than the reference soil RME concentration (40 mg/kg), yellow = greater than 40 mg/kg but less than 400 mg/kg, and red = greater than 400 mg/kg. Copper was detected in surface soil at concentrations above 40 mg/kg in numerous on-property samples and samples of wetland soil from the Southern Wetland. Surface soil samples collected east of North Avenue (along Bliss Brook) were mostly consistent with the reference soil samples (that is, less than 40 mg/kg), suggesting that copper released to the property itself or the Southern Wetland has not migrated via groundwater to the brook. Concentrations of copper in sediment samples are similar, in that Bliss Brook sediment samples do not show impact while sediments in the Southern Wetland are elevated in copper (see Section 4.4).

4.2.5 Total PAHs

Petroleum releases are documented to have occurred at the W&L property from former USTs and possibly other sources. For this reason, and because total PAHs were considered to be a possible risk driver, total PAH concentrations were calculated for historic and RI surface soil samples, and the total concentrations were compared to the RME total PAH concentration for reference soil samples calculated in the BERA (4.87 mg/kg, rounded up to 5 mg/kg for simplicity). Figure 4-12 presents total PAHs concentrations as follows: green = less than 5 mg/kg, yellow = >5 to 25 mg/kg, and red = >25 mg/kg. The total PAH concentration in surface soil samples exceeds 5 mg/kg in the majority of samples from the property itself, but exceedances in off-property surface soil samples are limited and the pattern of exceedances is not suggestive of an on-property source. For sediment samples, total PAHs concentrations are higher in samples farther from the property, also suggesting that the W&L property is not the source (see Section 4.4).

4.2.6 Chlorinated VOCs

TCE and 1,1,1-TCA were reported to have been used at the W&L property and are present in the groundwater (see Section 4.5), and there is anecdotal information that TCE was spilled from an AST and possibly disposed into a historic dry well. These compounds, several daughter products, and PCE were detected in both surface

soil and subsurface soil samples, although concentrations are not highly elevated. The detected concentrations of six chlorinated VOCs (cVOCs) in surface and subsurface soil samples (historic and RI) are summarized in Table 4-17, and results are presented on Figure 4-13 for the sum of these cVOCs. For locations where VOCs were sampled but there were no detections of these cVOCs, the location is shown as a gray symbol.

The most commonly detected cVOC was TCE, and with few exceptions, it was detected at every location where any cVOCs were detected. The exceptions are historic locations P-78-SB-03 and P-78-SB-09, where 1,1,1-TCA was detected but TCE was not. Detections are limited to samples from the property itself and the northernmost portion of the Southern Wetland. The highest total cVOC concentration was 901 µg/kg (less than 1 mg/kg) at location P-78-SB-14, in the sample from 1.5 to 2 feet below ground surface. The highest detections of TCE and 1,1,1-TCA in overburden groundwater are detected in well MW-5S, which is in the same vicinity as P-78-SB-14. These results suggest that the original source of the cVOC contamination in groundwater was a release to soil in the area of P-78-SB-14 and MW-5S that migrated down to the water table. Soil samples from the more southern portions of the wetland and from along Bliss Brook did not contain detectable levels of these cVOCs.

4.3 Subsurface Soil

Historically, subsurface soil was not as well-characterized as surface soil. While the W&L property was being investigated as a MCP site, it was known that subsurface soil below the capped surface impoundment/lagoon area contained elevated concentrations of chromium and other metals [RCA, 2001], based on samples taken after the sludge and visibly contaminated soil were removed. Soil borings installed as part of the MCP Phase IIC investigation showed elevated concentrations of total chromium in the plating trench area [RCA-22, 8.5 to 10 feet and 13 to 14 feet below surface grade – 1,300 and 1,800 mg/kg, respectively] and the former oil/water separator area [RCA-29, 9 to 10 feet below surface grade, 1,000 mg/kg]. The only VOC detected in subsurface soil was TCE, at 2.9 mg/kg in soil boring RCSB-25 (14 to 16 feet below surface grade). At this same location near the former TCE tank and UST area, there were detected concentrations of Extractable Petroleum Hydrocarbons and target analytes (PAHs) at 8 to 9 feet below surface grade. Therefore, prior to the involvement of EPA and MassDEP, subsurface soil impacts on the W&L property were known to exist in the vicinity of former plating trenches and AST/UST locations, as well as in the area of the capped/closed surface impoundments. However, the extents of those impacts were not well-defined.

Subsurface soil samples were collected from the property itself and along the northern portion of Bliss Brook during removal program and remedial program sampling efforts, and additional subsurface soil samples were collected during the RI to obtain more data for a full suite of analytes for use in the risk assessments. At a significant number of historic sampling locations, six-inch sampling intervals were collected consisting of three depths: 0 to 0.5 feet, 0.75 to 1.25 feet, and 1.5 to 2 feet. For these locations, the 0 to 0.5 foot interval has been classified as “surface soil” for plotting onto figures, while the latter two intervals have been classified as “subsurface soil.” At other locations (both historic and RI), deeper intervals were sampled (4 feet or deeper) but the number of samples from this depth is more limited. Subsurface soil samples were analyzed for total chromium, hexavalent chromium, other metals, VOCs, SVOCs, pesticides, and PCBs, but not all samples were analyzed for all these analytes. Subsurface soil samples collected for the RI were analyzed for the full suite and were collected from within the property boundaries.

4.3.1 Total Chromium

Subsurface soil samples collected on the property in close proximity to the building generally showed total chromium concentrations in excess of 1,000 mg/kg (Figure 4-14). Sample depths extended to as deep as 9 feet below ground surface. The water table in this portion of the study area is approximately 5 to 7 feet below ground surface. Therefore, the deeper subsurface soil samples are likely from the saturated zone.

Elevated total chromium concentrations (greater than 1,000 mg/kg) are also detected east of North Avenue in the area that was covered as part of the EPA removal action. This is consistent with the conceptual site model that posits that the source of the chromium in this area is contaminated groundwater migrating from the property and approaching the ground surface in this area just west of Bliss Brook. The cover system and drainage trench constructed by the removal program function to prevent contaminated groundwater from rising to the new ground surface (i.e., the top of the cover), but soil and groundwater contamination remain under it.

One other area shows total chromium concentrations in shallow subsurface soil (0.75 to 1.25 feet below ground surface; bgs) in excess of 1,000 mg/kg: an area represented by three historic samples (SB-214, SB-215, and SB-216 – see Figure 4-14). Samples at the immediate ground surface from these historic locations were not submitted for total chromium analysis. Sediment samples from the open water areas north of these locations also show elevated total chromium concentrations (see Section 4.4). The source of this contamination is believed to be a combination of direct discharge of chromium-contaminated wastewater from the W&L facility prior to 1970, as well as migration of soil contamination from the property to the Southern Wetland area via overland flow.

4.3.2 Hexavalent Chromium

Hexavalent chromium was detected in most subsurface soil samples collected on the property. Within the building footprint and just south of it, concentrations exceeded 100 mg/kg at depths of up to 10 feet below ground surface (Figure 4-15). The water table in this portion of the study area is approximately 5 to 7 feet below ground surface. Therefore, the deeper subsurface soil samples are likely from the saturated zone and also reflect the groundwater contamination present in this zone. Hexavalent chromium concentrations in subsurface soil are also elevated in the area covered by the removal program. For areas of the study area other than on the property or under the cover, hexavalent chromium is infrequently detected at levels greater than 0.2 mg/kg.

4.3.3 Total PAHs

Figure 4-16 presents total PAH concentrations in subsurface soil samples (samples collected from 0.75 feet bgs or deeper). Concentration ranges are represented by color-coding the sample locations as follows: gray = no PAHs detected, green = PAHs detected but the total is less than 5 mg/kg, yellow = >5 to 25 mg/kg, and red = >25 mg/kg. Actual concentrations are presented on the figure for locations where the concentration exceeds 25 mg/kg.

Total PAHs are less commonly detected in subsurface soil samples than in surface soil samples. At two on-property locations in close proximity, total PAHs in surface soil exceeded 25 mg/kg (PASI-SB-07 and PASI-SB-08). Corresponding surface soil samples from these two locations had somewhat lower total PAH concentrations. The source of the PAHs is not known. For subsurface soil samples collected off the former W&L property, total PAHs were either not detected or concentrations were less than 5 mg/kg. This suggests that the source of the subsurface soil contamination is limited to the property itself and may be related to releases from former USTs, and/or the presence of historic fill on the property.

4.3.4 Chlorinated VOCs

Total cVOC concentrations in subsurface soil samples are presented along with surface soil results in Table 4-17 and on Figure 4-13. For locations where multiple depths were sampled for VOCs and cVOCs and were detected, the concentrations appear to increase with depth, with the highest concentrations detected in the deepest samples from P-78-SB-09 and P-78-SB-14 just south of the property and just west of the area excavated by the removal program. The deepest samples at these locations are 1.5 to 2 feet bgs. TCE concentrations in groundwater in the shallow overburden wells closest to these locations (MW-5S and MW-6S) were 380 µg/L and 390 µg/L during the Phase 3 (September 2015) sampling effort. The water table is also fairly shallow in this area (approximately 3 feet bgs in September 2015). This area is approximately 180 feet south of where the former TCE above-ground storage tank is believed to have been located. Soil and groundwater samples from locations closer to the presumed location of the former TCE storage tank show lower concentrations of TCE, which suggests that spills in the immediate vicinity of the tank (reported to have occurred in the 1980s) may not be the source of the observed contamination. The other potential source, an abandoned dry well, was reported to have been located on the south side of the former building. A former employee stated it had been used for disposal of TCE, but soil sampling has not shown TCE contamination in this area, and contamination of overburden groundwater with TCE is interpreted to be lower immediately south of the building than it is in the MW-5S/MW-6S area (see Section 4.5, Figure 4-28).

4.4 Sediment

This section presents the results of sediment sampling (generally, 0 to 0.5 feet or 0 to 1 foot below surface grade) from historical EPA investigations for which the data were determined to be fully usable, and Phases 1 through 3 of the RI. For the purposes of the RI and the risk assessments, “sediment” is defined as solid material that is below normal water elevation (areas typically having standing water during the year) and in locations that the materials were deposited within a water body. All other solid samples were designated “soil” with results discussed in Sections 4.2 and 4.3 above.

Figures illustrating the distribution of concentrations in sediment are presented in this section for total chromium and hexavalent chromium, lead, silver, copper, and total PAHs. For the purpose of evaluating whether the concentrations of metals and PAHs detected in sediment samples may be related to the W&L facility, the analysis of reference sediment sample data presented in the BERA has been used to establish estimates of naturally occurring (i.e., background) concentrations in sediment that would likely be present in the absence of the Site. The BERA has estimated RME concentrations for chemicals of potential concern in the reference sediment samples. These concentrations are presented in Table 11 of the BERA and are summarized for chromium, lead, silver, copper, and PAHs in Table 4-18. These analytes were selected for presentation based on knowledge of their release or use at the W&L facility based on past investigations and facility history (chromium, lead, copper, and PAHs), and observations of elevated concentrations in sediment that were identified as the draft BERA was being prepared (silver).

The RME concentrations in Table 4-18 were used to help generate figures presenting sediment concentrations as ranges, to help visualize where the concentrations exceed levels that are likely to be consistent with concentrations that would be present in the absence of the releases from the W&L facility. In general, for locations where the detected concentration is below the reference sample RME concentration, the sample location is color-coded green. Ranges of higher concentrations (color-coded yellow, orange, or red) were established for each analyte to attempt to illustrate patterns of contamination in relation to the W&L property. However, because the RME concentration for total PAHs in reference sediment was so much higher than that for soil (25 mg/kg, compared to 5 mg/kg for soil), the soil ranges were used for plotting the total PAH sediment results so that the soil and sediment figures could be more easily compared.

Results are discussed by analyte below.

4.4.1 Total Chromium and Hexavalent Chromium

The total chromium and hexavalent chromium concentrations in historic and RI sediment samples are presented on Figure 4-17, with the sample IDs color-coded based on the range into which the reported total chromium concentration(s) for that location fell. For situations where two results were available and the two results fell into different ranges, the higher of the two ranges (concentrations) was assigned. Locations where the total chromium result was less than the reference sediment RME concentration (23 mg/kg) are color-coded green. Higher ranges are 23 to 1,000 mg/kg (yellow), 1,000 to 5,000 mg/kg (orange), and >5,000 mg/kg (red).

The highest total chromium concentrations (greater than 5,000 mg/kg) in are found in the Southern Wetland. The presence of elevated total chromium in this sediment is consistent with the fact that chromium-contaminated wastewater was directly discharged to the wetland prior to 1970. Chromium-contaminated surface soil also was likely transported by overland flow from the property itself to depositional areas in the Southern Wetland. Several sediment samples collected during the RI from the portion of the Southern Wetland that was excavated by the removal program, and is now open water, show total chromium concentrations above 1,000 mg/kg (SD-202, SD-301, and SD-303). Surface water samples from these locations show detectable levels of dissolved total chromium, and the interpreted overburden groundwater plume encompasses this open water area. Therefore, it is considered likely that the sediment at the bottom of the removal program excavation has been impacted by the discharge of chromium-contaminated groundwater to the open-water area, and subsequent reduction of the soluble hexavalent chromium in the groundwater to trivalent chromium because of the reducing nature of the sediment.

Hexavalent chromium was detected less frequently and at lower concentrations in sediment samples than it was in soil samples. The highest detection of hexavalent chromium in a sediment sample was for RI sample SD-211 from Bliss Brook, approximately 200 feet downstream (south) of the southern edge of the covered area, where the concentration was 87 mg/kg. There is no apparent correlation between high total chromium concentrations and high hexavalent chromium concentrations for sediment samples. Several samples for which the total chromium concentration exceeded 1,000 mg/kg showed no detectable hexavalent chromium (SB-203, SB-208, SB-209, SD-212, SD-214, SD-205), but hexavalent chromium was frequently detected at locations where the total chromium concentration was considerably less than 1,000 mg/kg (SD-211, SD-213, SD-216, SD-217, SD-218, SD-302). Over time in some sediment, chromium originally deposited in the hexavalent form may become reduced to the trivalent form. For sediment that is exposed to a continuing source of hexavalent chromium (i.e., areas where the groundwater contaminant plume is discharging, such as along Bliss Brook and the open water just south of the property), one might expect there to be a greater proportion of chromium in the hexavalent form. This appears to be the case in some locations (e.g., SD-301 and SD-211) but not all; notable exceptions are SD-202 and SD-212.

4.4.2 Lead

Figure 4-18 presents the lead concentrations and color-coded concentration ranges for historic and RI sediment samples. With few exceptions, the lead concentrations in sediment samples were below the RME reference sediment sample concentration of 212 mg/kg for samples collected from areas other than the property itself or the Southern Wetland. None of the sediment samples from Bliss Brook had reported lead concentrations above 212 mg/kg and there were only two such locations in Mechanics Pond. In contrast, multiple sediment samples from the Southern Wetland contained elevated lead (500 mg/kg or greater). These locations also showed elevated total chromium, suggesting that the source of the chromium and the lead is the same (i.e., discharge of untreated wastewater from the W&L facility to the Southern Wetland prior to 1970).

4.4.3 Silver

Figure 4-19 presents the silver concentrations and color-coded concentration ranges for historic and RI sediment samples. Virtually all sediment sample locations with highly elevated silver concentrations (greater than 100 mg/kg) are in the Southern Wetland and are also locations where the total chromium concentration is elevated. In general, silver concentrations were not elevated in surface soil (see Figure 4-10 and Section 4.2.3), with the exception of a few wetland soil locations in the Southern Wetland. This suggests that the source of the silver contamination could be the discharge of untreated wastewater from the W&L facility (assuming silver plating had been practiced at the facility in the past), but that deposition of silver on the property itself was not significant. This is in contrast to chromium, where on-property surface soil concentrations are significantly higher than those for reference soil samples.

4.4.4 Copper

Figure 4-20 presents the copper concentrations and color-coded concentration ranges for historic and RI sediment samples. The highest copper concentrations are found in Mechanics Pond and Farmer's Pond, with only one location from the Southern Wetland having a copper concentration above 1,000 mg/kg. On-property surface soil has elevated copper concentrations (Figure 4-11) and could be the source of the copper contamination in the Southern Wetland (in addition to untreated wastewater discharge), but the higher levels found in Mechanics Pond suggest that there are other more significant sources of copper that have impacted it.

4.4.5 Total PAHs

Figure 4-21 presents the total PAH concentrations and color-coded concentration ranges for historic and RI sediment samples. It is noted that for the reference sediment samples, the RME concentration for total PAHs was 25 mg/kg, which is the upper range that was plotted for soil sample results (Figure 4-12). The soil ranges were used on Figure 4-21 to allow more ready comparison of the two figures. No on-property sediment samples had a total PAH concentration above 25 mg/kg, but two samples from the Southern Wetland did. The concentrations are similar in magnitude for the Southern Wetland, lower Bliss Brook and the Bungay River, and

Mechanics Pond. It is likely that sources other than the W&L property releases have contributed substantially to the PAHs present in sediment in all these areas.

4.4.6 Chlorinated VOCs

Table 4-19 summarizes the detections of cVOCs in sediment samples collected during Phase 1 that were not designated as reference locations. There were no detections of cVOCs in sediment samples from the W&L property and Southern Wetland or Mechanics Pond and Bungay River. Detections were very low and infrequent in sediment samples from Bliss Brook. The only exception was SD-211 which is located approximately 180 feet downstream (south) of the southern edge of the cover installed by the removal program. The total cVOC concentration in this sample was 1,690 µg/kg. Brook sediment samples just upstream and downstream of this location did not contain detectable concentrations of cVOCs. This sample appears to be a “hot spot” location. The surface water sample from the same location contained 0.14 µg/L TCE when sampled during Phase 1 (with no other cVOCs detected), and there were no detections of cVOCs when the location was sampled again in Phase 2.

4.5 Groundwater

Monitoring well construction and groundwater gauging details are documented in Tables 2-2 and 4-20. The wells have been divided into four categories: shallow water table wells, deep overburden wells, shallow bedrock wells, and multi-level deep bedrock wells. Groundwater elevation data collected for Phases 1, 2, and 3 (August 2014, December 2014, and September 2015) is representative of two dry periods (August and September) and one wetter period (December). Groundwater elevation data collected in January 2018 and early April 2018 (Phase 5) is representative of wetter periods and is the most comprehensive set of data since it included historic monitoring wells, wells installed in all RI phases, and the new piezometers and staff gauges installed during Phase 5.

Depths to groundwater ranged from 1.5 to 17.5 feet for measurements made during Phases 1 through 3, with the deeper measurements occurring along North Avenue and the shallower occurring along Bliss Brook. Saturated overburden thickness ranged from 16 feet in the area of Hayward Field to 39 feet along Bliss Brook southeast of Paulette Lane.

The January 2018 round of water-level measurements were used to construct groundwater elevation contour maps for water table, deep overburden, and shallow bedrock flow zones (Figures 4-22, 4-23, and 4-24 respectively). Results are generally consistent with contour maps constructed during earlier RI phases, before the comprehensive re-survey of all wells, staff gauges, and piezometers was performed in January 2018. The January 2018 results are likely more reliable because the water level measurements were performed only a few days after the survey ended, greatly reducing the likelihood that measuring point elevations could have changed in the interim.

4.5.1 Groundwater Flow

Water-table contours for the shallow overburden shown on Figure 4-22 indicate that groundwater across the study area generally flows southeasterly towards Bliss Brook. In the southern part of the study area near Deanville Road, groundwater flows easterly towards Bliss Brook. A similar flow pattern is noted in the potentiometric groundwater maps of the deep overburden (Figure 4-23) and bedrock (Figure 4-24). A slightly more easterly shift in the flow direction just east of the W&L property may account for some of the spread in the plume to the east (as observed in AE-15 wells), making the overall plume wider as it progresses to the southeast. See plume maps for hexavalent chromium and TCE (Figures 4-26, 4-27, 4-28, and 4-29).

4.5.2 Groundwater Gradients

Gradients across the Site generally range from 0.002 to 0.03 in the overburden. The steepest gradients (up to about 0.03) occur west of and beneath North Avenue, and the flattest (as low as 0.002) occur east of the residences along North Avenue. Gradients observed in bedrock range from 0.0008 to 0.02 and, like those in overburden, become flatter as the flow approaches Bliss Brook. In the overburden, the decrease in gradients to the east of North Avenue is likely due to several factors including topography, greater thickness of the medium to

coarse sand and gravel layers (see cross-section Figures 4-31 through 4-38), and better sorting of those sand and gravel deposits compared to those to the west of North Avenue. In general, thicker and better-sorted deposits are likely to have higher hydraulic conductivities and therefore lower gradients at a given flux.

4.5.2.1 Vertical Gradients

Vertical gradients are slight to non-existent (Table 4-21) in most areas. During the Phase 5 (January 2018) water level round, differences in piezometric heads between adjacent zones at the 28 multi-well clusters located across the study area were between 0.00-1.66 feet but were >1 foot at only 5 clusters. The range for the September 2015 water level round was smaller (0.00 to 1.01 feet), and only one cluster had a head difference >1 foot between adjacent zones.

On the W&L property, the general trend in vertical gradients was downward from shallow to deep overburden with the exception of AE-01S/D, which was uniformly upward for all five water level rounds. East of the property across North Avenue, gradients were generally flat from shallow to deep overburden. At AE-ML-01, which is a multi-level well installed on the W&L property during Phase 3 work, the gradient from shallow bedrock to deep overburden was slightly upward for four of the water level rounds. Conversely, the vertical gradients from shallow bedrock to the four deeper bedrock intervals were all downward, which is in contrast to AE-04S/D/B and AE-ML-02 (open borehole, not completed as multi-level well). At this location, further to the south of AE-ML-01, the vertical gradients are zero to slightly downward into shallow bedrock, but upward from the deeper bedrock zone (AE-ML-02), which may in part be due to the open borehole and bedrock controls, as this area shows a drop in bedrock elevation from AE-04B to AE-ML-02 of approximately 16 feet. These two wells are separated horizontally by approximately 6 feet.

Further south and along North Avenue, vertical gradients are essentially zero, neither up nor down until Deanville Road, where there was a large (head difference >1 foot) downward gradient between shallow and deep overburden (DEP-3S/D) during the August 2014 and September 2015 water level rounds. The difference in head was lower during winter/spring rounds (December 2014, January 2018, and April 2018), which suggests greater downward gradients during the drier periods in this area where water moves from the Southern Wetland under North Avenue to Bliss Brook.

Along the Bliss Brook corridor, vertical gradients are generally zero in the areas north of the engineered cover, beneath Hayward Field, and likely in the wetlands east of Hayward Field. These zero gradients also appear east of the engineered cover as well, though there are limited observation points. Immediately west (AE-06B and AE-ML-04A/B/C/D) and south (MW-103S/D, AE-12B, AE-ML-03A/B/C/D) of the engineered cover, the vertical gradients begin to show an upward trend, as is typical of a discharge into a surface water feature. Further to the south along Bliss Brook, these head differences between the shallow groundwater zone and the deep groundwater zone increase, with higher upward gradients at the southernmost well pair DEP-2S/D compared to MW-103S/D (which is approximately 1,000 feet farther north along the brook). This agrees with base-flow measurements in Bliss Brook that show increase in flow further downstream [Weston, November 2013]. Upward gradients between the shallow bedrock and deep overburden over this stretch are much less than between deep and shallow overburden. The weaker upward gradient at this depth may be related to the apparent flow passing under Bliss Brook in the bedrock.

4.5.2.2 Deep Bedrock Gradients

As part of Phase 3 work, four deep bedrock wells were drilled to a depth of 150 feet along the center line of the plume. Although three multi-level wells were originally planned, AE-ML-04 was added to the program after well development and geophysics indicated that location AE-ML-02 had essentially no water-bearing fractures of significance more than a few feet below the bottom of the steel casing. AE-ML-02 was therefore not finished as a multi-level well but rather was left as an open borehole well. AE-ML-04 was located further along the plume, adjacent to AE-06B. This location was chosen for several reasons including access to the location, spacing between deep boreholes along the plume line, and concern that drilling a second deep borehole in the limited area near AE-ML-02 could result in a similar well. AE-04B, though much shallower than AE-ML-02, does indicate that the upper bedrock is well fractured (more conductive) than deeper bedrock. AE-04B, despite being located only about 6 feet west of AE-ML-02, also encountered bedrock approximately 15-16 feet higher than the

bedrock surface at AE-ML-02, indicating some structural and/or erosional feature. Slickensides noted in some of the bedrock fractures are indicative of the former.

The multi-level well design was based on the Solinst CMT, a seven-channel single pipe system designed for sample port installation through the sidewall of the channels and a single port at the bottom of the pipe. Each well was designed to have three paired ports and one single port at depth (the central channel). The paired ports were designed to have one channel for water level measurements and the other for groundwater sampling (see Appendix P – multi-level well construction logs). This design provides for four potentiometric head measurements (one at each of the three paired ports, and a fourth at the bottom port), allowing for the ability to monitor temporal changes in vertical groundwater potential.

During the September 2015 and subsequent groundwater water level rounds, measurements were taken using a Slope Indicator probe designed to fit the CMT channels. Vertical gradients in the deep multi-level bedrock wells are presented in Table 4-21. This data indicates that vertical gradients were essentially non-existent within the bedrock at two of the three locations. AE-ML-01 on the W&L property had the only significant potentiometric head differences of the three multi-level wells; differences in head were highest in September 2015, ranging from 0.08-0.46 feet, and were somewhat lower in the two subsequent rounds, with downward gradients in all cases. Conversely, at AE-01S/D/B (adjacent to AE-ML-01), upward vertical gradients existed from the shallow bedrock to the overburden and within the overburden, with the exception of the April 2018 round.

Midway along the plume line at AE-ML-04, potentiometric head differences ranged from 0.02-0.05 feet (ports A, B, C, D). Allowing for measurement error, these differences were classified as essentially zero head differences, meaning that there is no tendency for upward or downward flow among zones A to D. Conversely, between the two upper zones, the tendency for flow was upward from AE-ML-04 port A to AE-ML-04E. AE-ML-04E is a 1.5" PVC well co-located within the casing for CMT well AE-ML-04 with its screened interval above the top port (A) of the CMT well and below the screened interval of AE-06B.

AE-ML-04E was installed to screen a very conductive zone located just below the steel casing that also houses the CMT portion of AE-ML-04. Two sub-horizontal fractures (6-7 degree dips) were encountered just below the top of competent bedrock, with one dipping to the SSE and the other to the NNW (elevation of 65 to 69 feet NAVD88). These fractures were somewhat unique compared with many higher-angled fractures encountered elsewhere, and the elevation of these fractures was also similar to the elevation (65 to 75 feet NAVD88) of some highly to moderately conductive fracture(s) at AE-ML-02. The fracture set at AE-ML-02 dipped at angles between 30-60 degrees to the ESE. While there is no definitive connection between these two locations, it is noted that the potentiometric heads in these fractures at AE-ML-02 and AE-ML-04E were both about 0.1 to 0.4 feet different from adjacent zones, which is about 5 to 10 times greater than differences in head between all other zones.

AE-ML-03, the most distant deep multi-level well from the W&L property, is located adjacent to Bliss Brook and to a companion triplet of overburden/bedrock wells MW-103S/D and AE-12B. Head differences between adjacent zones in the multi-level well were essentially zero. In the nearby overburden wells, gradients were upward or slightly upward. In the upper/shallow bedrock (AE-12B) there was either a slight downward gradient to AE-ML-03A or no observed gradient (April 2018). Overall, the lack of an upward gradient in the bedrock suggests that only overburden flow is entering Bliss Brook, and that the bedrock flow is continuing south or possibly SSE.

4.5.3 Bliss Brook

Bliss Brook is the closest open water body to the W&L property, aside from the pond created just south of the property during the removal action. Located approximately 500-700 feet east and southeast of the W&L property at its closest point, Bliss Brook flows southerly approximately 1,000 feet to a confluence with the Bungay River.

Groundwater flow from the W&L property is towards Bliss Brook, whether it is in the shallow, deep, or bedrock flow zone. It is clear from the wells located east of Bliss Brook that the plume has migrated under the brook to some extent as evidenced by the contaminant concentrations detected in AE-20B and DEP-07D. Based on the concentrations, it seems that flow under Bliss Brook is higher in the bedrock than in the deep overburden. Non-

detect results at DEP-7S and AE-18S indicate that shallow overburden contamination is not crossing under Bliss Brook, but rather is captured by the brook's hydrologic system. This is also evidenced by the concentrations of hexavalent chromium found in the brook (see Section 4.7.4).

Vertical groundwater hydraulic gradients were determined from water levels collected on April 5, 2018 beneath Bliss Brook, which included measurements from the newly installed (Phase 5) piezometers and staff gauges that were located to provide more information on the groundwater/surface water interactions along the brook. Figure 4-25 presents groundwater contours for the cross-sectional transect along the brook, based on the April 5, 2018 measurements. The results indicate a predominant upward gradient in overburden groundwater from the base of the overburden aquifer. This indicates that overburden groundwater is discharging predominantly to the brook and not passing under the surface water body.

The review of the hydraulic cross-section also shows little, if any, vertical gradient between the fractured bedrock aquifer and overburden. This indicates that essentially no upward discharge of bedrock groundwater to the overburden aquifer under Bliss Brook is occurring, and that bedrock groundwater is passing beneath the brook and moving to areas further downgradient.

4.5.4 Extent of Contamination in Groundwater

The extent of the contamination in the overburden and bedrock aquifers is affected by numerous factors including groundwater flow gradients, chemical density and dispersion, redox/biological and chemical reactions, degradation, precipitation, sorption to soil particles, and geological and engineered factors. Sampling conducted for the RI has built on previous knowledge from the removal action work conducted by Weston and historical data collected by MassDEP. During the phases of work conducted for the RI, a larger and more comprehensive area has been canvassed to fill data gaps and build a more comprehensive understanding of the study area. A series of overburden wells were added to better delineate the extent of the contamination, bedrock wells were added to investigate the depth and extent of the impact in the bedrock, and piezometers and additional staff gauges were added along Bliss Brook. Along with the subsurface work, AECOM has also expanded the reconnaissance of wetlands and surface water bodies to the south, southwest, and southeast of the W&L property. The two primary and most widely spread contaminants of concern are hexavalent chromium and TCE. The following discussion focuses on these two contaminants as a framework to discuss the extent of contamination. Other contaminants are also discussed as appropriate to the data collected.

Figures 4-26 and 4-27 are plan views of the extent of hexavalent chromium in overburden and bedrock, respectively based on Phase 3 (September 2015) sampling results. Figures 4-28 and 4-29 present the same information for TCE. Cross sections that present the vertical extent of hexavalent chromium and TCE contamination in groundwater are presented in Figures 4-31 through 4-34 (hexavalent chromium) and 4-35 through 4-38 (TCE). Cross section locations are shown on Figure 4-30. Given the nature of the removal action activities that occurred in 2012-2013 to install the soil cover and PRB wall, which required dewatering, soil stabilization, and diversion of Bliss Brook, these maps may not depict long-term equilibrium conditions. Figure 4-39 shows the concentrations of hexavalent chromium that were reported for samples from piezometers along Bliss Brook. These piezometers were installed and sampled in December 2017 (Phase 5) to attempt to define where the shallow overburden plume is discharging to the brook.

4.5.4.1 Hexavalent Chromium

Hexavalent chromium contamination in the overburden extends east and south of the W&L property, crossing under North Avenue, Paulette Lane, and eventually extending out to Bliss Brook and nearly as far as Payson Street. Knowledge of concentrations and extent in deep overburden and bedrock east of Bliss Brook is limited due to the number of wells, but as explained above, the contamination that has apparently moved under Bliss Brook is now found in the bedrock, as seen in well AE-20B, and in the deep overburden, as detected in well DEP-7D. Neither of the two shallow overburden wells, DEP-7S or AE-18S, had a result above the detection limit, likely because the shallow groundwater discharges to Bliss Brook as seen in surface water samples collected along the brook. Movement of contaminants toward Bliss Brook in the shallow overburden may be lessened by the PRB wall that was constructed adjacent to Bliss Brook as part of the removal action. While this wall is only 4 feet deep adjacent to the engineered cover and 9.5 feet deep along the southern extension that angles southwest across a large portion of the center-line of the plume, it has been determined to be effective in

reducing hexavalent chromium as discussed below. In bedrock the hexavalent chromium appears to take a similar flow pattern as in the overburden, though with a notable extension under Payson Street. Although AE-20B is the only bedrock well east of Bliss Brook, the concentration of 1,270 ppb hexavalent chromium in the well indicates that the plume has clearly traveled in bedrock under Bliss Brook. The extent of the hexavalent chromium contamination in bedrock downgradient of AE-20B is not known; additional bedrock wells would need to be installed to determine this extent. The hexavalent chromium concentrations in both shallow wells DEP-7S and AE-18S were less than the 0.50 ppb detection limit, demonstrating that the hexavalent chromium plume in the shallow overburden does not extend significantly beyond Bliss Brook.

The PRB wall was designed to reduce hexavalent chromium by conversion to trivalent chromium. During Phase 3, the PRB wall was evaluated for effectiveness by installing monitoring wells on both sides along four transects. The northern part of the PRB wall (along the engineered cover) was constructed of soils that are hydraulically similar to the surrounding fill with the addition of 5% zero-valent iron mixed into the soil. Monitoring well transects 1 and 2 were installed along this 4-foot deep section of the PRB. Along the 9.5-foot deep southern extension of the wall (which angles away from Bliss Brook), where monitoring well transects 3 and 4 were installed, the native soils are coarser, so the PRB is not as hydraulically transparent as it is to the north. Additionally, the engineered cover does not extend south over the deeper PRB extension area. Figure 4-40 shows an enlargement of the PRB area. In order to evaluate the effectiveness of the PRB wall, upgradient and downgradient piezometers were installed by direct push methods along the four transects to the PRB wall. The two transects that were located along the shallow section of the PRB wall were named PRB-01 and PRB-02. The wells on these transects were installed to a depth of 4 feet and screened from 2.5 to 4.0 feet to attempt to capture flow through the wall. The upgradient wells (PRB-01W and -02W) were located between 4 to 8 feet from the wall, while the downgradient wells (PRB-01E and -02E) were located between the PRB wall and Bliss Brook. The shallow PRB wall construction, in profile, consisted of 1 to 1.25 feet of topsoil and vegetative support, 0.75 to 1 foot gravel capillary break, a drain layer, and then 2 feet of PRB wall. The upper 2 feet comprise the engineered cover that was constructed to prevent surfacing of hexavalent chromium-contaminated groundwater, while the lower 2 feet were intended to reduce the hexavalent chromium in the groundwater. This shallow section of the PRB wall is also adjacent to a 6-inch perforated drain buried 2.5 feet deep that lies between the PRB wall and a rip-rap channel that leads to Bliss Brook and then Bliss Brook itself. The drain appears to capture water from the capillary break and drainage layer. The result of the construction appeared to effectively lower the water during the summer/fall months when the field sampling event took place, so much so that the wells in Transects 1 and 2 were dry or had very little water. AECOM and EPA decided that sampling of these transects would be difficult or not possible and would not provide the data necessary to make an evaluation. AECOM instead focused on Transects 3 and 4, which were located along the PRB wall extension further south. That section of the PRB wall was installed to a depth of 9.5-10 feet, with 8 feet of PRB wall overlain by a 6- to 8-inch stone capillary break and 12 to 16 inches of soil and topsoil. Unlike the shallow PRB section, the PRB extension is not covered by the engineered cover and therefore does not have the drain layer below the capillary break. To evaluate this section of the PRB wall, AECOM installed piezometers to a depth of 8 feet with a screened interval of 3 to 8 feet. The upgradient wells, PRB-03Ws and -04W, were installed at a distance between 5 to 10 feet from the PRB wall and the downgradient wells, PRB-03Es and -04E, within 4 to 8 feet of the PRB wall. In addition, two deep piezometers, PRB-03Wd and -03Ed, were also installed to a depth of 15 feet with a screened interval of 12 to 15 feet. The deep piezometers were installed to observe underflow past the PRB wall, as well as provide information on vertical gradients.

Figure 4-40 shows the unfiltered hexavalent chromium results for the samples collected from these piezometers in September 2015. Full results (filtered and unfiltered samples) are shown in Table 4-22. Field observations noted that the groundwater upgradient of the PRB wall had a greenish tinge, while downgradient this tinge was absent. The greenish color suggested the presence of high concentrations of hexavalent chromium. The analytical data confirmed this field observation and also provided some additional insight (Table 4-22). The dissolved hexavalent chromium concentration at PRB-04W (5,850 ppb) was considerably greater than it was at downgradient well PRB-04E (110 ppb); but also of interest were the hexavalent chromium concentrations in the deep (below the PRB wall) wells that also declined from up gradient PRB-03Wd (13,600 ppb) to downgradient PRB-03Ed (2,780 ppb). Unfiltered sample results (Figure 4-40) were similar. The reason for the decline in hexavalent chromium concentrations in wells that are screened below the reported depth of the PRB wall is not known; however, natural spatial differences in contaminant concentrations over short distances are common,

even in areas where the subsurface has not been altered by excavation and backfilling. Possible factors that could be contributing to the observed decline in hexavalent chromium concentrations between the deep wells are 1) the downgradient well is on a slightly different flow path from the upgradient well; 2) the wall depth is not consistent and is deeper in this area; or 3) the presence of the wall affects flow paths both vertically and horizontally in this area.

Data from PRB-03Ws/Es was slightly less conclusive than the data from PRB-04Ws/Es. For total chromium, dissolved total chromium, and dissolved hexavalent chromium, the results are consistent with PRB Transect 4 wells, but at much lower concentrations. However, total (unfiltered) hexavalent chromium was not detected above the detection limit on either side of the PRB wall. It is unclear why the total chromium and hexavalent chromium contaminant levels for PRB-03Ws/Es are inconsistent with neighboring and deeper wells. The only items of note, other than the concentrations of chromium, were the dissolved oxygen concentrations along Transect 3 in the shallow wells. Both up- and downgradient wells indicated depleted oxygen values (<0.5 mg/L), which was not observed at the Transect 3 deep wells or at Transect 4, where upgradient dissolved oxygen levels were 3.5-3.7 mg/L and downgradient levels were <0.5 mg/L. The PRB wall, overall, appears to be reducing hexavalent chromium concentrations and contributing to the dilution of concentrations in the slightly deeper flow zone, which undercuts the PRB wall.

Figure 4-39 shows the hexavalent chromium concentrations in piezometers bordering the brook from December 2017. Concentrations were highest at PZ-14 located approximately 150 feet southeast of the southernmost end of the PRB wall, and next highest at PZ-13 located approximately 120 feet southeast of it. Other piezometers (PZ-11 and PZ-12) located immediately downgradient of the PRB wall show much lower concentrations, indicating that the wall is having some effect in reducing hexavalent chromium concentrations in groundwater passing through it. PZ-10 is located where the PRB wall transitions from its shallow portion (4 feet deep) to its deeper portion (9.5 feet deep) and shows elevated hexavalent chromium concentrations, which may be indicative of the plume passing below the PRB wall in this area. The piezometers located further north (PZ-06 and PZ-09) show low hexavalent chromium concentrations, which may be a function of the PRB wall and also the fact that these locations are on the northern edge of the plume as mapped on Figure 4-26.

4.5.4.2 Trichloroethene (TCE)

TCE was used at Walton and Lonsbury and at other locations upgradient of the W&L property [Sage, 2016]. A plume of TCE is found in the overburden and bedrock groundwater extending to the southeast towards Bliss Brook. Though TCE concentrations are not very high (maximum of 390 ppb at W&L property in MW-6S, 70 ppb east of North Avenue in MW-102D) relative to hexavalent chromium, they do exceed the drinking water Maximum Contaminant Level of 5 ppb.

TCE in overburden has migrated from the W&L property to Bliss Brook, as shown on Figure 4-28. In the overburden, the TCE plume is not as wide as the hexavalent chromium plume in the northern part of the study area and does not cross under any part of Hayward Field or Paulette Lane. The plume does, however, show an outward “bulge” on its southwest side as it reaches North Avenue. It is unclear if this extension of the plume is related to releases migrating from the W&L property, since wells AE-10S and AE-19S, in the “bulge” area, are located on and downgradient of (respectively) a property known to have an automotive and small engine repair shop. The overburden plume extends as far as Bliss Brook, but there is no evidence that it extends beyond the brook to any significant degree in the overburden. TCE concentrations in wells DEP-7S/D, located slightly north of the plume trace and east of Bliss Brook, were below the reporting limit. Wells MW-103S/D, adjacent to and west of Bliss Brook, contained 20 ppb and 10 ppb of TCE (respectively), and wells MW-16/AE-7D, located west of Bliss Brook and further south, had concentrations of 7.8 ppb and 22 ppb (respectively) and appear to indicate the end of the TCE plume just before it discharges to Bliss Brook. Further south at DEP-2S/D, TCE was not detected above the reporting limit.

TCE in bedrock is shown on Figure 4-29. Although the concentrations are not as high as in the overburden, the width of the plume is wider than in the overburden, extending slightly further northeast under the corner of Hayward Field and part of Paulette Lane. The TCE plume, like the hexavalent chromium plume, appears to have traveled under Bliss Brook, although the concentration of 1.1 ppb at AE-20B is low. Unlike hexavalent chromium,

the core of the TCE plume seems to be detached from the W&L property, suggesting that it may be less persistent than the hexavalent chromium.

4.5.4.3 Other Contaminants

Other contaminants of note in groundwater include 1,1,1-TCA and 1,4-dioxane, which is likely associated with the 1,1,1-TCA. The distribution of the two contaminants is similar, in that higher concentrations of 1,4-dioxane seem to correspond with higher concentrations of 1,1,1-TCA. The spread of 1,4-dioxane, due to its non-reactive nature and high solubility in water, tends to be greater than that of 1,1,1-TCA, which is somewhat more likely to degrade in the environment and is more retarded by adsorption onto soil particles. Overall, the extent to which 1,4-dioxane is found matches that of hexavalent chromium; however, the concentrations are significantly lower. The number of wells at which the concentration of 1,4-dioxane exceeds its MassDEP drinking water guideline (0.3 ppb) is fewer than the number of wells for which the MCL for total chromium is exceeded, and those that exceed the drinking water guideline do so only marginally compared to total chromium exceedances. Table 4-23 lists the ranges and median values for each of the three groundwater sampling rounds as well as the rounds taken collectively.

Total lead in groundwater exceeds the Safe Drinking Water Act action level of 15 µg/L in three monitoring wells (maximum detected concentration in parenthesis): AE-09S (50 µg/L), DEP-3D (49.7 µg/L), and DEP-5S (108 µg/L). Dissolved lead results for these wells were all less than 15 µg/L except for the dissolved lead result for monitoring well DEP-5S collected in August 2014 (49.8 µg/L), corresponding to the total lead result of 108 µg/L. Monitoring well DEP-5S was sampled twice more, in December 2014 and September 2015, with total lead results exceeding 15 µg/L (26.1 µg/L and 33.7 µg/L, respectively) but dissolved lead results less than 15 µg/L (4.2 µg/L and 2.1 µg/L, respectively). Therefore, the elevated detections of total lead in these three monitoring wells may be related to suspended particulates in the samples, rather than to dissolved lead concentrations. It should be noted that monitoring well DEP-5S is at the very northern end of the W&L property and upgradient of the industrial operations area. Monitoring well DEP-3D is located in the Southern Wetland, near Deanville Road, and beyond the mapped chromium plume. Only monitoring well AE-09S is located within the mapped chromium plume migrating from the W&L property. This monitoring well is downgradient of the location with the highest soil concentration of lead (location P-78-SB-16; 13,200 mg/kg).

4.6 Surface Water

Surface water samples were collected historically and during three phases of the RI. Surface water sampling locations for the RI were co-located with sediment sampling locations. Phase 1 surface water sampling was completed in late June-early July 2014 and Phase 2 surface water sampling was completed in late October-early November 2014. The Phase 3 event involved a limited number of samples for toxicity testing and paired chemical analyses and was performed in late July 2015. Every location was not sampled in every phase. Between phases, data were evaluated to determine where additional samples should be collected.

Surface water samples were collected from three areas: Bliss Brook, the Southern Wetland, and Mechanics Pond/Bungay River. Reference surface water samples were also collected at the same locations as reference sediment samples. Results for historic and RI surface water samples are presented in Tables 4-3 (historic samples) and 4-6 (RI samples) for all analytes that were detected in at least one sample. This section summarizes the RI results for total chromium and hexavalent chromium for each of the three areas identified above. Results for cVOCs and 1,4-dioxane are also discussed. Detections of VOCs other than cVOCs are not explicitly discussed because detections were sporadic and very low and are not likely to be site-related. Those results can be found in Tables 4-3 and 4-6.

4.6.1 Bliss Brook

Table 4-24 presents the total chromium and hexavalent chromium concentrations detected in surface water samples from Bliss Brook for samples collected during Phase 1 and Phase 2. Phase 3 results are not included in this table because Phase 3 was limited to 3 locations for paired chemical analyses and toxicity testing; full results (all phases) can be found in Table 4-6. Field parameter measurements recorded during sampling and the depth of surface water at that time are also included in Table 4-24. Note that results for samples from upper Bliss

Brook from locations determined to not be impacted by the W&L property releases (and therefore classified as reference samples) are not included.

For the Phase 1 (summer 2014) samples, hexavalent chromium is first detected at SD-209, which is approximately located within the brook across from the southern end of the engineered cover. Concentrations of hexavalent chromium rise to the 200 µg/L level for the next three locations moving downstream (SD-210, SD-211, and SD-212), indicative of the fact that the shallow groundwater hexavalent chromium plume is discharging to this area. At these three locations, total chromium and hexavalent chromium results were similar and unfiltered and field-filtered sample results were similar, which indicates that essentially all of the chromium was in the hexavalent, dissolved form (which is also characteristic of the groundwater plume).

Results were similar for the Phase 2 (fall 2014) samples, except that hexavalent chromium impacts were observed further downstream. Hexavalent chromium was detected at approximately 29 µg/L in the most downstream brook location (SD-218) in Phase 2, compared to a detection of less than 1 µg/L in Phase 1.

With respect to surface water toxicity testing results, there were two samples showing a significant effect on survival and reproduction when compared to their reference sample (SW-207): these samples were SW-210 and SW-212. These samples were significantly different from Bliss Brook site reference, with complete mortality and no reproduction measured for either sample.

Table 4-25 presents detected concentrations for cVOCs and 1,4-dioxane in surface water samples from Bliss Brook, the W&L property and Southern Wetland, and Mechanics Pond and Bungay River. For the Bliss Brook samples, there were sporadic, very low (less than 1 µg/L) detections of TCE and 1,4-dioxane. Other cVOCs were also detected in some samples at very low levels. No association of these detections with the locations of the groundwater TCE and 1,4-dioxane plumes is apparent.

4.6.2 W&L Property and Southern Wetland

Table 4-26 presents the total chromium and hexavalent chromium concentrations detected in surface water samples from the W&L property and Southern Wetland area, and the Mechanics Pond and Bungay River area, for samples collected during Phase 1 and Phase 2. Field parameter measurements recorded during sampling and the depth of surface water at that time are also included.

Very low levels of hexavalent chromium (less than 1 µg/L) were detected in some on-property and Southern Wetland samples, with the highest concentration observed at SD-301 (1.04 µg/L in the field-filtered sample and 1.55 µg/L in the unfiltered sample). Total chromium was detected in all the samples (both field-filtered and unfiltered) and detections were substantially higher than the hexavalent chromium detections (if the latter was detected at all), indicating that most of the chromium present in the surface water in this part of the Site is trivalent chromium.

Table 4-25 presents detected concentrations for cVOCs and 1,4-dioxane in surface water samples from Bliss Brook, the W&L property and Southern Wetland, and Mechanics Pond and Bungay River. At location SD-203 in the Southern Wetland, south of the area excavated by the removal program, there were detections of cVOCs in the 1 to 5 µg/L range in both Phase 1 and Phase 2 samples. More commonly, cVOCs were not detected or detected at concentrations well below 1 µg/L for samples from the property and Southern Wetland. 1,4-Dioxane was detected at five locations in the range of 0.19 to 1.0 µg/L.

4.6.3 Mechanics Pond and Bungay River

Total chromium and hexavalent chromium concentrations for surface water samples from Mechanics Pond and Bungay River are presented in Table 4-26. In field-filtered samples, total chromium was infrequently detected above the 2 µg/L reporting limit, in contrast to Southern Wetland samples where total chromium was consistently detected. Hexavalent chromium was also detected infrequently at levels less than 1 µg/L. Detections of hexavalent chromium occur in samples from the southern end of Mechanics Pond (SD-307 and south), but there are no detections of hexavalent chromium in pond or river samples collected north of SD-307. For the one sample from the Bungay River (SD-219, just upstream of its confluence with the Ten Mile River), hexavalent

chromium was not detected in any sample (filtered or unfiltered), and total chromium was detected at low levels (maximum of 2.2 µg/L in the Phase 2 unfiltered sample).

Chlorinated VOCs and 1,4-dioxane concentrations for surface water samples from Mechanics Pond and Bungay River are presented in Table 4-25. There were no detections of cVOCs at concentrations over 0.5 µg/L. 1,4-Dioxane was consistently detected at concentrations ranging from 0.11 to 0.90 µg/L, with non-detects (less than 0.1 µg/L) reported for SD-306 and SD-308. However, at one location (SD-314) where a field duplicate was collected, one sample was non-detect while the duplicate had a reported concentration of 0.90 µg/L. Overall, surface water results for 1,4-dioxane in all areas indicate a low level of contamination over a very wide area, suggesting that the W&L property is not the only potential source. 1,4-Dioxane was also detected in surface water samples from Farmer's Pond (SD-234 and SD-235) at concentrations of 0.21 and 0.25 µg/L, respectively. Traces of TCE (0.12 and 0.13 µg/L) were also detected in these two samples. Since the groundwater plumes emanating from the W&L property do not impact Farmer's Pond, another source of 1,4-dioxane and TCE exists that may also be affecting the surface water in Mechanics Pond. For the one sample from the Bungay River (SD-219, just upstream of its confluence with the Ten Mile River), there were no detections of either cVOCs or 1,4-dioxane in either phase of sampling.

4.7 Nature and Extent Summary

The primary contaminant released at the W&L property is chromium, present in both trivalent and hexavalent forms in surface soil, subsurface soil, sediment, and surface water, with trivalent being more prevalent in these media. However, in groundwater samples chromium was present almost entirely in the hexavalent form. Figure 4-41 illustrates the extent of total chromium contamination in soil and sediment (excluding Mechanics Pond), with the extent of the hexavalent chromium bedrock groundwater plume overlaid on it, to provide an overview of the extent of chromium contamination throughout the study area. The extents of other contaminants in soil, sediment, groundwater, and surface water generally fall within the boundaries of the chromium contamination as shown on this figure.

4.7.1 Surface and Subsurface Soil

Total chromium impacts in soil extend from the former W&L property itself, south through the Southern Wetland to Deanville Road, to the east of North Avenue as far as Bliss Brook, and south along the brook to its confluence with the Bungay River. In general, total chromium concentrations are higher in wetland soil samples from the Southern Wetland and along the brook than they are in upland soil samples from these same areas. The highest concentrations of total chromium (greater than 5,000 mg/kg) are found in soil located beneath the cover installed by the removal program and in the wetland soil in the Southern Wetland. Along Bliss Brook south of the cover, total chromium concentrations exceed those in reference soil samples, but are less than 1,000 mg/kg with few exceptions. The highest on-property subsurface soil concentrations ranged from 1,000 to 5,000 mg/kg total chromium. The extent of soil contamination with metals other than chromium (copper, lead, and silver were plotted for illustration purposes – see figures) is similar to that for total chromium, but concentrations are much lower overall.

The extent of soil contamination with hexavalent chromium extends from the former W&L property to the south into the Southern Wetland and to the east of North Avenue to the cover installed by the removal program. The soil along Bliss Brook (other than that under the cover) is not impacted by hexavalent chromium. Hexavalent chromium was detected in the majority of on-property surface soil and subsurface soil samples at concentrations in the range of 0.2 to 100 mg/kg. The same was true for soil samples from under the removal program cover. In summary, the extent of hexavalent chromium contamination in soil is smaller than that for total chromium, in that it does not extend downstream along Bliss Brook. Concentrations of hexavalent chromium in soil are also orders of magnitude lower than those for total chromium, indicating that most of the chromium present in the soil is in the trivalent form.

Except for samples from the property itself, total PAH concentrations in soil samples exceeded 25 mg/kg in only two instances. Soil samples along Bliss Brook and in the Southern Wetland had total PAH concentrations consistent with reference soil samples, except for one sample along Deanville Road and three samples south of West Street, all of which are a considerable distance from the W&L property. Surface soil and subsurface soil

samples collected from the property itself showed elevated total PAH concentrations compared to reference soil samples. Potential sources are historic petroleum releases from former USTs and historic fill. Detections of cVOCs in soil samples were limited to the property itself and the northern portion of the Southern Wetland. The most commonly detected cVOC was TCE, and with few exceptions, it was detected at every location where any cVOCs were detected. The exceptions are historic locations P-78-SB-03 and P-78-SB-09, where 1,1,1-TCA was detected but TCE was not.

4.7.2 Sediment

The extent of sediment contamination with total chromium extends from the property to the Southern Wetland as far south as Deanville Road, to Bliss Brook from the section just east of the removal program cover downstream to its confluence with the Bungay River, and into Mechanics Pond. Virtually all sediment samples from these areas had total chromium concentrations greater than those found in the reference sediment samples. It is noted that Farmer's Pond, which is not downstream of the W&L property and was sampled originally for possible use as a reference pond, also showed elevated total chromium concentrations compared to the samples ultimately selected as reference samples.

The highest total chromium concentrations (greater than 5,000 mg/kg) were found in the Southern Wetland. The presence of elevated total chromium in this sediment is consistent with the fact that chromium-contaminated wastewater was directly discharged to the wetland prior to 1970. Chromium-contaminated surface soil also was likely transported by overland flow from the property itself to depositional areas in the Southern Wetland. Along Bliss Brook and in Mechanics Pond, the majority of sediment samples showed total chromium concentrations in the range of 23 to 1,000 mg/kg.

The extent of sediment contamination with hexavalent chromium is similar to that for total chromium, but concentrations are much lower. The highest hexavalent chromium detection in sediment was for SD-301 located in the open water area excavated by the removal program, at 48.4 mg/kg. Detections exist in numerous samples as far south as the southern end of Mechanics Pond (SD-312), and there is no apparent correlation with respect to distance from the W&L property itself or the concentration of total chromium detected at the same location.

Sediment contamination with lead and silver is evident in the Southern Wetland and mirrors the total chromium contamination. Concentrations of lead in Southern Wetland sediments exceed 500 mg/kg in the majority of samples, while for silver a majority of samples exceed 100 mg/kg. In contrast, sediment samples from Bliss Brook do not show evidence of lead or silver contamination above the concentrations of these analytes detected in reference sediment samples. In Mechanics Pond however, there are some detections of these metals in sediment samples at levels above reference concentrations. Transport of lead and silver contamination from the Southern Wetland to the pond via overland flow or the storm water drainage system is possible, as is the possibility of other sources impacting the Ten Mile River and the pond. Concentrations of copper in sediment samples exceed 1,000 mg/kg in multiple samples from Mechanics Pond, but are not that elevated in the Southern Wetland, with only one sample exceeding this value. This suggests that there may be another source of the copper contamination in Mechanics Pond sediment. Similarly, concentrations of total PAHs in Mechanics Pond and the Bungay River are generally higher than those in Southern Wetland sediment samples, suggesting that other sources are more significant contributors.

4.7.3 Groundwater

Figures 4-26, 4-27, 4-28, and 4-29 provide the plan views of the extent of hexavalent chromium and TCE in overburden and bedrock on the property and downgradient.

Hexavalent chromium contamination in the overburden extends east and south of the W&L property crossing under North Avenue, Paulette Lane, and eventually extending out to Bliss Brook and nearly as far as Payson Street. Knowledge of concentrations and extent in deep overburden and bedrock is limited due to the number of wells east of Bliss Brook, but the apparent transgression under Bliss Brook occurs in the deep overburden and in the bedrock. The shallow overburden flow is likely following the course of and discharging to Bliss Brook. In bedrock the hexavalent chromium appears to take a similar flow pattern as in the overburden, though with a notable extension under Payson Street. Although AE-20B is the only bedrock well east of Bliss Brook, the

concentration of 1,270 µg/L hexavalent chromium in the well indicates that the plume has clearly traveled in bedrock under Bliss Brook.

TCE in overburden has been detected off-property across North Avenue from the W&L property. In the overburden the TCE plume is not as wide as the hexavalent chromium plume and does not cross under any part of Hayward Field or Paulette Lane to the northeast side of the plume. The plume does extend, however, further southwest and west of North Avenue. It is unclear if this extension of the plume is related to releases at the W&L property, as the wells AE-10S and AE-19S, related to the extension of the plume, are located (respectively) on a property known to have an automotive and small engine repair shop. The overburden plume extends as far as Bliss Brook, but there is no evidence that it extends beyond the brook to any significant degree in the overburden.

TCE in bedrock is shown on Figure 4-29. Although the concentrations are not as high as in the overburden, the width of the plume is wider than in the overburden, extending slightly further northeast under the corner of Hayward Field and part of Paulette Lane. The TCE plume, like the hexavalent chromium plume, appears to have traveled under Bliss Brook, although the concentration of 1.1 ppb at AE-20B is low. Unlike hexavalent chromium, the core of the TCE plume seems to be detached from the W&L property, suggesting that it may be less persistent than the hexavalent chromium.

Other contaminants of note in groundwater include 1,1,1-TCA and 1,4-dioxane, which is likely associated with 1,1,1-TCA. The distribution of the two contaminants is similar, in that higher concentrations of 1,4-dioxane seem to correspond with higher concentrations of 1,1,1-TCA. The spread of 1,4-dioxane, due to its non-reactive nature and high solubility in water, tends to be greater than that of 1,1,1-TCA, which is somewhat more likely to degrade in the environment and is more retarded by adsorption onto soil particles. Overall, the extent to which 1,4-dioxane is found matches that of hexavalent chromium; however, the concentrations are significantly lower.

Total lead in groundwater exceeds the Safe Drinking Water Act action level of 15 µg/L in three monitoring wells (maximum detected concentration in parenthesis): AE-09S (50 µg/L), DEP-3D (49.7 µg/L), and DEP-5S (108 µg/L). Dissolved lead results for these wells were all less than 15 µg/L except for the dissolved lead result for monitoring well DEP-5S collected in August 2014 (49.8 µg/L), corresponding to the total lead result of 108 µg/L. The elevated detections of total lead in these three monitoring wells may be related to suspended particulates in the samples, rather than to dissolved lead concentrations. Monitoring well DEP-5S is at the very northern end of the W&L property and upgradient of the industrial operations area. Monitoring well DEP-3D is located in the Southern Wetland, near Deanville Road, and beyond the mapped chromium plume. Only monitoring well AE-09S is located within the mapped chromium plume migrating from the W&L property. This monitoring well is downgradient of the location with the highest soil concentration of lead (location P-78-SB-16; 13,200 mg/kg).

4.7.4 Surface Water

Table 4-24 presents the total chromium and hexavalent chromium concentrations detected in surface water samples from Bliss Brook for samples collected during Phase 1 and Phase 2. Other contaminants were detected in surface water samples from the brook and other locations, but hexavalent chromium is the most significant, and is clearly related to discharge of the hexavalent chromium groundwater plume to the brook. For the Phase 1 (summer 2014) samples, hexavalent chromium is first detected at SD-209, which is approximately located within the brook across from the southern end of the cover. Concentrations of hexavalent chromium rise to the 200 µg/L level for the next three locations moving downstream (SD-210, SD-211, and SD-212), indicative of the fact that the shallow groundwater hexavalent chromium plume is discharging to this area. Results were similar for the Phase 2 (fall 2014) samples, except that hexavalent chromium impacts were observed further downstream (as far downstream as SD-218). Surface water toxicity testing results showed a significant effect on survival and reproduction for locations SD-210 and SD-212, which is attributed to the hexavalent chromium concentrations observed in these locations.

4.8 Data Quality Evaluation

This section provides a discussion of the usability of the data collected for the RI and pre-RI data collected by EPA that was determined to be usable for the RI and risk assessments. Historic data sources that were

consulted for planning the RI but were not used for evaluating nature and extent or assessing risk, are also summarized along with the rationale for not including those data in the risk assessments.

4.8.1 RI Fixed Laboratory Data

The usability of fixed-laboratory data based on precision and accuracy is assessed during data validation. Measurement Performance Indicators (MPIs; quality control samples or measurement performance activities) are used to evaluate precision and accuracy. The validator reviews MPIs to determine whether measurement performance criteria (MPC) are achieved. If MPC are not achieved, qualifiers are applied to the associated data. Data for which the associated MPIs greatly exceed MPCs are considered unusable and are rejected (R). The remaining data are considered usable as qualified. Determination of what is usable versus not usable is based on the data validation guidelines applied.

During validation, data may be qualified to indicate that the concentration presented is an estimate that may be biased high (J+) or low (J-) or have an indeterminate bias (J). The reporting limit may also be considered an estimate (UJ). Multiple qualifiers are used to indicate that there may be a high bias in a detected result because of blank contamination: Detected results may be qualified with EB, BB, or TB or the detected result may be changed to a non-detected result (U) of the same or greater concentration.

Data validation for RI fixed laboratory data was performed in accordance with the project-specific SAP, the USEPA National Functional Guidelines (versions issued from 2008 through 2014), the *EPA New England Environmental Data Review Program Guidance* (Final Version 4-22-2013), and the *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance / Procedures* (Final Version #0, April 22, 2013). Validation criteria and actions were tailored to the method requirements. Validation qualifiers were applied to the data during validation if measurement performance criteria were not achieved. Usability with respect to precision and accuracy is therefore captured in the data qualifiers applied during data validation.

A summary of the level of validation conducted for the fixed-laboratory data is presented by sampling round in Table 4-27 for the first three RI phases. The MPIs that failed criteria and the resulting validation actions are presented by sample delivery group (SDG) in the data validation memoranda, located in Appendix U. Data validation memoranda for Phase 4 and Phase 5 SDGs are also included in Appendix U.

Assessment of the data usability based on representativeness considers the extent to which the sampling design adequately reflects the environmental conditions of the study area and adherence to that sample design, in terms of the numbers, types, and locations of samples collected. The rationale behind the sampling design is presented in the project-specific SAP and SAP addenda. There were no significant deviations from that sampling design.

Comparability of the data with historic data and within the data set is based on an assessment of whether comparable methods of sample collection and analysis were used for the data sets being compared, whether the procedures documented in the SAP were followed or, if not, whether accepted, published methods of sample collection and analysis were used and clearly documented. There were no significant deviations from the sample collection and analysis methods presented in the SAP.

Sensitivity, the ability of the method to detect values at sufficiently low concentrations to determine within known confidence whether that result is above or below the Project Action Limit, is assessed by reviewing the results for which non-detects were reported and determining whether uncertainty in the risk assessment or conceptual site model has resulted from the inadequate sensitivity. The uncertainty sections of the human health and ecological risk assessments include a discussion of the impact of inadequate sensitivity on the risk assessments. There was no impact on the conceptual site model, since the conceptual site model is based on the nature and extent and fate and transport of total chromium, hexavalent chromium, and TCE, for which sensitivity was adequate.

Completeness is discussed in terms of the percentage of samples collected relative to what was planned for collection and the percentage of usable analytical results obtained for the samples collected and submitted for fixed-laboratory analysis. Completeness goals of 95% were set for all matrices and analyses. A summary of the completeness achieved for fixed-laboratory data for RI Phases 1, 2, and 3 is presented in Table 4-28.

4.8.2 RI Sub-Slab and Indoor Air Sampling by EPA OEME (2015 and 2016)

In March of 2015, EPA OEME performed sub-slab soil gas and indoor air sampling of several residences proximal to the groundwater VOC plume. The purpose of the effort was to obtain current data usable for risk assessment purposes and to confirm whether the source of indoor air VOCs (if present) was likely due to vapor intrusion. EPA performed the analyses using EPA Method TO-15 and conducted internal review of the data, and it was provided to AECOM for use in the RI and risk assessments. The report produced by OEME includes a usability review that concluded all the data collected are of acceptable quality to represent the levels of VOCs present at the indoor air, ambient air, and soil gas sampling locations. Results are presented in Table 4-9 and the complete report is included in Appendix A.

In September 2016, EPA OEME sampled the indoor air in one additional residence for VOCs using the same methods as for the 2015 effort. Results are presented in Table 4-9 and the complete report that includes a usability review is included in Appendix A.

4.8.3 RI Surface Water Toxicity Testing

A total of 10 surface water samples were collected from three EAs and reference locations (three from Bliss Brook, two from the W&L Property & Southern Wetland EA, two from the Mechanics Pond EA, and three from reference locations). Samples were collected by AECOM and EPA on July 21, 2015. Samples were transported to the New England Regional Laboratory (NERL) to run a single species toxicity test, using the cladoceran *Ceriodaphnia dubia* (*C.dubia*) as the test species. Synthetic 60 mg/L hardness water was used as the laboratory control water for the *C. dubia*. The measured endpoints for *C. dubia* were survival and reproduction. The detailed report is included as Appendix E of the BERA [AECOM, May 2019a].

The toxicity tests were performed according to procedures detailed in EPA Office of Environmental Measurement and Evaluation (OEME) Biology Section SOPs and Chronic Toxicity Test Method for *C. dubia* [USEPA, 2013]. Both of these SOPs describe aquatic toxicity test methods used by the EPA OEME according to EPA [USEPA, 2002]. All surface water samples were tested at full strength (100% undiluted) with daily renewal from the same water sample from July 21, 2015.

C. dubia

The *C. dubia* toxicity test successfully met the testing criteria for both survival and reproduction [USEPA, 2002]. The laboratory control had a survival of 90% which is over the minimum Test Acceptability Criteria (TAC) of 80% and had 88.9% of surviving laboratory control brooders having at least three broods and a total average reproduction of 15 neonates. The six-day survival data were evaluated to determine if there was a significant ($p < 0.05$) difference in survival between the reference samples and site samples. The two samples showing a significant effect on survival and reproduction were samples SW-210 and SW-212 from Bliss Brook when compared to their reference sample SW-207. These samples, historically known for high chromium concentrations, were significantly different from Bliss Brook site reference with complete mortality and no reproduction measured for either sample. No other endpoints at any exposure area sample locations showed a significant effect on survival or reproduction (Table 43 of the BERA).

4.8.4 RI Sediment Toxicity Testing

A total of 12 bulk sediment samples were collected from three exposure areas (Bliss Brook, W&L Property & Southern Wetland, and Mechanics Pond) and three additional samples were collected from reference locations. Samples were transported to NERL and were kept at 4°C until test initiation. Co-located sediment samples were collected for chemical analysis. Samples were used to conduct biological toxicity testing in two batches, performing 10-day sediment toxicity test using juveniles of the benthic invertebrates *Hyalella azteca* (a freshwater amphipod) and larvae of *Chironomus dilutus* (a midge-fly).

The toxicity tests followed procedures in the EPA Ecosystem Assessment (ECA) Biology Section SOP Static Bulk Sediment Toxicity Testing, which describes sediment toxicity tests methods according to EPA [USEPA,

2000]. The measured endpoints for *H. azteca* were survival, dry biomass, and dry weight. For *C. dilutus*, survival, ash-free dry biomass, and ash-free dry weight (AFDW) were the selected endpoints. The key difference between biomass and weight (or ash-free dry biomass and AFDW) is that biomass accounts for impacted survival (biomass is average weight divided by the starting number of test organisms), whereas weight is based on the number of surviving organisms. Eight replicates per sediment sample and the laboratory control were prepared for each species. Refer to the BERA [AECOM, May 2019a] for interpretation of the sediment toxicity testing results.

H. azteca

Test Acceptability Criteria (TAC) specified by EPA [USEPA, 2002], were met for both part 1 and part 2 of the tests with survival in the laboratory controls above 80% (83.8%, part 1 and 96.3% in part 2). Survival in reference samples ranged from 88.8% to 95%. In comparison to the corresponding reference locations, only two locations, SD-312 (Mechanics Pond) and SD-203 (W&L Property & Southern Wetland) showed significant reduction in survival (68.8% at SD-312, and 72.5% at SD-203) of *H. azteca*. Site sample locations, at SD-224, SD-226, and SD-312 in Mechanics Pond, and SD-211 in Bliss Brook were significantly lower than reference location samples for biomass. When reference locations were compared to sample locations for mean dry weight (growth), the only site sample significantly different from reference was SD-312 (Mechanics Pond).

C. dilutus

The controls in the *C. dilutus* sediment toxicity test met the TAC for both survival and growth. Survival in the reference for Bliss Brook (SD-207) was low (62.5%). The low survival for this reference was partly due to the presence of a leech in one of the replicates where only one surviving *C. dilutus* was found at the termination of the test. In comparison to the corresponding reference locations, none of the site samples showed significant reduction in survival of *C. dilutus*. The survival in the Bliss Brook samples ranged from 85 to 89%. Site sample locations SD-312 in Mechanics Pond, and SD-203 and SD-205 in the W&L Property & Southern Wetland exposure areas, had endpoints that were significantly lower than reference location samples for biomass. When reference locations were compared to sample locations, for mean dry weight (growth), the site samples significantly different from reference were SD-205 in the W&L Property & Southern Wetland exposure area, SD-312 (Mechanics Pond), and SD-208, SD-212, and SD-218 in Bliss Brook.

4.8.5 RI Soil Toxicity Testing

In October 2016, 20 soil samples from two ecological exposure areas (W&L Property and Southern Wetland, and Bliss Brook) were collected in the vicinity of locations previously sampled, with the goal of providing a range of chromium concentrations and habitats for future toxicity testing. After review of chemical analytical data and discussion with EPA, 12 of the 20 samples were selected for toxicity testing to represent both exposure areas and a range of total chromium concentrations. The selected samples were used to conduct biological toxicity testing for two test organisms. For the earthworm, *E. fetida*, two separate assays were performed; a standard 14-day laboratory toxicity test with a survival endpoint, as well as a separate 28-day bioaccumulation study. These assays were performed separately due to the amount of biomass required for the bioaccumulation study. For the perennial rye grass, *Lolium perenne*, 14-day post emergence assays were performed. Detailed reports and interpretation of the results are included in the BERA [AECOM, May 2019a]. Toxicity testing was conducted by EnviroSystems, Inc (ESI) of Hampton, New Hampshire.

***E.* fetida – 14-day Survival**

Toxicological and analytical protocols used in this program followed procedures outlined in *Standard Methods for the Examination of Water and Wastewater*, 22nd Edition [APHA 2012] and *Standard Guide for Conducting Laboratory Soil Toxicity or Bioaccumulation Tests With the Lumbricid Earthworm Eisenia Fetida and the Enchytraeid Potworm Enchytraeus albidus* [ASTM 2016]. These protocols provide standard approaches for physical and chemical analysis and for the evaluation of toxicological effects of soils on terrestrial organisms.

The measured endpoint for *E. fetida* was 14-day survival. At the end of the 14-day exposure period, survival in the laboratory control treatment was 100% with a coefficient of variation of 0%. This endpoint meets or exceeds the minimum protocol specification of ±90% survival, indicating that the test organisms were healthy and the assay is valid.

***E. fetida* – 28-Day Bioaccumulation Study**

Bioaccumulation testing was based on programs and protocols developed by the ASTM [2012] and US EPA [1989]. Uptake of metals from project soils was assessed by conducting 28-day exposure assays with the earthworm, *E. fetida*. The endpoint for the 28-day exposure study was body burden (bioaccumulation). The test utilized 5 replicates with approximately 20 grams of worms added to each replicate. After 28 days exposure, living worms were removed from the soil, rinsed with deionized water to remove soil particles and allowed to depurate overnight. Worm tissue was homogenized, digested in acid, and analyzed for total metals. Results were reported on a dry weight basis. The data from the bioaccumulation study were not used to directly assess an endpoint for earthworms; these data were used to evaluate the earthworm tissue concentrations used in the wildlife models for short-tailed shrew and American robin.

L. perenne

Toxicological and analytical protocols followed procedures outlined in *Conducting Terrestrial Plant Toxicity Tests* [ASTM, 2014] with modifications according to *Seedling Emergence and Seedling Growth* [US EPA, 2012]. Endpoints for the plant toxicity tests were percent emergence, days to emergence, percent survival, and growth measured as shoot length (mm), shoot weight (mg biomass) and root length (mm). At the end of the exposure period, emergence in the laboratory control treatment was 95% overall with a coefficient of variation of 9.75%. Laboratory control survival was also 95% (100% in plants that emerged). These endpoints meet or exceed the minimum protocol specification of ≥70% survival overall [ASTM, 2014], and ≥75% emergence with ≥90% survival in those plants that emerged [US EPA, 2012].

4.8.6 Pre-RI Data: EPA Removal Program PA/SI, Phases 1 - 5 (2010-2012)

In August 2010, the EPA Emergency Planning and Response Branch ("removal program") began a removal program PA/SI that documented the presence of residual chromic acid in vats, and high concentrations of metals in surface soils along the western bank of Bliss Brook extending into the backyards of several residences along Paulette Lane and North Avenue [Weston, October 2012]. As a result, EPA initiated a Time-Critical Removal Action with the objective of mitigating ongoing human health exposure to metals-impacted soil and groundwater and preventing potential future releases. Activities conducted as part of the Time-Critical Removal Action included removal of the W&L buildings and residual waste materials, excavation and off-site disposal of contaminated sediment from the Southern Wetland), and construction of an engineered cover to isolate surficial soils adjacent to Bliss Brook.

Numerous soil and sediment samples were collected as part of this effort, and the results were used in the RI and the risk assessments for those locations where the samples are representative of current conditions (i.e., are for areas where the soil/sediment was not excavated and disposed off-site as part of the Time-Critical Removal Action). The figures in Section 2 identify the sampling locations color-coded to indicate whether a location was excavated or not.

4.8.7 Pre-RI Data: EPA Remedial Program Site Reassessment (2010-2012)

During implementation of the Time-Critical Removal Action, EPA also conducted additional soil, sediment and surface water sampling to further assess the extent of the chromium contamination. The EPA Site Reassessment work [Weston, April 2012] focused on the surface water pathway and included sampling of sediment and surface water in the wetlands between the W&L property and the drainage culvert beneath Deanville Road, and downstream along Bliss Brook as far as south as West Street (approximately 1,800 feet south of the W&L property). Surface and shallow soil samples were also collected from upland areas along these water courses to assess possible flood plain impacts. The results were presented in the Expanded Trip

Report [Weston, April 2012]. These results were used in the RI and risk assessments because the data were validated and are judged likely to be representative of current conditions.

4.8.8 Historic Data Not used in RI or Risk Assessments

Historic investigations were discussed in Section 1 of this report and included the following efforts:

MCP Investigations (1990 - 2001)
EPA Remedial Program, Initial Site Inspection (2004)
Historic Vapor Intrusion Evaluations (2009, 2010)
MassDEP Investigations (2011 and 2012)

MCP Investigations (1990-2001)

MCP investigation data for soil and groundwater was collected by consultants for W&L between 1990 and 2001, and results were reported in MCP site assessment submittals to MassDEP [RCA, 1990; RCA, 2001]. These investigations determined that soil and groundwater on the W&L property and adjacent areas had been impacted by metals including trivalent chromium and hexavalent chromium and lead, as well as VOCs including TCE, TCA, and their breakdown products. Groundwater contamination was documented to have migrated southeastward from the property towards Bliss Brook, passing beneath a residential area along Paulette Lane. These data were used to support development of the conceptual site model and to plan investigation locations for subsequent investigations performed by EPA and MassDEP, as well as this RI. Some of the monitoring wells installed as part of these investigations were included in the monitoring well network for the RI. However, because of the age of the data, and the inability to obtain the original data packages and perform validation of the data, it was not used in the risk assessments.

EPA Remedial Program, Initial Site Inspection (2004)

The investigation work was completed in 2004 and included a reconnaissance of the property and nearby residential neighborhoods, a survey of the wetlands and Bliss Brook, interviews, and collection of a limited number of soil, sediment, surface water, and groundwater samples. A report describing the work as well as past investigations was issued in 2005 [TtNUS, 2005]. The sampling confirmed that contaminants were present in sediments and surface water (including downstream water bodies Bungay River and Ten Mile River/Mechanics Pond). Results from the well couplet sampling suggested that the contaminant plume discharges to Bliss Brook but does not cross below it. The soil sampling showed elevated concentrations of chromium and hexavalent chromium. These data were used in conjunction with other historic data to help identify sampling locations for the RI but were not used in the risk assessments due to the age of the data.

Historic Vapor Intrusion Evaluations (2009, 2010)

EPA and MassDEP performed sub-slab sampling and indoor air sampling in residential homes in 2008, 2009 and 2010, as described in Section 1 [OEME, 2008; OEME, 2009; MassDEP, February 2010; MassDEP, December 2010]. The data from these evaluations was used to help plan the investigation performed by EPA in the winter of 2015 that included both sub-slab sampling and indoor air sampling. Because the sampling performed in 2015 was performed during heating season, when the possibility of vapor intrusion is normally greatest, and because the data are recent and achieved reporting limits low enough for human health risk assessment purposes, only the 2015 data were used in the human health risk assessment. Similar sampling was performed for House G in 2016 (once access became available to EPA), and these data were also used in the human health risk assessment.

MassDEP Investigations (2011 and 2012)

These efforts were performed by a contractor to MassDEP in 2011 and 2012 and included installation of monitoring wells (the DEP series wells), sampling of groundwater for VOCs, hexavalent chromium, and lead, and sampling of surface water and sediment from Bliss Brook [ESM, 2011; ESM, 2012]. Some of the MassDEP

series wells were selected for inclusion in the RI monitoring well network, and the results from this sampling were used to help plan the installation of new monitoring wells for the RI. The groundwater data from the 2011 and 2012 sampling efforts were not used in the risk assessments because the results from the RI groundwater sampling efforts are more recent and include a more comprehensive well network and list of analytes.

5.0 Contaminant Fate and Transport

Understanding fate and transport mechanism(s) of principal site contaminants is an important element when characterizing present and future risks to receptors, as well as in the evaluation of cleanup alternatives. Fate and transport mechanism(s) can vary by media (e.g. surface water, sediment, etc.) and can also vary by contaminant due to the unique chemical properties of individual contaminants which may be part of a mixture of contaminants associated with a release. The data collected to date provide useful information and can be used to estimate travel times, locations of contaminant discharge, and attenuation (if any).

5.1 Contaminants

The RI data and historic data from previous investigations confirm that releases have occurred on the W&L property and to the wetland to the south. The data show that contaminants have migrated and as a result have impacted surface soil, sediment, and surface water beyond the original release areas. Chromium contamination in sediment extends at least one mile downstream to Mechanics Pond. Groundwater had been rising to the surface in the backyards of residences along North Avenue and Paulette Lane prior to the EPA removal action, transporting chromium contamination to the surface soil in those yards. Groundwater has also carried chromium contamination to Bliss Brook, which upon seasonal flooding was transported to soil along the banks of the brook. Direct discharge of chromium-contaminated wastewater to the Southern Wetland led to significant soil/sediment contamination (some of which was excavated by the EPA removal action), and there are some indications that chromium has migrated via overland flow and the storm water drainage system to waterbodies that receive surface water from the Southern Wetland.

Based on the results of the investigation and data evaluation presented in Section 4, the predominant contaminant is chromium in both the trivalent and hexavalent forms. The next most-prevalent contaminants are chlorinated VOCs (primarily TCE), which are found in soil, groundwater, soil gas, and indoor air. 1,4-Dioxane is also found in groundwater and is considered separately from other organic contaminants due to its unique properties. PAHs and metals other than chromium are also present in study area soil and sediment, and metals other than chromium are present in groundwater, but concentrations of these constituents are lower overall, their extent is not as large as that for chromium and chlorinated VOCs, and their mobility is more limited.

5.1.1 Physical and Chemical Characteristics of Site Contaminants

An understanding of the physical and chemical properties of a contaminant helps to explain how the contaminant moves (or partitions) from one medium into other media (i.e., soils into air, soils into groundwater, or groundwater into air). The extent to which a dissolved contaminant moves or is transported through the environment is referred to as its mobility. In general, a contaminant that is water soluble will move readily with groundwater and is considered highly mobile. Conversely, a contaminant whose movement is strongly retarded in the environment due to chemical and physical interactions with the media into which it is released is considered to have low mobility. The extent and rate at which a contaminant is transported through various media is based on the chemical and physical interactions of that contaminant with the media. During transport there are attenuation processes that can reduce the rate of movement and the concentration of contaminant in the environment; these include: volatilization, adsorption, biodegradation, hydrolysis, and photolysis. A brief description of these processes follows.

- Volatilization: The process by which a chemical is transferred from soil or water into a vapor phase or the atmosphere.

- Adsorption: The adherence of a chemical to the surface of a substance or another chemical. This interaction does not involve penetration of the chemical into, or changes in the structure of, the other substance. The process of adsorption results in retardation of contaminant movement.

- Biodegradation: The breaking down (degradation) of contaminants by microorganisms.

- Hydrolysis: The reaction which occurs when a contaminant comes into contact with and reacts with water. As a result, a hydroxyl group (-OH) typically replaces a leaving group (such as a chloride) in the chemical structure.

- Photolysis: The breaking down (degradation) of contaminants by sunlight.

Physical and chemical properties of the contaminant controlling these interactions include molecular weight, water solubility, vapor pressure, Henry's Law constant, and partition and sorption coefficients. Definitions of these properties are as follows:

- Molecular weight is the sum of the atomic weights of the atoms that make up a compound. Typically, chemicals with a lower molecular weight are more mobile in the environment.

- The water solubility of a chemical is defined as the maximum concentration of that chemical that will dissolve in pure water at a specific temperature and pH. Highly soluble chemicals can be rapidly leached from wastes or contaminated soils and are generally quite mobile in water. High solubility can be associated with higher biodegradability [Lyman et al., 1982].

- Vapor pressure is a measure of the volatility of a chemical from its pure state at a specific temperature. A higher vapor pressure indicates a greater tendency for movement of a chemical from water or soil into air. A vapor pressure greater than 1 mm Hg is usually characteristic of chemicals having high volatility, whereas a vapor pressure less than 0.01 mm Hg is characteristic of chemicals with low or very limited volatility.

- Henry's Law constant is the ratio of the concentrations of a constituent in vapor and aqueous phases at equilibrium. The concentration in the vapor phase is often measured in terms of partial pressure (atm), and the concentration in the liquid phase is often measured in terms of moles per unit volume (moles/m^3). Henry's Law constant is an important predictor of a chemical's volatilization from water to air. A large Henry's Law constant, (i.e., greater than $1x10^{-3}$ atm-m^3/mole) indicates a tendency for a chemical to readily move from water into air.

- The octanol/water partitioning coefficient (K_{ow}) is an indicator describing the attraction of a particular compound for organics (soil/sediment) as compared to water. K_{ow} is defined as the ratio of a chemical's concentration in the organic phase (specifically, in octanol) to its concentration in the aqueous phase of a two-phase organic/water system. Octanol/water partition coefficients are usually reported in logarithmic form and are used to represent the tendency of a chemical to move from water to organic material such as soil or organic phases such as non-aqueous phase liquids. Chemicals with a low log K_{ow} value (i.e., less than 1) may tend to remain dissolved in water rather than adsorb onto an organic material and may be classified as hydrophilic compounds. Chemicals with a high log K_{ow} value (i.e., greater than 4) are more likely to remain adsorbed to organic material rather than migrate to water. These chemicals are considered hydrophobic [Lyman et al., 1982].

- The soil sorption coefficient, K_{oc}, indicates the tendency of an organic chemical to adsorb to particles containing organic carbon and water. This organic carbon/water partition coefficient is usually reported in logarithmic format. A low value indicates that a chemical can easily be leached (desorbed) from soil/sediment to water. A high value indicates that a chemical has a strong affinity to bind to organic material in soil. A chemical with a high K_{oc} value may be of concern if it is detected in water, as it usually indicates a tendency to bioaccumulate. The typical range of log K_{oc} values for organic chemicals is 1 to 7 [Lyman et al., 1982]. Values of log K_{oc} greater than 3 generally indicate chemicals with greater adsorption potential. A log K_{oc} value between 2 and 3 is considered intermediate, while a log K_{oc} value less than 2 indicates a low adsorption capability.

5.1.2 Chromium

Within the environment, chromium is found primarily in two oxidation states: trivalent [also written as Cr^{3+} or Cr(III)] and hexavalent [also written as Cr^{6+} or Cr(VI)] [Palmer and Puls, 1994]. The chemical and toxicological properties of each are substantially different. Hexavalent chromium is relatively mobile in the environment and is acutely toxic, mutagenic, teratogenic, and carcinogenic, while trivalent chromium has relatively low toxicity and is immobile under moderately alkaline to slightly acidic conditions [Palmer and Puls, 1994]. Hexavalent chromium tends to be moderately to highly mobile in most shallow groundwater aquifers due to its high solubility and the low to moderate sorption to soil of anions containing hexavalent chromium, because of competition for sorption sites by other background anions [Stanin, 2005].

Trivalent chromium is the most common form of naturally occurring chromium in natural waters [Testa, 2005]. There are some geologic environments, such as arid alluvial basins in the southwestern United States, where hexavalent chromium is naturally occurring in groundwater [Steinpress et al., 2005]. However, for most aquifers to which no releases of anthropogenic chromium have occurred, naturally occurring chromium is typically in its trivalent state, and only small concentrations of hexavalent chromium may exist as a result of oxidation of natural trivalent chromium [Bartlett, 1991 as cited in USEPA, 2000].

Once released to the environment, hexavalent chromium can be reduced to trivalent chromium in the environment via oxidation-reduction (redox) reactions whereby chromium gains electrons (is reduced) and another species in the environment donates electrons (is oxidized) [Stanin, 2005]. Species that are common in groundwater that can act to reduce hexavalent chromium to trivalent chromium include ferrous iron [Fe^{2+} or Fe(II)], dissolved sulfides, and organic matter [Stanin, 2005]. The reverse reaction (oxidation of trivalent chromium to hexavalent chromium) is less likely to occur in the environment; while many oxidizing agents are known to oxidize trivalent chromium to hexavalent chromium, few are found in groundwater in sufficient concentration to do so [Stanin, 2005].

During migration of a hexavalent chromium plume in groundwater, there is little mixing of the waters containing reducing agents and the hexavalent chromium. The mixing of reductants and hexavalent chromium occurs primarily through the interactions of the plume and the immobile soil matrix rather than reactions within the dissolved phase. For this reason, the reductive capacity of the soil matrix is an important factor in determining the degree to which the hexavalent chromium plume can be attenuated naturally due to reduction to trivalent chromium [Stanin, 2005]. Depending on the mass of hexavalent chromium released to the environment, a plume may attenuate over time within a relatively short distance from the point of the original release, or it may exhaust the reductive capacity of the soil near the initial release point rather quickly and continue migrating downgradient.

It is likely that the reductive capacity of the saturated soil between the W&L property and Bliss Brook has been exhausted, since hexavalent chromium concentrations in samples from piezometers installed next to the brook are elevated and the brook itself is impacted. The total masses of trivalent or hexavalent chromium released at the W&L facility over the years are unknown. The form of chromium used in the plating baths operated at the W&L facility was hexavalent chromium (chromic acid, H_2CrO_4). As a result, discharges of spent plating baths, spills or leakage of plating bath liquids, and rinse waters for plated parts would all have contained hexavalent chromium. Prior to 1970, wastewater from the facility was not treated but was reported to have been directly discharged to the wetland south of the property, and therefore it is assumed that this waste contained hexavalent chromium. After 1970, a batch treatment system was installed and treated wastewater was discharged to the Southern Wetland, while metal sludge was discharged to an unlined surface impoundment and lagoon system. The form of chromium in this metal sludge was likely a combination of residual hexavalent (dissolved) chromium and trivalent chromium, precipitated with other metals in the sludge in the form of chromium hydroxide [$Cr(OH_3)$]. The treatment process likely did not reduce all of the hexavalent chromium, and therefore treated wastewater discharged to the Southern Wetland likely continued to contain hexavalent chromium (although at much lower concentrations than the untreated wastewater discharged prior to 1970).

5.1.2.1 Fate and Transport of Hexavalent Chromium

Hexavalent chromium is found in soil, sediment, groundwater, and surface water on the W&L property and Southern Wetland and in Bliss Brook due to the decades-long practice of disposing chromic acid (H_2CrO_4) plating

bath solutions and untreated process wastewater to either the ground surface or directly to the wetland south of the former facility. Analytical data collected to date reveal the predominant type of chromium in groundwater near and downgradient of the site is hexavalent chromium. Hexavalent chromium is very water soluble and moves with groundwater to downgradient areas – most significantly, the yards of residences abutting Bliss Brook where groundwater upwelling occurs.

As noted above, when hexavalent chromium is directly discharged to soil or sediment or migrates via groundwater to soil and sediment that contains reduced iron, organic matter, or any other reducing agent, the hexavalent chromium can be reduced to trivalent chromium [Stanin, 2005; ATSDR, 2012; Canadian Council of Ministers of the Environment (CCME), 1999], and then precipitate out due to the low solubility of trivalent chromium. This process is evident from the results from sediment sampling in the Southern Wetland and in Bliss Brook at locations where hexavalent chromium was historically released or continues to be released due to contaminated groundwater discharge or migration in surface water downgradient from the discharge zone. Table 5-1 presents total chromium and hexavalent chromium concentrations for sediment samples from several such locations sampled during the RI. The results show that total chromium is present in the sediments at concentrations well above concentrations found in reference samples, but that there is much less hexavalent chromium detected, suggesting that reduction of the originally released hexavalent chromium to trivalent chromium has occurred or continues to occur.

5.1.2.2 Fate and Transport of Trivalent Chromium

Trivalent chromium (Cr^{3+}) is the predominant form of chromium present in soil and sediment throughout the study area; this is based on a comparison of total chromium and hexavalent chromium results from the same sample. The total chromium analysis measures both forms of chromium, and therefore the trivalent chromium concentration can be estimated as the difference between the total chromium concentration and the hexavalent chromium concentration. Trivalent chromium has very limited solubility in groundwater and does not significantly leach from soil or sediment to groundwater. Oxidation of the trivalent chromium to hexavalent chromium is unlikely because of the lack of oxidizing agents in the environment to support this reaction. Therefore, the trivalent chromium in soil and sediment is likely to be stable. Migration of trivalent chromium has occurred and is likely still occurring due to the transport of chromium-contaminated soil and sediment particles via wind or surface water, respectively.

5.1.3 TCE and Other Chlorinated Volatile Organic Compounds

The primary VOCs impacting groundwater are TCE and 1,1,1-TCA; both were used at the W&L facility as degreasing agents, and there is anecdotal evidence that spills took place, and possibly disposal to a former dry well (see Section 1.6 for discussion of potential sources).

Chlorinated VOCs (cVOCs) tend to have: 1) low viscosities (are able to move easily into the subsurface); 2) low interfacial tensions with water (are able to enter into water-wet pores and rock fractures); 3) high vapor pressure (can diffuse rapidly in the unsaturated zone and volatilize to soil gas and intrude into buildings); 4) relatively low partitioning to soils; and 5) slow biodegradability under certain geochemical and biological conditions [Pankow and Cherry, 1996].

TCE and other cVOCs can be broken down in the subsurface by chemical and/or biological processes that can attenuate their concentrations. Natural biodegradation of dissolved chlorinated solvents in groundwater systems primarily occurs through reductive dechlorination [USEPA, 1997]. During this process, the chlorinated hydrocarbon is used as an electron acceptor and a chlorine atom is removed and replaced with a hydrogen atom. In general, reductive dechlorination occurs by sequential dechlorination from PCE to TCE to DCE to vinyl chloride and finally to ethene. One line of evidence of biodegradation occurring in groundwater systems is evidence of daughter products such as cis-1,2-DCE and vinyl chloride dissolved in groundwater. 1,1,1-TCA can also undergo dechlorination, resulting in lesser chlorinated ethane daughter products such as 1,1-dichloroethane, 1,2-dichloroethane, and chloroethane. The daughter products of TCE and 1,1,1-TCA biodegradation are detected in groundwater within the study area, indicating that these processes are occurring.

Once introduced into the subsurface, cVOCs can migrate in several ways, including in the dissolved phase in the unsaturated and saturated zones, and in the vapor phase in the unsaturated zone. The migration may be retarded by adsorption, dispersion and diffusion, and attenuated by volatilization and biodegradation. These mechanisms primarily affect the dissolved phase in a fractured porous medium [Pankow and Cherry, 1996]. As noted above, the presence in groundwater of daughter products expected from biodegradation of TCE and 1,1,1-TCA is an indication that reductive dechlorination is occurring.

5.1.4 1,4-Dioxane

The following information about this compound is from EPA's Technical Fact Sheet for 1,4-Dioxane [USEPA, 2014] which cites many other references about the compound. 1,4-Dioxane is a contaminant at many sites contaminated with certain chlorinated solvents (particularly 1,1,1-TCA) because of its widespread use as a stabilizer for chlorinated solvents. It is completely miscible with water. It migrates rapidly in groundwater and does not volatilize rapidly from surface water bodies. It is relatively resistant to biodegradation in water and soil and does not bio-concentrate in the food chain.

Because 1,1,1-TCA was used at the W&L facility and is found in the groundwater, the source of the 1,4-dioxane in the groundwater is believed to be its use as a stabilizer in the 1,1,1-TCA that was released at the property. However, it is used in many products, including paint strippers, dyes, greases, varnishes and waxes, and is also found as an impurity in antifreeze and aircraft deicing fluids and in some consumer products (deodorants, shampoos and cosmetics) [USEPA, 2014], so other sources are possible.

The extent of 1,4-dioxane in groundwater is similar to that of hexavalent chromium (see Section 4.5.4.3), which is consistent with the fact that it is completely soluble (as is hexavalent chromium) and would be expected to migrate at a similar rate, with little attenuation due to volatilization, sorption on soil particles, or biodegradation. Concentrations are relatively low, consistent with the concept that it was released to the property in association with 1,1,1-TCA, in which it may have been present in relatively low concentrations as a stabilizer.

5.1.5 Metals Other Than Chromium

Other metals present in study area soil and sediment in concentrations above those found in reference samples, and likely to have been released through activities at the W&L facility, include lead, copper, and silver. Copper was reportedly plated at the facility many years ago and lead sulfate was also reportedly used. Historic documents do not make mention of silver plating having been performed, but the presence of silver at elevated levels in the Southern Wetland suggests it was discharged from the facility in the past.

Assessing the mobility of metals in environmental media is complicated because of the many organic and inorganic complexes and salts they form. In addition, metals undergo a variety of processes in soils and water, which include hydrolysis, reduction, oxidation, and adsorption (i.e., ion exchange, specific adsorption). These reactions are highly dependent on factors such as pH, salinity, ionic strength, particle-surface reactions, and the presence of anions and natural organic acids (humics and fulvics). When compared to hexavalent chromium, the metals detected at the study area are expected to be relatively insoluble, either in metallic form or as inorganic complexes and salts, but may become soluble in the presence of organic acids and reducing conditions. Adsorption of metals through cation exchange, specific adsorption, co-precipitation, or organic complexation by soils and sediments is the dominant fate mechanism in natural systems. Metals vary in the extent to which they are adsorbed by these mechanisms, and the adsorbents range in selectivity for metals. For example, the selectivity of peat for divalent metals is as follows [Alloway, 1990]:

Lead > copper > cadmium = zinc > calcium

Cations, such as barium and manganese, are mobile in natural environments. These cations are easily leached from salts and minerals to water systems due to weathering processes. In water, these cations are dissociated to ionic forms, which tend to remain mobile unless affected by changes in pH or other interactions, such as retention by soils through cation exchange reactions.

Metals occur naturally in soil, groundwater, and surface water systems as a result of weathering of rocks and soils and decay of plants. However, concentrations are often elevated in industrial settings. Common sources of heavy metals are atmospheric pollution from motor vehicles, fuel combustion products (e.g., ash, slag), industrial sludge, and wastewater [Alloway, 1990]. Conclusions regarding the migration of metals are difficult to make due to the numerous reactions and complex geochemistry discussed above.

5.1.6 Polyaromatic Hydrocarbons

PAHs are semi-volatile organic compounds with 2- to 6-ring structures. PAHs are commonly found in the environment, stemming from petrogenic (associated with oils) and pyrogenic (associated with combustion) sources. Pyrogenic PAHs are dominated by the larger ringed PAHs (i.e., high molecular weight PAHs [HMW PAHs]). HMW PAHs include several of the priority pollutant PAHs such as benzo(a)anthracene, benzo(b)fluoranthene, chrysene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene and benzo(k)fluoranthene. These constituents are generally characterized as having low vapor pressures, low water solubility, and high octanol/water partitioning coefficients. As such, they are strongly sorbed to particles, particularly those with high organic carbon content, and are relatively immobile and persistent in the environment. The smaller-ring PAHs (i.e., naphthalenes) are slightly soluble in water and may volatilize from water to air to a limited extent. As the number of aromatic rings in the chemical structure of PAHs increases, the affinity for adsorbing to soils and organic materials increases. Biodegradation of multi-ring PAHs in waters and soil, although slow, is the major mechanism for the removal of PAHs. The potential for wind and stormwater erosion is present, but the migration of PAHs via volatilization or leaching is unlikely to be a major transport mechanism at the study area.

5.2 Fate and Transport Processes and Migration Pathways

A discussion of fate and transport processes and migration pathways that have occurred or continue to occur in the study area is presented in the following sections.

5.2.1 Leaching from Soil to Groundwater

Contaminant leaching refers to the movement of a contaminant downward through the soil to the underlying groundwater. Many factors affect whether or not a contaminant leaches, including the solubility of the contaminant in water, reactions that transform contaminants to other forms that could be more or less leachable than the original form (e.g., biodegradation or chemical reactions), the volatility of the contaminant, and the amount of rainfall and its ability to infiltrate the soil.

A site-specific condition that plays a significant role in contaminant leaching is the amount of water that percolates through the soil column (infiltration). Soil contamination is highest on the former W&L property itself and in the Southern Wetland. Since most of this area is uncovered (with the exception of the former building foundation and parking lot), infiltration is occurring and there is the potential for subsequent leaching of soil contamination to groundwater. Of the primary contaminants, hexavalent chromium and 1,4-dioxane have the most leaching potential because of their high solubility in water. Contaminant properties are described in Section 5.1. The presence of hexavalent chromium and 1,4-dioxane in groundwater suggests that leaching of these contaminants from soil to groundwater has already occurred. Dissolved hexavalent chromium was also directly released to saturated soil and groundwater by the direct discharge of chromium-contaminated wastewater to the Southern Wetland (pre-1970). It is also likely that chromium-contaminated water (plating bath solutions and/or rinse water) directly leaked to the subsurface in the area of the former plating tanks, as evidenced by the hexavalent chromium contaminant plume which appears to have its source in the former plating tank area (see figures in Section 4).

5.2.2 Migration with Groundwater Flow

The principal processes related to contaminant migration with bulk groundwater flow are advection and dispersion. Properties of the contaminant (i.e., sorption, solubility, etc.) also play a role as discussed in Section 5.1.

Advection is the process by which a dissolved constituent is transported by the bulk motion of groundwater flow [Freeze and Cherry, 1979]. The dissolved constituent will move at an average rate equal to the groundwater flow velocity if it does not react in some manner to become less mobile (e.g., sorption onto soil particles or reaction with other dissolved constituents and transformation to a form that is less soluble in the groundwater). Variations in hydraulic conductivity and hydraulic gradients within the aquifer will result in differing advection rates. In addition, the presence and orientation of fracture patterns in bedrock also have a significant effect on contaminant migration in bedrock.

Estimates of groundwater flow velocity for the study area were presented in Section 3.3. The estimated velocity of groundwater west of North Avenue is about 0.34 feet/day or 124 feet/year. East of North Avenue, the estimated groundwater velocity is 1.4 feet/day or 511 feet/year.

Hydrodynamic dispersion is the spreading out of a dissolved constituent from the path it would be expected to follow just by advection, resulting in a dilution of the concentration of the constituent [Freeze and Cherry, 1979]. It occurs because of mechanical mixing during advection and because of molecular diffusion. Diffusion is a relatively minor process except at low groundwater velocities, whereby constituents migrate along a concentration gradient independent of any bulk flow of the fluid they are dissolved in. Mechanical mixing causes the majority of the dispersion that occurs as a dissolved constituent migrates through groundwater. The result of dispersion is that the dissolved constituent plume spreads out laterally and vertically as it moves downgradient from the original source to a greater degree than would be predicted by advection alone.

To aid in evaluating contaminant migration with groundwater flow, the following data was collected: water level measurements from monitoring wells and staff gauges in Bliss Brook; geologic logging of the different saturated materials; and borehole geophysics and bedrock fracture analysis. Hydraulic conductivity data was collected in previous investigations and these data are presented in Section 3.3. A detailed discussion of groundwater flow patterns in overburden and bedrock and contaminant extent in groundwater was previously presented in Section 4.5.

5.2.3 Discharge from Groundwater to Surface Water and Migration with Surface Water

Once a substance becomes dissolved in groundwater, it can migrate from the source area through the aquifer and potentially discharge to a surface water body. A portion of the groundwater contaminant plume migrating from the former W&L facility discharges to Bliss Brook, as evidenced by vertical gradients and hexavalent chromium concentrations in monitoring wells and piezometers and in the brook water itself. A portion of the plume also migrates under the brook. Contaminants entering Bliss Brook via groundwater discharge flow downstream to the brook's confluence with the Bungay River. The Bungay River then converges with the Ten Mile River. Further discussion of the interaction of groundwater with the brook was presented in Section 4.5.3.

Contaminants also migrate with the surface water that exists in the Southern Wetland. Surface water from the Southern Wetland drains to a culvert under Deanville Road, entering a City of Attleboro storm water drainage pipe that runs south along North Avenue to West Street, where it makes a turn along West Street and discharges to Bliss Brook immediately south of the West Street Bridge.

5.2.4 Wind-Blown and Stormwater Runoff and Flooding

Contaminant transport via wind or storm water runoff may be significant pathways in uncovered or unpaved areas with contaminated surface soils. Contaminants in soil may be transported via wind and deposited elsewhere on the property or via surface runoff and discharged elsewhere on the property or to the brook and/or associated tributaries. As indicated previously, the former W&L property is not entirely paved. Exposed soil on the property itself was covered by a 6-inch layer of clean soil during the EPA removal action to reduce the potential for direct exposure to contaminated soil and transport of contaminated soil off-property via storm water runoff, but historically this transport mechanism likely occurred to transport contaminants to the Southern Wetland. In turn, transport of contaminated soil and sediment from the Southern Wetland to the city storm water drain system (Deanville Road culvert) occurred historically, as evidenced by chromium contamination detected in a sample from a manhole along the culvert that is considered to be representative of grit accumulation within the storm drain (SD-09 on Figure 4-17). This transport is likely still occurring to some degree. Flooding of the

Southern Wetland also likely transported contaminated soil and sediment particles to upland soils bordering the wetland. Similarly, occasional flooding of Bliss Brook likely transported contamination from bottom sediment to the banks.

5.2.5 Volatilization to Air

The chlorinated VOCs present in Site groundwater and (to a much more limited extent) soil, have Henry's Law constants that predict high volatility. Once a compound volatilizes from groundwater or soil into the soil gas, it can migrate via the soil gas into the ambient air, along preferential pathways such as the bedding along subsurface utilities, and into overlying structures through penetrations or cracks in foundation walls and floors. This migration is governed by a number of factors, including the permeability of the soil and pressure gradients from changes in barometric pressure and the HVAC systems in operation within overlying structures. Migration of VOCs from soil gas into overlying buildings, resulting in impacts to the indoor air, is called vapor intrusion. Contaminants may exist in indoor air from sources other than vapor intrusion, but when a volatile contaminant is found in nearby soil and groundwater, in soil gas beneath the floor of a building, and in the indoor air of the building, a vapor intrusion pathway is confirmed to exist.

Historical work by EPA and MassDEP had previously confirmed the existence of vapor intrusion in several homes near the site, and sub-slab depressurization systems (SSDS) were installed (or were already in place for radon mitigation) to address the vapor intrusion concern. To support the RI, EPA conducted additional vapor intrusion evaluations in a greater number of homes (see Section 2.4 and Appendix A). The homes with operating SSDS were also visited by EPA and AECOM to confirm that the systems were effective in creating negative pressure gradients as designed, such that VOCs could not migrate into the homes.

5.3 Fate and Transport Summary

The primary contaminants identified during historic and RI investigations are chromium (total and hexavalent), and chlorinated VOCs, with lesser amounts of other metals, 1,4-dioxane, and PAHs.

Hexavalent chromium is the predominant contaminant in groundwater and has migrated to a large extent with the groundwater due to its high mobility in this medium. Hexavalent chromium is also found in surface water along a stretch of Bliss Brook where contaminated groundwater discharges. It is also found in soil and sediment on-property and in the Southern Wetland, consistent with the conceptual site model that it was directly discharged to the Southern Wetland and also leaked from plating trenches. Finally, it is found in soil under the area covered by the removal program. Hexavalent chromium is present to a lesser extent in Bliss Brook sediments and sediments in Mechanics Pond, most likely because it is reduced to trivalent chromium in the sediments due to the presence of sulfides, ferrous iron, and organic matter acting as reducing agents. Hexavalent chromium does not volatilize from soil or groundwater, and therefore is not of concern with respect to vapor intrusion, although historically (when the W&L facility was in operation) it was likely emitted to air from the plating baths. These emissions deposited on the roof and the ground surface in the immediate proximity of the former building.

Trivalent chromium is prevalent in soil and sediment on the property, within the Southern Wetland, east of North Avenue under the cover, along Bliss Brook, and in Mechanics Pond. In general, for off-property soil sample locations, concentrations are higher in wetland soil than in upland soil. As with hexavalent chromium, trivalent chromium concentrations in soil are elevated under the cover. It is likely the trivalent chromium in soil under the cover is from hexavalent chromium that migrated to this area via groundwater and was then reduced to trivalent chromium by reducing agents present in the soil. In groundwater, there is virtually no trivalent chromium; essentially all the chromium detected in both total (unfiltered) and dissolved (field-filtered) samples is in the hexavalent form.

Chlorinated VOCs (TCE; 1,1,1-TCA, and their daughter products) were detected to a limited extent in soil, but are present in both overburden and bedrock groundwater, forming a plume that is of generally smaller lateral and vertical extent than the hexavalent chromium plume. Maps of the TCE plume are included in Section 4. The TCE plume is likely being attenuated due to mechanisms such as biodegradation (as evidenced by the presence of daughter products), adsorption to soil particles, and volatilization into soil gas. Homes overlying the plume

show evidence of vapor intrusion, based on the fact that the cVOCs found in groundwater are also detected in sub-slab soil gas samples and indoor air samples.

1,4-Dioxane is present in groundwater in low concentrations, with an approximate extent similar to that of the hexavalent chromium contamination. Similar to hexavalent chromium, its high water solubility, mobility, and low biodegradability cause it to migrate quickly in groundwater. Because 1,4-dioxane is used as a stabilizer in chlorinated solvents, the spills/releases of solvents to the property are believed to also be one source of the 1,4-dioxane.

Lead is present in in numerous bulk (unsieved) surface soil samples collected from the Walton & Lonsbury property itself, and in wetland soil of the Southern Wetland, at concentrations above 500 mg/kg (well above the residential screening value of 200 mg/kg). No pattern to the distribution of the lead is apparent. The source of the lead found in surface soil on the property is not definitively known, but it is known that lead sulfate was used at the W&L facility. Few soil samples east of North Avenue (e.g., under the engineered cover) show substantially elevated lead concentrations, indicating that unlike chromium, lead has not migrated to this area via groundwater.

Concentrations of fine fraction total lead are generally greater than 200 mg/kg for residential properties west of North Avenue that border the Southern Wetland, and are also generally greater in wetland soil samples than in upland soil samples. Lead concentrations in the fine fraction are also consistently higher than the corresponding bulk (unsieved) soil sample collected from the same location.

There is no clear correlation of higher unsieved or fine fraction total lead results with elevated total chromium results in the same samples, but there does appear to be some association, suggesting that releases from the W&L facility may be the source of at least a portion of the fine fraction lead. It is possible that the source of lead in the wetland soil south of the property is the former W&L facility operations (e.g., discharge of lead-contaminated wastes), and that upland soil bordering the wetland area became contaminated with lead due to transport of wetland soil particles to bordering upland areas by flooding. Other factors that may contribute to lead contamination in the wetland soil and bordering upland soils are road runoff, historic fill, and lead-based paint. In addition, there is a possible localized source of lead contamination (as well as petroleum/PAHs) in the form of a former bus garage located on North Avenue. Aerial photos from 1959 and 1961 show what appear to be buses parked on the western side of North Avenue just north of its intersection with Deanville Road [Lockheed Martin, 2013]. Sediment lead concentrations show a greater likelihood of association with former W&L facility activities, because elevated concentrations are clustered in the Southern Wetland.

Metals other than chromium and lead are present in soil and sediment on the property and in the Southern Wetland, although concentrations are much lower. The source(s) of many of the metals are not known; however, it is known that copper was used at the facility. Silver plating may also have been performed based on the high levels of silver found in Southern Wetland sediment that are coincidental with elevated chromium concentrations. Historic fill on the property is also a potential source of metals. Metals other than chromium do not appear to be significantly above reference sample concentrations for soil and sediment along Bliss Brook. This indicates that, in contrast to hexavalent chromium, other metals are not being transported to Bliss Brook via the groundwater migration pathway. Other metals are found in Mechanics Pond sediments at concentrations well above those found in reference sediment samples. In part, these metals may have been transported from the property and Southern Wetland via migration through storm water discharge from the Southern Wetland, but numerous other sources along the Ten Mile River and the pond itself are also likely contributors. It is noted that sediment samples from Farmer's Pond (which feeds the Ten Mile River upstream of Mechanics Pond and was sampled originally for possible use as a reference pond) showed elevated total chromium, copper, and silver concentrations compared to the samples ultimately selected as reference samples.

PAHs are semi-volatile organic compounds with 2- to 6-ring structures. PAHs are commonly found in the environment, stemming from petrogenic (associated with oils) and pyrogenic (associated with combustion) sources. PAHs are present in on-property soil and in some off-property soil samples at concentrations in excess of those found in reference soil samples, but the extent is much more limited than for chromium. The source of the PAHs in on-property soil may be from historic petroleum releases as well as the presence of historic fill from an unknown (off property) source. PAH concentrations in soil samples collected along Bliss Brook were mostly

consistent with reference soil sample concentrations. Similarly, concentrations of PAHs in sediment samples from Bliss Brook were similar to or lower than those in reference sediment samples. PAH contamination in off-property samples is not clearly associated with the property, and other sources are likely.

6.0 Baseline Risk Assessment Summary

The baseline human health risk assessment is included in Appendix Y and the baseline ecological risk assessment is included in Appendix Z. A summary of each is presented below.

6.1 Human Health Evaluation

A baseline human health risk assessment was performed for the Site that evaluated soil, groundwater, sediment, surface water, and indoor air data collected between 2013 and 2017, using the most current risk assessment methodology and toxicity information available.

The focus of the risk assessment was the quantitative, and in some cases qualitative, evaluation of potential risks to human receptors who have the potential for current and/or future exposure to contaminants in soil, groundwater, sediment, surface water, and indoor air. The areas of interest include the W&L Property, potentially impacted surface water bodies and wetland/floodplain areas located downgradient of the W&L Property, VOC and inorganic (primarily chromium) groundwater plumes within and downgradient of the W&L Property, and occupied residential buildings along Paulette Lane and North Avenue potentially impacted via the vapor intrusion pathway[2].

Data used to prepare this risk assessment were obtained from several different investigations conducted between 2010 and 2017. Groundwater data were used as inputs to dilution/dispersion models to estimate trench air concentrations for the human health risk assessment.

Numerous Chemicals of Potential Concern (COPCs) were detected in site media. In soil, COPCs consisted of the following compounds: tetrachloroethene, carcinogenic polycyclic aromatic hydrocarbons (PAHs), naphthalene, carbazole, DDT, endrin aldehyde, and metals (e.g., antimony, arsenic, hexavalent chromium, cobalt, lead, and thallium). In sediment, COPCs included: tetrachloroethene, carcinogenic PAHs, carbazole, DDT, Aroclor-1260, and a number of metals. COPCs selected for surface water included: chlorinated VOCs, 1,4-dioxane, and metals (e.g., hexavalent chromium). In groundwater, the COPCs included: chlorinated VOCs, benzene, 1,4-dioxane, and metals (e.g., arsenic, hexavalent chromium, cobalt, and manganese). In trench air, COPCs were limited to 1,1-dichloroethane and trichloroethene. Indoor air COPCs included: petroleum-related compounds (e.g., benzene), chloroform, and trichloroethene.

Potential non-carcinogenic and carcinogenic human health risks were quantitatively assessed for the central tendency exposure (CTE) and reasonable maximum exposure (RME) cases for surface soil, subsurface soil, sediment, surface water, groundwater, trench air, and indoor air at each exposure point determined to be accessible to human receptors currently or in the future.

EPA recommends calculation of the 95-percent upper confidence limit (95% UCL) on the arithmetic mean concentration for the estimation of both the RME and CTE risk [EPA, 1989; 1992] for most scenarios. Therefore, whenever possible, the 95% UCL has been calculated and used as the EPC for both the RME and CTE cases. When the 95% UCL was greater than the maximum detected value, the maximum and average concentrations were generally used. The 95% UCLs were calculated using EPA's program ProUCL Statistical Software [EPA, 2011; 2016c]. The 95% UCL values were calculated by this program when a sufficient number of samples were available from an exposure point. When too few samples were available, the program was unable to calculate a reliable 95% UCL value.

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[2] Vapor intrusion is defined as the movement of VOCs from groundwater into soil gas and then into a building. Only VOCs present in indoor air as part of a complete vapor intrusion pathway are evaluated in the risk assessment.

Possible human exposure to the selected COPCs was characterized through exposure pathways for current and future land use. An exposure pathway describes the course a chemical follows while moving through environmental media to a receptor. An exposure pathway may consist of a mechanism of release of contaminants to an environmental medium (e.g., soil), an exposure route (e.g., ingestion) and a receptor (e.g., trespasser). An exposure pathway is considered complete when contact by a receptor with contaminated media may occur currently or in the future. For purposes of this risk assessment, only potentially complete exposure pathways were quantitatively evaluated.

The W&L Property is currently unoccupied and surrounded by a security fence, with the exception of the leased portion which is covered entirely by pavement and buildings. The W&L Property is bounded to the north by Walton Street, to the south by wetlands and wooded areas with residential properties further to the south, to the east by North Avenue with residences and Bliss Brook on the eastern side of roadway, and to the west by industrial/commercial properties. The W&L Property was evaluated as a future exposure point for upland and floodplain soil exposures assuming the property is re-developed for commercial or residential use. Shallow groundwater was included in the evaluation for future direct contact exposures for an excavation worker on the W&L Property. In addition, the vapor intrusion pathway was qualitatively evaluated for potential impacts of soil and shallow groundwater VOCs on the indoor air of future occupied buildings constructed on the W&L Property.

Site-related impacts have been noted in the soil, sediment, and surface water within the wetland area and associated areas subject to flooding to the south of the W&L Property (i.e., residential yards along the west side of North Avenue) as well as in residential yards and Bliss Brook and its floodplain to the east of North Avenue. Impacts extend downstream of Bliss Brook to the Bungay River and Mechanics Pond.

Soil beneath the engineered cover constructed in the Paulette Lane/North Avenue residential back yards (east of North Avenue) was qualitatively evaluated as a future exposure point, assuming the integrity of the cover is compromised.

Because VOC-impacted shallow groundwater is flowing from the site in a southeasterly direction, eleven residential buildings along North Avenue and Paulette Lane were evaluated for the vapor intrusion pathway. In addition, groundwater from the center of the VOC and chromium plumes was evaluated as a future tap water exposure point. Finally, shallow groundwater was evaluated for future direct contact exposures for an excavation worker in Off-Property Areas.

The following bullets summarize the pathways quantitatively evaluated in the baseline human health risk assessment for each receptor/exposure point:

- **Recreational user scenario, Southern Wetland and Bliss Brook, current/future**

  Ingestion pathway: Floodplain/wetland surface soil, sediment
  Dermal contact pathway: Floodplain/wetland surface soil, sediment, surface water

- **Recreational user scenario, Bungay River/Mechanics Pond, current/future**
  Ingestion pathway: sediment, surface water
  Dermal contact pathway: sediment, surface water

- **Recreational user scenario, Downstream of Mechanics Pond, current/future**

  Ingestion pathway: sediment
  Dermal contact pathway: sediment, surface water

- **Residential scenario, West and East of North Avenue, current/future**

  Ingestion pathway: Floodplain surface soil
  Inhalation pathway: Fugitive dust and VOCs
  Dermal contact pathway: Floodplain surface soil

- **Residential scenario, Paulette Lane/North Avenue, current/future**

  Inhalation pathway: Indoor air (vapor intrusion)

- **Residential scenario, Site-Wide, future**

  Ingestion pathway: Groundwater (center of the plume)
  Inhalation pathway: Groundwater (center of the plume)
  Dermal contact pathway: Groundwater (center of the plume)

- **Commercial worker scenario, W&L Property, future**

  Ingestion pathway: Upland/floodplain surface/subsurface soil
  Inhalation pathway: Fugitive dust and VOCs
  Dermal contact pathway: Upland/floodplain surface/subsurface soil

- **Residential scenario, W&L Property, future**

  Ingestion pathway: Upland/floodplain surface/subsurface soil
  Inhalation pathway: Fugitive dust and VOCs
  Dermal contact pathway: Upland/floodplain surface/subsurface soil

- **Construction worker scenario, W&L Property, future**

  Ingestion pathway: Upland/floodplain surface/subsurface soil, shallow groundwater
  Inhalation pathway: Trench air
  Fugitive dust and VOCs
  Dermal contact pathway: Upland/floodplain surface/subsurface soil, shallow groundwater

- **Construction worker scenario, Off-Property Areas, future**

  Ingestion pathway: Shallow groundwater
  Inhalation pathway: Trench air
  Dermal contact pathway: Shallow groundwater

Estimated risks were compared to the EPA target Incremental Lifetime Cancer Risk (ILCR) range of 10^{-4} to 10^{-6} and target hazard index (HI) of 1 for non-carcinogenic effects.

Table ES-1 of the HHRA summarizes the estimated cancer and non-cancer risk for the evaluated receptor/exposure points. For receptors/exposure points with estimated risk in excess of EPA criteria, major contributors to risk (ILCRs $>10^{-6}$ or HIs >1) were identified. Risks were summarized for both the RME and CTE receptors for each of the evaluated exposure points. When risks were estimated for a child and adult receptor, the HIs were presented as the most conservative (i.e., the child HIs), while ILCRs were the sum of the child and adult risks (i.e., a total receptor cancer risk). The risks presented by exposure point have been summed together, as appropriate, when a receptor would be exposed to more than one medium during activities. In cases where the total pathway HI exceeded 1, COPCs having similar target organ effects were summed for each pathway and medium.

Lead in soil and sediment was evaluated through the use of EPA models for children and adults. Potential health risks associated with lead exposure were evaluated by comparing the estimated blood lead level from exposure to lead in soil and sediment to the target blood lead level of 5 µg/dL. Site-specific studies (i.e., soil sieving and *in vitro* bioaccessibility testing) were performed for four of the soil exposure points to more accurately characterize

surface soil lead risks. Lead in groundwater was evaluated by comparing monitoring well concentrations to the Safe Drinking Water Act (SDWA) action level of 15 micrograms per liter (µg/L).

The media for which RME exposures for one or more pathways exceeded the target risk range for carcinogens and/or risk criterion for non-carcinogens are summarized below. The risk-contributing contaminant(s) are also summarized below by exposure point:

- Current and future recreational users exposed to surface water at the Bliss Brook exposure point, due to hexavalent chromium;
- Future residents exposed to upland/floodplain surface soil at the W&L Property, due to benzo(a)pyrene, benzo(b)fluoranthene, indeno(1,2,3-cd)pyrene, antimony, arsenic, hexavalent chromium, and thallium;
- Future residents exposed to upland/floodplain surface/subsurface soil at the W&L Property, due to benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, antimony, arsenic, hexavalent chromium, and cobalt;
- Future construction worker exposure to shallow groundwater at the W&L Property, due to hexavalent chromium; and
- Future residents exposed to Site-Wide tap water, due to 1,1-dichloroethane, cis-1,2-dichloroethene, trichloroethene, vinyl chloride, 1,4-dioxane, arsenic, hexavalent chromium, cobalt, and manganese.

The lead modeling indicated that surface soil at the Residential Yards West of North Avenue for a current/future residential scenario and surface/subsurface soil at the W&L Property for a future residential scenario have a greater than 5 percent probability that children exposed will have a blood lead level that exceeds the target blood lead level of concern (5 µg/dL).

Total lead exceeded the Safe Drinking Water Act action level of 15 µg/L in three monitoring wells (maximum detected concentration in parenthesis): AE-09S (50 µg/L), DEP-3D (49.7 µg/L), and DEP-5S (108 µg/L). Dissolved lead results for these wells were all less than 15 µg/L except for the dissolved lead result in monitoring well DEP-5S collected in August 2014, corresponding to the total lead result of 108 µg/L. Monitoring well DEP-5S was sampled twice more, in December 2014 and September 2015, with total lead results exceeding 15 µg/L (26.1 µg/L and 33.7 µg/L, respectively) but dissolved lead results less than 15 µg/L (4.2 µg/L and 2.1 µg/L). Therefore, the elevated detections of total lead in these three monitoring wells may be related to suspended particulates in the sample, rather than to dissolved lead concentrations. Of these three monitoring wells, only AE-09S is located within the mapped inorganics plume migrating from the W&L Property. This monitoring well is downgradient of the location with the highest soil concentration of lead (location P-78-SB-16; 13,200 mg/kg). Because the SDWA action level is exceeded, lead in groundwater is assumed to pose an unacceptable future drinking water risk even though lead was not evaluated in the risk assessment through modeling. Further evaluation of lead in groundwater may be warranted in the feasibility study to reduce the uncertainty in the risk assessment.

A qualitative evaluation of covered soils at the Residential Yards East of North Avenue exposure point indicates that hexavalent chromium concentrations beneath the existing cover would be associated with an ILCR greater than the upper bound of the target risk range (10^{-4}) if the cover was disturbed and soils beneath the cover were contacted.

A screening-level evaluation has been performed of soil and shallow groundwater VOC concentrations to identify those areas of the W&L Property where a future vapor intrusion evaluation is warranted, should an occupied building be constructed. Based on concentrations of VOCs in shallow groundwater to the south of the former building foundation and detections of soil VOCs within and to the south of the former building

footprint, it is concluded that that an unacceptable vapor intrusion future risk is possible if buildings are constructed on the W&L property in the future.

Although the sub-slab soil gas and indoor air of Buildings I, J, and K were not sampled due to the presence of an active sub-slab mitigation system, a potential future indoor air risk may exist at these buildings if the systems were shut off. Shallow groundwater concentrations of trichloroethene within 100 feet of these buildings exceed EPA's groundwater vapor intrusion screening levels, indicating potential impacts to indoor air that could pose a risk if the systems failed to operate.

6.2 Environmental Evaluation

6.2.1 Introduction

A Baseline Ecological Risk Assessment was prepared for the Site to evaluate the risk to ecological receptors potentially affected by the site. Chemicals originally identified as potentially site-related contaminants released to the environment included metals (primarily total chromium, hexavalent chromium, and lead), chlorinated VOCs, and PAHs.

The major habitats potentially affected by the site include a large wetland complex (Southern Wetland) immediately south of the property, a stream (Bliss Brook) affected by discharge of contaminated groundwater to the east of the property, and a river/pond system (Mechanics Pond and Bungay River) downstream. In addition, upland and wetland habitat surrounding the Southern Wetland and Bliss Brook were also investigated. The potential receptors evaluated in the BERA included: 1) aquatic receptors (e.g., invertebrates, fish, and amphibians) living in the affected waterways; 2) benthic invertebrates in affected sediments; 3) invertebrates and plants exposed to soils affected by site contaminants; and 4) wildlife receptors (birds and mammals) exposed via the food chain to site-related contamination in the sediments or soils.

6.2.2 Risk Analysis

A Screening-Level Ecological Risk Assessment (SLERA) was performed in 2015 using available surface water, sediment, and soil analytical data. The SLERA identified many inorganic and organic COPCs in all of the aquatic and terrestrial habitats evaluated as potentially affected by the site. This finding prompted EPA to proceed with a BERA to further determine the degree and extent of ecological risk in these habitats.

The Conceptual Site Model developed for the SLERA identified the likely exposure pathways and receptors in the aquatic and terrestrial habitats addressed in the SLERA. The receptor groups of concern were benthic invertebrates, water column invertebrates, fish, amphibians, and piscivorous birds feeding in aquatic habitats. In upland and wetland surrounding these aquatic habitats, the receptor groups of concern included soil invertebrates and plants exposed directly to soils and insectivorous birds and mammals exposed through the food chain.

In order to assess the risk to each of the selected receptors, appropriate assessment and measurement endpoints were selected. The assessment endpoints used in the BERA included:

- Survival and growth of a water column invertebrate community: *Are the levels of dissolved COPCs in surface water sufficiently high to cause biologically-significant changes or impair the function of the water column invertebrate community in the surface water Exposure Areas (EAs) at the site?*
- Survival and reproduction of local amphibian populations: *Are the levels of dissolved COPCs in surface water sufficiently high to cause biologically-significant reduction of reproduction of the amphibian populations in the surface water EAs at the site?*
- Survival and growth of a local fish community: *Are the levels of dissolved COPCs in surface water sufficiently high to cause biologically-significant changes or impair the function of the fish community in the surface water EAs at the site?*

- Survival and growth of a benthic invertebrate community: *Are the COPC levels in sediment or porewater sufficiently high to cause biologically-significant changes or impair the function of the benthic invertebrate community in aquatic EAs at the site?*
- Survival and growth of a soil invertebrate community: *Are the COPC levels in the upland and wetland soils sufficiently high to cause biologically-significant changes or impair the function of the soil invertebrate community in upland or wetland EAs at the site?*
- Survival and growth of terrestrial and wetland plant communities*: Are the COPC levels in the upland and wetland soils sufficiently high to cause biologically-significant changes or impair the function of the terrestrial plant community in upland or wetland EAs at the site?*
- Sustainability (survival, growth, reproduction) of local populations of herbivorous birds: *Are the COPC levels in surface soils and biota sufficiently high to cause biologically-significant changes or impair the function of herbivorous bird populations foraging in the upland/wetland areas of the EAs?*
- Sustainability (survival, growth, reproduction) of local populations of insectivorous birds: *Are the COPC levels in surface soils and soil invertebrates sufficiently high to cause biologically-significant changes or impair the function of insectivorous bird populations foraging in the upland/wetland areas of the EAs?*
- Sustainability (survival, growth, reproduction) of local populations of herbivorous mammals: *Are the COPC levels in surface soils and biota sufficiently high to cause biologically-significant changes or impair the function of herbivorous mammal populations foraging in the upland/wetland areas of the EAs?*
- Sustainability (survival, growth, reproduction) of local populations of insectivorous mammals: *Are the COPC levels in surface soils and soil invertebrates sufficiently high to cause biologically-significant changes or impair the function of insectivorous mammal populations foraging in the upland/wetland areas of the EAs?*
- Sustainability (survival, growth, reproduction) of local populations of piscivorous birds: *Are the COPC levels in surface water, sediment, and biota sufficiently high to impair piscivorous bird populations foraging in aquatic EAs at the site?*

It is generally not possible to directly quantify the risk to assessment endpoints. Instead, a series of measurement endpoints were selected for this purpose. These endpoints were measurable ecological characteristics, quantified through laboratory or field experimentation, which could be related back to the ecological resources selected as the assessment endpoints.

The following four types of measurement endpoints were used in the BERA:

- Compare COPC levels in surface water, sediment, porewater, and soil samples to published media-specific benchmarks.
- Assess the bioavailability of divalent metals in sediment samples by measuring the Acid Volatile Sulfides (AVS), Simultaneously Extracted Metals (SEM), and Total Organic Carbon (TOC).
- Perform toxicity tests in the laboratory by exposing laboratory test organisms to site surface water, sediment, or soils.
- Use food chain modeling to calculate a Total Daily Dose (TDD) to herbivorous, insectivorous, and piscivorous wildlife receptors based on exposure to surface water and aquatic (fish) or terrestrial biota (soil invertebrates or plants) and incidental ingestion of soil or sediment; compare these TDDs to Toxicity Reference Values (TRVs) from the literature.

Additional data were collected following preparation of the SLERA in order to address these endpoints.

Three EAs within the areas of investigation were utilized for the purposes of the risk assessment based on habitat types, contaminant fate and transport pathways, and hydrogeology. These exposure areas are:

- W&L Property & Southern Wetland;

- Bliss Brook; and
- Mechanics Pond (including a short segment of Bungay River).

In addition, sample locations were identified to represent background or reference locations for each habitat and media type (surface water, sediment, and soil).

The exposure analysis in the BERA estimated the COPC concentrations to which each of the target receptor groups are exposed in the habitats affected by site contaminants. COPCs were selected in the SLERA, and this list was used to identify COPC-specific Exposure Point Concentrations (EPCs) for surface water, sediment, soil, and TDDs for wildlife receptors. The EPCs used in the risk calculations consisted of the following two values: 1) A Central Tendency Exposure (CTE) was calculated by taking the arithmetic mean of the available analytical data for each COPC identified in an EA; and 2) A Reasonable Maximum Exposure (RME) was calculated as the smaller of either the 95% Upper Confidence Limit (UCL) of the mean or the maximum value of the available analytical data for each COPC identified in an EA.

The Hazard Quotient (HQ) is used to identify the COPCs most responsible for risk. The HQ method compares measured or estimated exposures to corresponding toxicity values. During risk characterization, all HQ-derived risks for each EA were compared to their corresponding risk at the reference areas by calculating a Residual Risk value (RR). The RR was obtained by subtracting the reference risk from the site risk. This approach allowed for a more thorough and accurate assessment of site-related impacts by factoring in reference COPC levels.

6.2.3 General Conclusions of the BERA

6.2.3.1 Aquatic Receptors

The potential for ecological risk to aquatic invertebrate (zooplankton), amphibian, and fish populations exposed to surface water in each EA was assessed using two measurement endpoints. These included comparison of surface water concentrations to surface water quality benchmarks and evaluation of surface water toxicity testing results.

The preponderance of the evidence indicated potential for severe ecological impairment to the aquatic invertebrates as well as potentially severe effects on amphibians and the fish community in Bliss Brook due to exposure to chromium (VI) and potentially chronic effects of chromium (III). The evaluation of endpoints for surface water indicated no significant risk to aquatic invertebrates, amphibians or fish due to exposure to surface water in the Property & Southern Wetland and Mechanics Pond EAs. The reliability of this conclusion is high because it is based on multiple lines of evidence, including laboratory toxicity testing.

6.2.3.2 Benthic Invertebrates

The potential for ecological risk to the benthic community exposed to site-related contamination was assessed in all of the aquatic habitats using four measurement endpoints. These included comparison of sediment concentrations to sediment benchmarks, comparison of porewater concentrations to surface water benchmarks, evaluation of sediment toxicity testing results, and evaluation of bioavailability using SEM, AVS, and TOC evaluations of sediment.

The evidence indicated a low risk to benthic invertebrate communities based on toxicity testing, and no association of this risk related to elevated chromium concentrations in most of the sediments in Bliss Brook and Property & Southern Wetland EAs. SEM, AVS, and TOC and porewater data indicated that any observed sediment toxicity measured is unlikely to be associated with divalent metals or chromium measured in sediments. In Mechanics Pond, one sediment sample collected in the deeper water at the southern end of the pond (SD-312) showed the highest toxicity to sediment invertebrates. The cause of toxicity in this sample is uncertain, but may be related to PAHs or pesticides in the sediment. In all other sediment locations, toxicity was low, even at high total chromium levels.

6.2.3.3 Soil Invertebrates and Plants

Risk from the direct exposure of upland and wetland plants and invertebrates to surface soils was assessed via two measurement endpoints. One endpoint was the comparison of bulk soil concentrations to soil benchmarks (mainly no-observed-effects concentrations). The second endpoint was to further evaluate the toxicity of site soils on invertebrate and plant receptors in laboratory toxicity tests.

Risk from direct exposure to soils was identified in Bliss Brook for antimony, chromium, selenium, and silver based on comparisons to benchmarks. The magnitude of the RR HQs for selenium and silver were low; the RR HQs for chromium were high for both plants and invertebrates due to the high EPCs for chromium (III) calculated for soil. Risk to plants and invertebrates exposed directly to soil in the Property & Southern Wetland EA, based on comparisons to benchmarks, were identified primarily due to antimony, chromium, and silver, with high RR HQ values calculated for chromium.

Results of laboratory toxicity testing, however, indicated that site soils had no effect on the survival of soil invertebrates and no significant effects on the emergence or survival of plants. The toxicity testing endpoints indicated a reduction in growth of plants on site soils as compared to laboratory controls, with no association of this risk related to elevated chromium concentrations.

6.2.3.4 Wildlife Receptors

The potential for ecological risk to piscivorous birds feeding in the three EA waterways was assessed using one endpoint. A food chain model was used to estimate the COPC concentrations in fish tissue and to calculate daily doses to great blue heron for comparison to avian TRVs.

The heron model results indicated possible risk to piscivorous birds feeding in the Property & Southern Wetland EA, above risk levels at reference locations. The risk to piscivorous birds is related to elevated concentrations of chromium in sediments of the Southern Wetland. However, confidence in this conclusion is low.

The potential for ecological risk to insectivorous birds and mammals feeding in Property & Southern Wetland and Bliss Brook EAs was assessed using one endpoint (food chain modeling). Earthworm bioaccumulation test results on site soils were used to estimate the COPC concentrations in invertebrate tissue and then to calculate daily doses to American robin and short-tailed shrew for comparison to wildlife TRVs. Risks to wildlife receptors in the Bliss Brook EA are not expected based on the evaluation of the average EPCs and the LOAELs in the food chain model. Low risk was identified to American robin for soil exposures to chromium (III) in the Property & Southern Wetland EA. Refinement of the modeling assumptions results in the conclusion of negligible risk to receptors obtaining less than 50% of their daily food intake from the wetland soils in site areas within the Property & Southern Wetland. These risks are not likely to represent significant ecological risks to wildlife populations.

The potential for ecological risk to herbivorous birds and mammals feeding in the Property & Southern Wetland and Bliss Brook EAs was assessed using one endpoint (food chain modeling). Food chain models were used to estimate the COPC concentrations in plant tissue and to calculate daily doses to meadow vole and bobwhite quail for comparison to wildlife TRVs. Risks to wildlife receptors in the Bliss Brook EA are not expected based on the evaluation of the average EPCs and the LOAELs in the food chain model. Low risk was identified to bobwhite quail due to exposures to chromium in soil in the Property & Southern Wetland EA. Refinement of the modeling assumptions results in the conclusion of negligible risk to receptors obtaining less than 50% of their daily food intake from the wetland soils in site areas within the Property & Southern Wetland. These risks are not likely to represent a significant ecological risk to wildlife populations.

7.0 Summary of RI Findings

This RI report presents the results from five phases of field investigation that were performed between June 2014 and October 2018 to support completion of a RI/FS for the W&L Superfund site. This report includes a comprehensive evaluation of all five phases of RI data, as well as historic data determined to be usable for the human health and ecological risk assessments. The site history and potential source areas were described previously (refer to Section 1). This section summarizes the:

- nature and extent of contamination;
- the fate and transport processes and migration pathways of the primary contaminants; and
- the results of the human health and ecological risk assessments performed using the RI data and historic data

7.1 Remedial Investigation

The RI field activities (Phases 1, 2, 3, 4 and 5: June 2014 – October 2018) consisted of activities related to the following tasks:

- Contaminant Delineation in Soil (soil borings, surficial soil sampling in upland and wetland areas)
- Contaminant Delineation in Groundwater (assessment of existing monitoring wells; installing new monitoring wells and piezometers; groundwater sampling; water level measurements)
- Hydrogeological investigations (borehole geophysics and evaluation of groundwater/surface water interactions at Bliss Brook)
- Surface Water and Sediment Investigation (surface water and sediment sampling)
- Ecological Assessment (habitat characterization, toxicity testing)
- Site Surveys (elevation and location surveys of investigation points)
- Vapor Intrusion Assessment (sub-slab and indoor air sampling in residential homes performed by EPA's Office of Environmental Measurement and Evaluation)
- Surface soil evaluation for fine-fraction lead based on updated EPA guidance

Phase 1 of the remedial investigation was planned with the primary objective of filling data gaps from previous investigations regarding the nature and extent of contamination in soil, sediment, surface water, and groundwater. Phase 1 activities were performed in June-July 2014 and consisted of the installation of monitoring wells and the collection of samples of groundwater, surface water, soil, and sediment.

Phase 2 field activities took place in October-December 2014 and consisted of additional soil, sediment, and surface water sampling, the installation of several new monitoring wells, and sampling of the new wells along with the wells previously sampled in Phase 1.

In March of 2015, EPA performed the final Phase 2 investigative activity consisting of sub-slab soil gas and indoor air sampling of several residences proximal to the groundwater VOC plume. The results from Phase 1

and Phase 2 groundwater sampling for VOCs (primarily TCE) were used to help determine which homes would be included in this effort.

Phase 3 field activities were performed during the summer and fall of 2015, and consisted of:

- Collection of sediment samples for purposes of toxicity testing and chemical analysis
- Collection of pore water samples co-located with sediment samples for chemical analysis
- Collection of surface water samples for purposes of toxicity testing and chemical analysis
- Installation of multi-level wells to investigate vertical extent of contamination in bedrock
- Installation of micro-wells (piezometers) to investigate the effectiveness of the Permeable Reactive Barrier installed as part of the EPA removal action
- A comprehensive groundwater sampling event that included the new wells and a subset of existing wells

Phase 4 field activities were performed in October 2016 and consisted of:

- Collection of 20 soil samples from two ecological exposure areas (W&L Property and Southern Wetland, and Bliss Brook)
- Review of chemical analytical data from these 20 samples to select 12 of the 20 for toxicity testing
- Toxicity testing consisting of earthworm survival testing, earthworm bioaccumulation testing, and seedling germination and growth tests using rye grass

Phase 5 field activities were performed between November 2017 and October 2018 and consisted of:

- Collection of 51 surface soil samples from 48 locations with analysis for fine fraction total lead and IVBA lead from four exposure points: residential yards west of North Avenue, residential yards east of North Avenue, the Southern Wetland, and Bliss Brook
- Closure of data gaps in the understanding of the shallow overburden groundwater plume and its interaction with nearby surface water bodies (the ponded area south of the Walton & Lonsbury property and Bliss Brook) by installing additional piezometers and staff gauges, sampling the piezometers, surveying these new installations and also all existing wells in use for the RI, and conducting two synoptic water level rounds
- Collection of a total of 36 surface soil samples from six residential yards west of North Avenue with analysis for fine fraction lead, to provide sufficient data to evaluate each property as a separate exposure point

The figures in Section 2 show all the RI sampling locations as well as the historical sampling locations for data determined to be usable for the RI and risk assessments.

7.2 Geologic, Hydrologic, and Hydrogeologic Setting

The geologic, hydrologic, and hydrogeologic setting is summarized below. Details are presented in Section 4.

7.2.1 Geologic Setting

The geology in the vicinity of the study area is consistent with a filled wetland area that had developed on glacial outwash after the last glacial period. The geologic units identified are as follows (in descending order from the ground surface):

- Fill: Consists of fine to coarse sand with varying amounts of silt, gravel, cobbles, and boulders. Typically dry and well compacted (medium dense). Fill was observed in all upland boring locations at the surface and varied in thickness from about 3 to 9 feet.

- Recent Wetland Deposits: Consist of silty fine sand that was light grey with mottled orange-brown coloration. This layer was typically found near the elevation of the water table and was moist to wet and soft. This layer is believed to represent the former wetland soils upon which the fill was placed. The wetland deposits vary in thickness from 0 to nearly 4 feet.

- Organic Silt and Clay: These deposits were found only in the area immediately adjacent to Bliss Brook and are believed to be recent organic deposits that formed in a depression in the glacial outwash deposits (see below) possibly related to a kettle hole. These deposits are saturated and extremely soft, with little to no bearing strength. They vary in thickness from 0 to more than 12 feet along Bliss Brook behind #27 Paulette Lane. Most were removed or buried during the removal action and placement of the engineered cap in this area.

- Fine sand and silt: Found to over lay the glacial outwash deposits and are likely of later stage deposits as the glaciers withdrew from this area. These deposits tend to contain a greater proportion of silt and are not as permeable as the coarser underlying deposits. This layer is sometimes thin or missing.

- Glacial Outwash Deposits: Consist of very coarse to fine sand with little silt. These deposits are saturated and fairly dense, generally exhibiting an orange-brown color. The outwash extends to a depth of about 25 to 40 feet depending on the elevation of the ground surface or depth to bedrock.

- Glacial Till: Consists of fine to coarse sand with higher amounts of silt and clay as well as angular gravel and cobbles. The contact between the till and the outwash is not distinct but rather is transitional and can be difficult to identify. The same can also be true of the transition from till into weathered bedrock at the base. The till varies in thickness from about 10 to 20 feet.

- Bedrock: Consists of grey to grey-black silt/mudstone and greywacke/sandstone with some conglomerate; consistent with the Wamsutta Formation. The bedrock surface slopes gently (2 to 2.5% grade) to the southeast based on drilling refusal depths and bedrock boreholes drilled during the remedial investigation.

7.2.2 Hydrologic Setting

The study area lies within the Ten Mile River watershed, which covers approximately 54 square miles in southeastern Massachusetts and a small area of northeastern Rhode Island. Two major tributaries empty into the Ten Mile River along the way, the Seven Mile River and the Bungay River. The latter originates approximately five miles to the north in the Town of North Attleboro at the outlet of Greenwood Lake. The Bungay River flows south-southwesterly through an extensive wetland system until it joins the Ten Mile River just upstream of Mechanics Pond. Bliss Brook, which receives essentially all the drainage from the W&L property, appears to originate about 1.3 miles to the north of the W&L property, although its uppermost reaches have been significantly affected by the presence of the Exit 5 interchange on Route 95 and by commercial development to the northwest. From its headwaters, the brook flows generally south, passes approximately 500 feet east of the W&L property, and ends in the Bungay River just upstream of its confluence with the Ten Mile River. Just upstream of the W&L property, Bliss Brook flows through a large wetland area that contains a small pond. The watershed of Bliss Brook encompasses only about one square mile or less and is thus a relatively small portion of the Ten Mile River basin.

Surface drainage in the vicinity of the study area is divided by North Avenue. To the west of North Avenue, including the W&L property, surface water flows to the south through a large wetland complex (Southern Wetland). The primary outlet of this complex is a culvert under Deanville Road that eventually discharges into Bliss Brook near its confluence with the Bungay River. To the east of North Avenue, surface water drains into Bliss Brook.

7.2.3 Hydrogeologic Setting

Groundwater at the study area exists as a water table aquifer under unconfined conditions in the outwash and wetland deposits (where present). The water table is generally encountered at a depth of two to 13 feet below grade. It is deepest in the residential areas adjacent to North Avenue and shallowest in the wetlands south of the W&L property and along Bliss Brook. Shallow groundwater flow is generally to the southeast across the study area toward Bliss Brook and the associated wetlands. Groundwater flow in the deeper overburden is slightly more southerly and is not as strongly influenced by Bliss Brook. The horizontal gradients range from 0.010-0.015 on the W&L property and in the residential neighborhood near Paulette Lane to 0.002-0.003 in the areas closer to Bliss Brook. Vertical gradients measured in well couplets/triplets throughout the study area show variable results that are seasonally affected at many locations. Along Bliss Brook, vertical gradients are non-existent to weakly upward along the northern reach of Bliss Brook but are more strongly upward in the southern reach (beyond the Attleboro housing complex). Piezometers installed in Bliss Brook by MassDEP showed that the shallow groundwater discharges into the brook. These results were confirmed by the results of the Phase 5 (January 2018) water level round that included additional piezometers and new staff gauges installed along the brook, and a comprehensive survey of all monitoring well, piezometer, and staff gauge measuring point elevations.

Slug tests estimated the hydraulic conductivity of the outwash deposits near Bliss Brook to range from 20 to 440 feet/day with an average of about 140 feet/day [Weston, November 2013]. Slug tests conducted for a Supplemental Phase II Comprehensive Site Assessment Report [Sage, 2016] for a property located northwest of the W&L property on Walton Street suggest that hydraulic conductivities on the W&L property are likely much lower than those along Bliss Brook. Hydraulic conductivity values measured were on the order of 0.5-3.2 feet/day (0.7 feet/day average) in the upper silty sands and 4.4-5.5 feet/day in the lower medium-coarse sands and gravel.

Based on the values reported by Sage and using an effective porosity of 22% for non-uniform sand and gravel [Fetter, 1994], the estimated velocity of groundwater west of North Avenue is about 0.34 feet/day or 124 feet/year. East of North Avenue, using an effective porosity of 30% for well sorted sands [Fetter, 1994] and a K of 140 feet/day [Weston, November 2013], the estimated groundwater velocity is 1.4 feet/day or 511 feet/year.

7.3 Nature and Extent of Contamination

The primary contaminant is chromium, present in both trivalent and hexavalent forms in surface soil, subsurface soil, sediment, and surface water, with trivalent being more prevalent in these media. However, in groundwater samples chromium was present almost entirely in the hexavalent form. Figure 4-41 illustrates the extent of total chromium contamination in soil and sediment (excluding Mechanics Pond), with the extent of the hexavalent chromium bedrock groundwater plume overlaid on it. The extents of other contaminants in soil, sediment, groundwater, and surface water generally fall within the boundaries of the total chromium contamination as shown on this figure.

7.3.1 Surface and Subsurface Soil

Total chromium impacts in soil extend from the former W&L property itself, south through the Southern Wetland to Deanville Road, to the east of North Avenue as far as Bliss Brook, and south along the brook to its confluence with the Bungay River. In general, total chromium concentrations are higher in wetland soil samples from the Southern Wetland and along the brook than they are in upland soil samples from these same areas. The highest concentrations of total chromium (greater than 5,000 mg/kg) are found in soil located beneath the cover installed by the removal program and in the wetland soil in the Southern Wetland. Along Bliss Brook south of the cover, total chromium concentrations exceed those in reference soil samples, but are less than 1,000 mg/kg with few exceptions. The highest on-property subsurface soil concentrations ranged from 1,000 to 5,000 mg/kg total chromium. The extent of soil contamination with metals other than chromium (copper, lead, and silver were plotted for illustration purposes – see figures) is similar to that for total chromium, but concentrations are much lower overall, with very few detections greater than 500 mg/kg.

The extent of soil contamination with hexavalent chromium extends from the former W&L property to the south into the Southern Wetland and to the east of North Avenue to the cover installed by the removal program. The soil along Bliss Brook (other than that under the cover) is not impacted by hexavalent chromium. Hexavalent chromium was detected in the majority of on-property surface soil and subsurface soil samples at concentrations in the range of 0.2 to 100 mg/kg. The same was true for soil samples from under the removal program cover. In summary, the extent of hexavalent chromium contamination in soil is smaller than that for total chromium, in that it does not extend downstream along Bliss Brook. Concentrations of hexavalent chromium in soil are also orders of magnitude lower than those for total chromium, indicating that most of the chromium present in the soil is in the trivalent form.

Surface soil contamination with fine fraction lead at concentrations above the residential screening value (200 mg/kg) is present in the residential yards along the west side of North Avenue that border the Southern Wetland, from 48 North Avenue at the northern end to Deanville Road. The conceptual site model is that this contamination resulted from discharge of wastes containing primarily chromium (and also lead) from the W&L property to the Southern Wetland, followed by flooding and resultant transport of soil particles from the wetland to the bordering upland area that lies within the flood plain along the western portions of the affected lots.

Two soil samples within the flood plain that are south of Deanville Road (10-DE-10 and 28-NO-01) appear to be outliers (inconsistent with other nearby results), and the soil in these locations may be impacted by other sources. Sample 28-NO-01 is close to the road and where the property owner currently parks recreational vehicles. Sample 10-DE-10 is in the rear of the lot in an area that appears to have been a disturbed area, based on examination of historic aerial photos from before the home was built. Unlike the other properties north of Deanville Road, it appears that the lead on these two properties is localized to two areas (one on each lot) rather than being present throughout the flood plain.

Except for samples from the property itself, total PAH concentrations in soil samples exceeded 25 mg/kg in only two instances. Soil samples along Bliss Brook and in the Southern Wetland had total PAH concentrations consistent with reference soil samples, except for one sample along Deanville Road and three samples south of West Street, all of which are a considerable distance from the W&L property. Surface soil and subsurface soil samples collected from the property itself showed elevated total PAH concentrations compared to reference soil samples. Potential sources are historic petroleum releases from former USTs and historic fill. Detections of cVOCs in soil samples were limited to the property itself and the northern portion of the Southern Wetland. The most commonly detected cVOC was TCE, and with few exceptions, it was detected at every location where any cVOCs were detected.

7.3.2 Sediment

The extent of sediment contamination with total chromium extends from the property to the Southern Wetland as far south as Deanville Road, to Bliss Brook from the section just east of the removal program cover downstream to its confluence with the Bungay River, and into Mechanics Pond. Virtually all sediment samples from these areas had total chromium concentrations greater than those found in the reference sediment samples.

The highest total chromium concentrations (greater than 5,000 mg/kg) are found in the Southern Wetland. The presence of elevated total chromium in this sediment is consistent with the fact that chromium-contaminated wastewater was directly discharged to the wetland prior to 1970. Chromium-contaminated surface soil also was likely transported by overland flow from the property itself to depositional areas in the Southern Wetland. Along Bliss Brook and in Mechanics Pond, the majority of sediment samples showed total chromium concentrations in the range of 23 to 1,000 mg/kg. The extent of sediment contamination with hexavalent chromium is similar to that for total chromium, but concentrations are much lower.

Sediment contamination with lead and silver is evident in the Southern Wetland and mirrors the total chromium contamination. In contrast, sediment samples from Bliss Brook do not show evidence of lead or silver contamination above the concentrations of these analytes detected in reference sediment samples. In Mechanics Pond however, there are some detections of these metals in sediment samples at levels above reference concentrations. Transport of lead and silver contamination from the Southern Wetland to the pond via

overland flow or the storm water drainage system is possible, as is the possibility of other sources impacting the Ten Mile River and the pond. Concentrations of copper in sediment samples exceed 1,000 mg/kg in multiple samples from Mechanics Pond, but are not that elevated in the Southern Wetland, with only one sample exceeding this value. This suggests that there may be another source of the copper contamination in Mechanics Pond sediment. Similarly, concentrations of total PAHs in Mechanics Pond and the Bungay River are generally higher than those in Southern Wetland sediment samples, suggesting that other sources are more significant contributors.

7.3.3 Groundwater

Figures 4-26, 4-27, 4-28, and 4-29 provide the plan views of the extent of hexavalent chromium and TCE in overburden and bedrock on the W&L property and down gradient.

Hexavalent chromium contamination in the overburden extends east and south of the W&L property crossing under North Avenue, Paulette Lane, and eventually extending out to Bliss Brook and nearly as far as Payson Street. Migration under Bliss Brook occurs in the deep overburden and in the bedrock. The shallow overburden flow is likely following the course of and discharging to Bliss Brook. In bedrock the hexavalent chromium appears to take a similar flow pattern as in the overburden, though with a notable extension under Payson Street. Although AE-20B is the only bedrock well east of Bliss Brook, the concentration of 1,270 µg/L hexavalent chromium in the well indicates that the plume has clearly traveled in bedrock under Bliss Brook.

TCE in overburden has been detected off-property across North Avenue from the W&L property. In the overburden the TCE plume is not as wide as the hexavalent chromium plume and does not cross under any part of Hayward Field or Paulette Lane to the northeast side of the plume. The plume does extend, however, further southwest and west of North Avenue. The overburden plume extends as far as Bliss Brook, but there is no evidence that it extends beyond the brook to any significant degree in the overburden.

TCE in bedrock is shown on Figure 4-29. Although the concentrations are not as high as in the overburden, the width of the plume is wider than in the overburden, extending slightly further northeast under the corner of Hayward Field and part of Paulette Lane. The eastern most extent also appears to have traveled further under Bliss Brook, but not very significantly.

Other contaminants of note in groundwater include 1,1,1-TCA and 1,4-dioxane, which is likely associated with 1,1,1-TCA. The distribution of the two contaminants is similar, in that higher concentrations of 1,4-dioxane seem to correspond with higher concentrations of 1,1,1-TCA. The spread of 1,4-dioxane, due to its non-reactive nature and being readily soluble in water, tends to be greater than that of 1,1,1-TCA. Overall, the extent to which 1,4-dioxane is found matches that of hexavalent chromium; however, the concentrations are significantly lower.

Total lead in groundwater exceeds the Safe Drinking Water Act action level of 15 µg/L in three monitoring wells (maximum detected concentration in parenthesis): AE-09S (50 µg/L), DEP-3D (49.7 µg/L), and DEP-5S (108 µg/L). Dissolved lead results for these wells were all less than 15 µg/L except for the dissolved lead result for monitoring well DEP-5S collected in August 2014 (49.8 µg/L), corresponding to the total lead result of 108 µg/L. The elevated detections of total lead in these three monitoring wells may be related to suspended particulates in the samples, rather than to dissolved lead concentrations.

7.3.4 Surface Water

Table 4-24 presented the total chromium and hexavalent chromium concentrations detected in surface water samples from Bliss Brook for samples collected during Phase 1 and Phase 2. Other contaminants were detected in surface water samples from the brook and other locations, but hexavalent chromium is the most significant and is clearly related to discharge of the hexavalent chromium groundwater plume to the brook. For the Phase 1 (summer 2014) samples, hexavalent chromium is first detected at SD-209, which is approximately located within the brook across from the southern end of the cover. Concentrations of hexavalent chromium rise to the 200 µg/L level for the next three locations moving downstream (SD-210, SD-211, and SD-212), indicative of the fact that the shallow groundwater hexavalent chromium plume is discharging to this area. Results were similar for the Phase 2 (fall 2014) samples, except that hexavalent chromium impacts were observed further downstream (as

far downstream as SD-218). Surface water toxicity testing results showed a significant effect on survival and reproduction for locations SD-210 and SD-212, which is attributed to the hexavalent chromium concentrations observed in these locations.

7.4 Contaminant Fate and Transport

Hexavalent chromium is the predominant contaminant in groundwater and has migrated to a large extent with the groundwater due to its high mobility in this medium. Hexavalent chromium is also found in surface water along a stretch of Bliss Brook where the groundwater contaminant plume discharges to it. It is also found in soil and sediment on-property and in the Southern Wetland, consistent with the conceptual site model that it was directly discharged to the Southern Wetland and also leaked from plating trenches. Finally, it is found in soil under the area covered by the removal program, due to the presence of hexavalent-chromium contaminated groundwater under this cover. Hexavalent chromium is present to a much lesser extent in Bliss Brook sediments and sediments in Mechanics Pond, most likely because it is reduced to trivalent chromium in the sediments due to the presence of sulfides and organic matter acting as reducing agents.

Trivalent chromium is prevalent in soil and sediment on the property, within the Southern Wetland, and east of North Avenue under the cover, along Bliss Brook, and in Mechanics Pond. In general, for off-property soil sample locations, concentrations are higher in wetland soil than in upland soil. As with hexavalent chromium, concentrations in soil are elevated under the cover due to transport via groundwater. Reduction of some portion of the hexavalent chromium to trivalent chromium is apparently occurring in soil under the cover, since total chromium concentrations are much higher than hexavalent chromium concentrations. In groundwater, there is virtually no trivalent chromium; essentially all the chromium detected in both total (unfiltered) and dissolved (field-filtered) samples is in the hexavalent form.

Chlorinated VOCs (TCE; 1,1,1-TCA, and their daughter products) were detected to a limited extent in soil, but are present in both overburden and bedrock groundwater, forming a plume that is of a generally smaller lateral and vertical extent than the hexavalent chromium plume, the source of which is somewhat south of the hexavalent chromium source area. Maps of the plume are included in Section 4. The TCE plume is likely being attenuated due to mechanisms such as biodegradation (as evidenced by the presence of daughter products), adsorption to soil particles, and volatilization into soil gas. Homes overlying the cVOCs plume show evidence of vapor intrusion, based on the fact that the cVOCs found in groundwater are also detected in sub-slab samples and indoor air samples.

1,4-Dioxane is present in groundwater in low concentrations, with an approximate extent similar to that of the hexavalent chromium contamination. Similar to hexavalent chromium, its high water solubility and mobility and low biodegradability cause it to migrate quickly in groundwater. Because 1,4-dioxane is used as a stabilizer in 1,1,1,-TCA, the spills/releases of 1,1,1-TCA to the property are believed to also be one source of the 1,4-dioxane.

Lead is present in in numerous bulk (unsieved) surface soil samples collected from the W&L property itself, and in wetland soil of the Southern Wetland, at concentrations above 500 mg/kg (well above the residential screening value of 200 mg/kg). No pattern to the distribution of the lead is apparent. The source of the lead found in surface soil on the property is not definitively known, but it is known that lead sulfate was used at the W&L facility. Few soil samples east of North Avenue (e.g., under the engineered cover) show substantially elevated lead concentrations, indicating that unlike chromium, lead has not migrated to this area via groundwater.

Concentrations of fine fraction total lead are generally greater than 200 mg/kg for residential properties west of North Avenue that border the Southern Wetland, and are also generally greater in wetland soil samples than in upland soil samples. There is no clear correlation of higher unsieved or fine fraction total lead results with elevated total chromium results in the same samples, but there does appear to be some association, suggesting that releases from the W&L facility may be the source of at least a portion of the fine fraction lead. It is possible that the source of lead in the wetland soil south of the property is the former W&L facility operations (e.g., discharge of lead-contaminated wastes), and that upland soil bordering the wetland area became contaminated with lead due to transport of wetland soil particles to bordering upland areas by flooding.

Metals other than chromium and lead are present in soil and sediment on the property and in the Southern Wetland, although concentrations are much lower. The sources are not known but it is known that copper was used at the facility, and silver plating may also have been practiced, based on the high levels of silver found in Southern Wetland sediment that are co-incident with elevated chromium concentrations. Metals other than chromium do not appear to be significantly above reference sample concentrations for soil and sediment along Bliss Brook. This indicates that, in contrast to hexavalent chromium, other metals are not being transported to Bliss Brook via the groundwater migration pathway. Other metals are found in Mechanics Pond sediments at concentrations well above those found in reference sediment samples. In part, these metals may have been transported from the property and Southern Wetland via migration through storm water discharge from the Southern Wetland, but other sources along the Ten Mile River and the pond itself are also likely.

PAHs are present in on-property soil and in some off-property soil samples at concentrations in excess of those found in reference soil samples, but the extent is much more limited than for chromium. The source of the PAHs in on-property soil may be from historic petroleum releases as well as the presence of historic fill. PAH concentrations in soil samples collected along Bliss Brook were mostly consistent with reference soil sample concentrations. Similarly, concentrations of PAHs in sediment samples from Bliss Brook were similar to or lower than those in reference sediment samples. PAH contamination in off-property samples is not clearly associated with the property, and other sources are likely.

7.5 Actionable Risk Summary

The baseline human health risk assessment and baseline ecological risk assessment are summarized in Section 6 and presented in their entirety in Appendix Y and Appendix Z, respectively.

When the RME exposures for a particular exposure point exceed EPA's target risk range for carcinogens (ILCR of 10^{-6} to 10^{-4}) and/or risk criterion for non-carcinogens (HI of 1), remedial action to reduce or eliminate the risk is warranted and the risk is considered to be “actionable.” Similarly, when ecological risk to one or more receptors is estimated to exist, and the estimate is judged to have a moderate degree of certainty, remedial action to reduce the risk is warranted. Actionable risks to human and ecological receptors are summarized below.

Exposure Point and Medium	Scenario/Receptor	Major Contributors to Risk (Chemicals of Concern)
Bliss Brook Surface Water (area where plume is discharging)	**Human Health:** Current and Future Recreational Users **Ecological:** Aquatic invertebrates, amphibians, fish	Hexavalent chromium (Cr+6) Cr+6
W&L Property Surface and Subsurface Soil *	**Human Health:** Future Residents	Cr+6, PAHs, several other metals
Residential Yards West of North Avenue – Surface Soil	**Human Health:** Current and Future Residents	Lead
W&L Property Shallow Groundwater	**Human Health:** Future Construction Worker	Cr+6
Site-Wide Groundwater **	**Human Health:** If groundwater is used as tap water	Cr+6, cVOCs, 1,4-dioxane, several other metals

	Human Health: If groundwater is used for non-drinking water uses (i.e. irrigation, filling of pools, etc.)	Cr+6, TCE, vinyl chloride
	Human Health: Potential for indoor air exposures in structures located above/near plume (certain areas only, if no vapor mitigation system is present to prevent vapor intrusion)***	cVOCs

* In the HHRA, the "W&L Property" soil exposure point was evaluated in future exposure scenarios as the W&L property located at 78 North Avenue, as well as the floodplain area located immediately to the south of W&L property and current fenced area, since the area immediately to the south would likely be used as part of the property after redevelopment and the fence is removed. The future residential use is a hypothetical scenario; the property is currently zoned as industrial.
** A groundwater use and value determination has been completed by MassDEP that indicates a low value for groundwater use as a drinking water source, except within the Bungay River Water Resource Protection District, where a medium determination has been made and action may potentially be needed to restore groundwater within the District to meet drinking water levels, if impacted above drinking water standards. Groundwater has also been assigned a high value due to its contribution to the adjacent wetlands and Bliss Brook [MassDEP, 2018].
*** The indoor air exposure risk is not "actionable" since no indoor air samples have been collected that confirm the presence of a risk in excess of EPA's risk criteria. To address this potential risk, the Feasibility Study includes provisions for future building inspections, groundwater monitoring, and/or indoor air sampling to confirm that actionable risk is not present.

7.6 Conclusions and Next Steps

A review of the results of the RI and historic data indicate that sufficient information has been collected to evaluate the source(s), nature, extent, and distribution of contaminants and to assess the current and future potential risks to human health and to the environment.

The baseline human health and ecological risk assessments indicate that remedial actions need to be evaluated to address current and/or future potential human health and ecological risks from exposure to groundwater (human exposures), surface water in Bliss Brook (human health and ecological exposures), soil on the W&L property (human exposures), and surface soil in residential yards west of North Avenue with respect to human exposures to lead. This last conclusion is based on fine fraction lead results indicating that the average concentration of fine fraction lead within flood plain soils in these yards exceeds the residential screening value of 200 mg/kg.

Human health risk from exposure to cVOCs in indoor air is a potential future risk if SSDSs that are operating in three homes east of North Avenue were to be shut down, or if a new building were constructed over the plume without a vapor mitigation system. In addition, existing buildings for which sub-slab VOC concentrations are above soil gas Vapor Intrusion Screening Levels, but for which recently measured indoor air concentrations do not pose a risk, could potentially pose a human health risk in the future if building conditions were to change in a way that increased vapor intrusion. Operation, maintenance, and monitoring will be needed to determine if and when the existing SSDSs can be shut down in the future, or if existing buildings may have developed a vapor intrusion problem over time due to changes in the condition of the buildings.

Since remedial action has been determined to be in order for one or more media and exposure areas, a feasibility study has been prepared that includes the following:

- Development of response action objectives and preliminary remediation goals for each medium and exposure area for which risks have been identified
- Development and screening of remedial alternatives for each exposure area and medium of concern
- Detailed evaluation of remedial alternatives selected for retention after the screening process

Upon finalization of the feasibility study in response to comments, EPA, in consultation with MassDEP, will consider the alternatives evaluated and will select a preferred alternative for remediation of the Site. A Proposed Plan will be developed to present the proposed remedial approach to the public. Following a public informational meeting, public hearing, and public comment period, EPA in consultation with MassDEP will respond to comments from the public and issue a Record of Decision for the Site.

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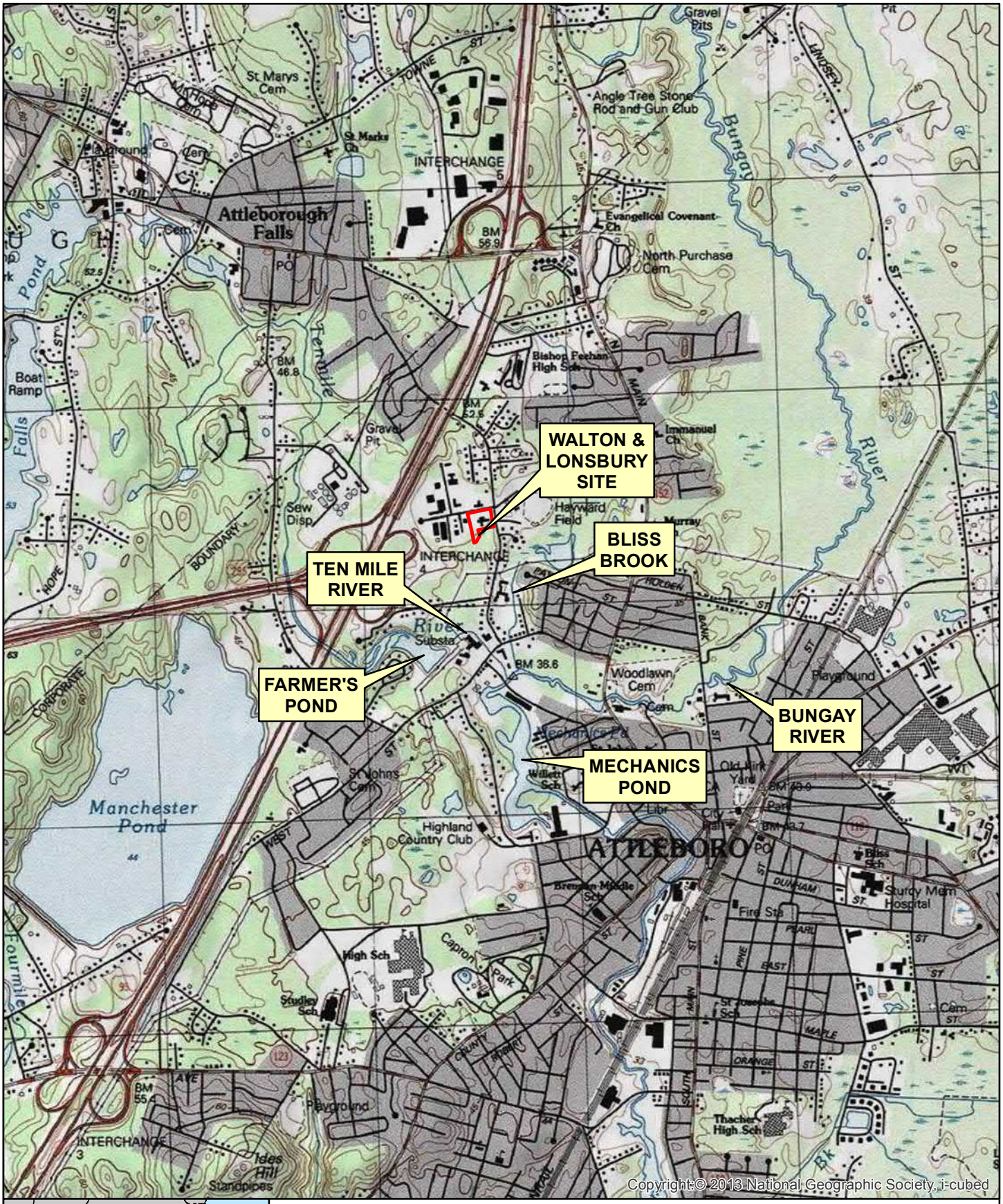
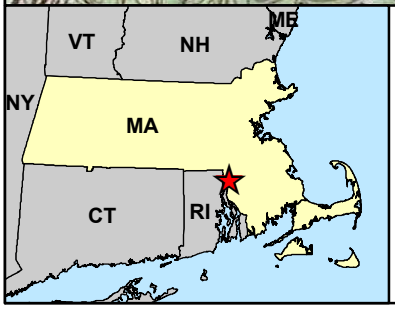
Figures





1:25,000

0 1,250 2,500 Feet

AECOM

FIGURE 1-1.

SITE LOCUS MAP

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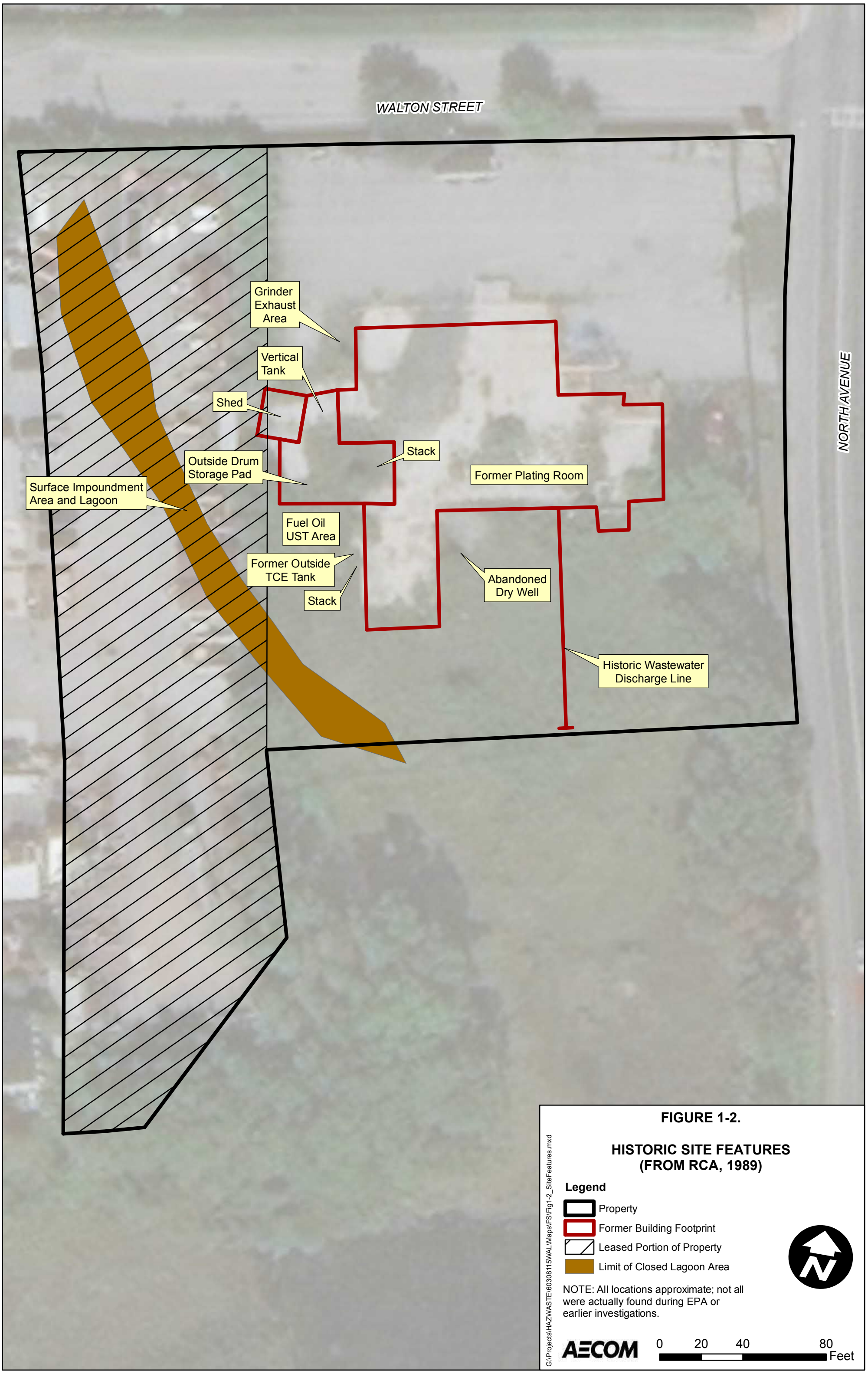


FIGURE 1-2.

HISTORIC SITE FEATURES (FROM RCA, 1989)

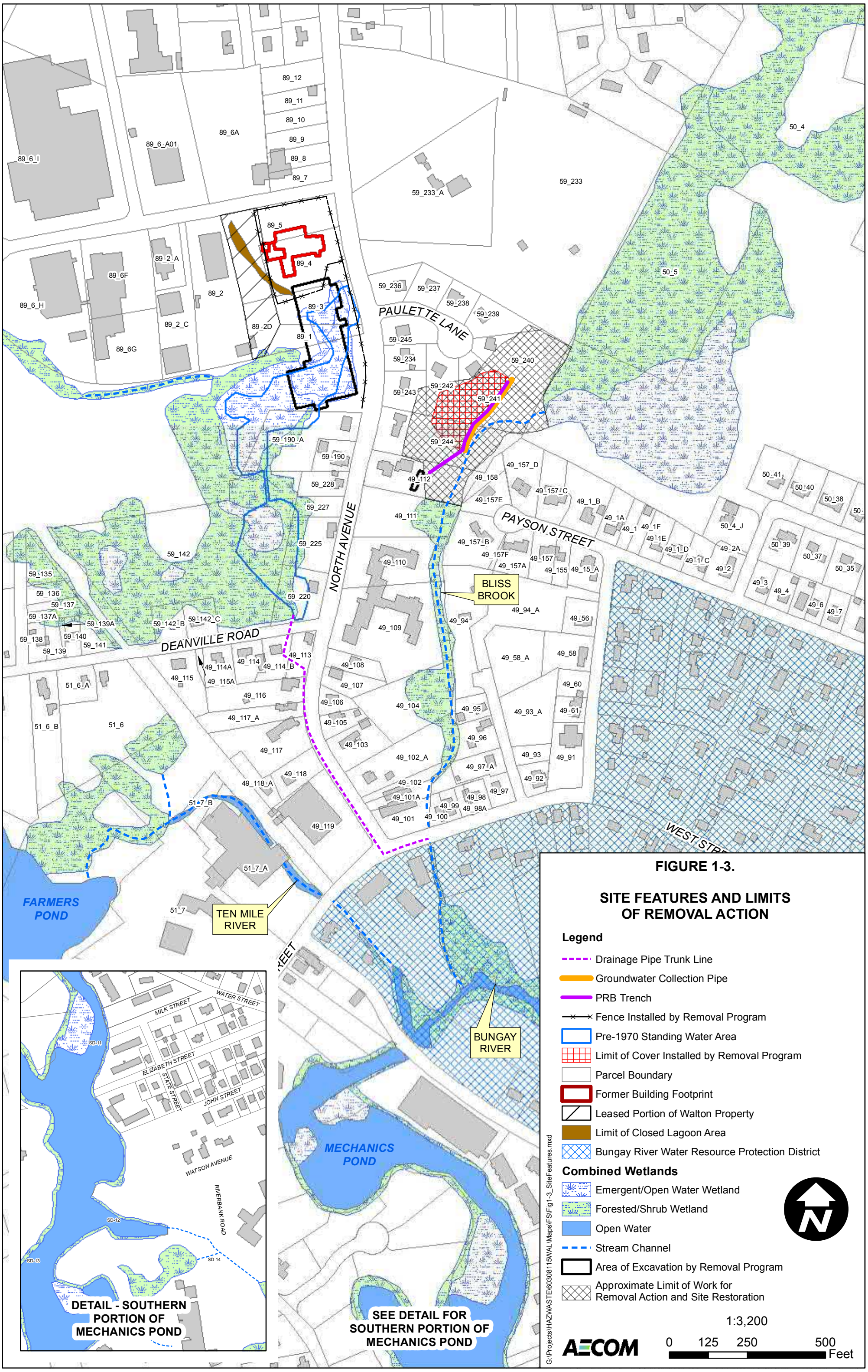
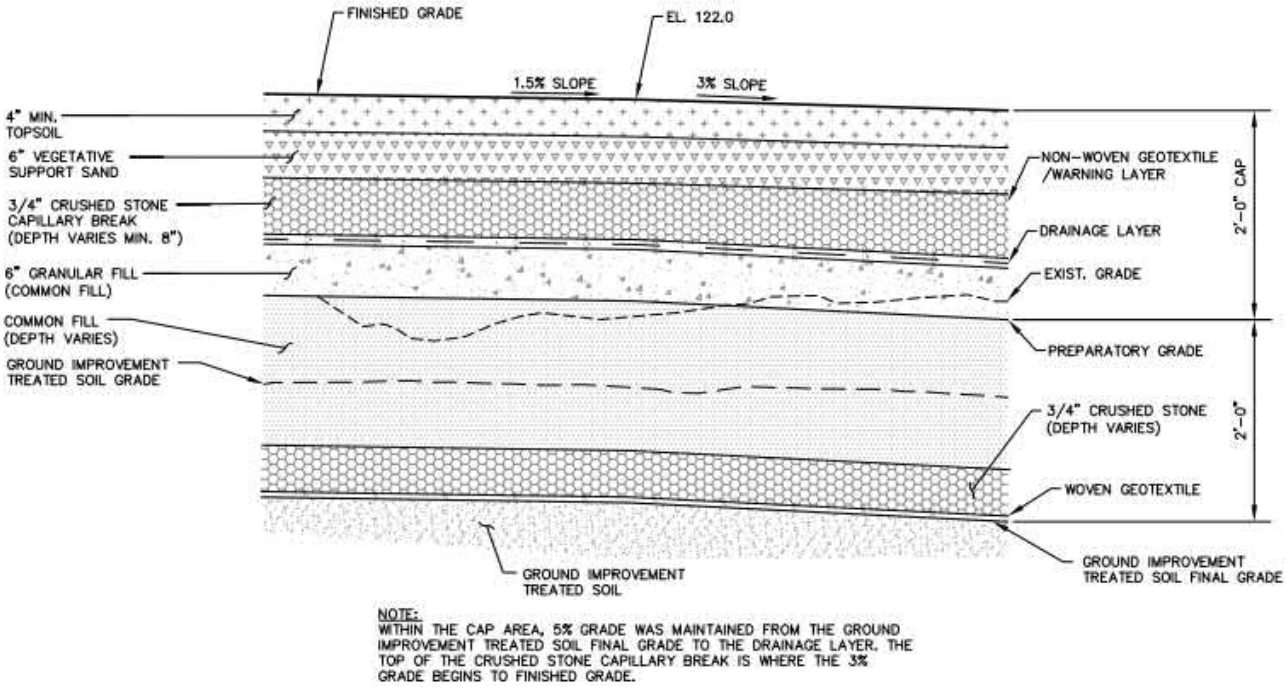


FIGURE 1-3.

SITE FEATURES AND LIMITS OF REMOVAL ACTION



Note: Above detail is from Drawing C-8 of Plans for: Time Critical Removal Action and Site Restoration, Walton and Lonsbury Site, Attleboro, Massachusetts: Record Drawings. Prepared by Weston Solutions for US EPA Region 1, Contract Number EP-W-05-04, Task Order Number 0003, November 2013

FIGURE 1-4. TYPICAL SECTION – ENGINEERED COVER

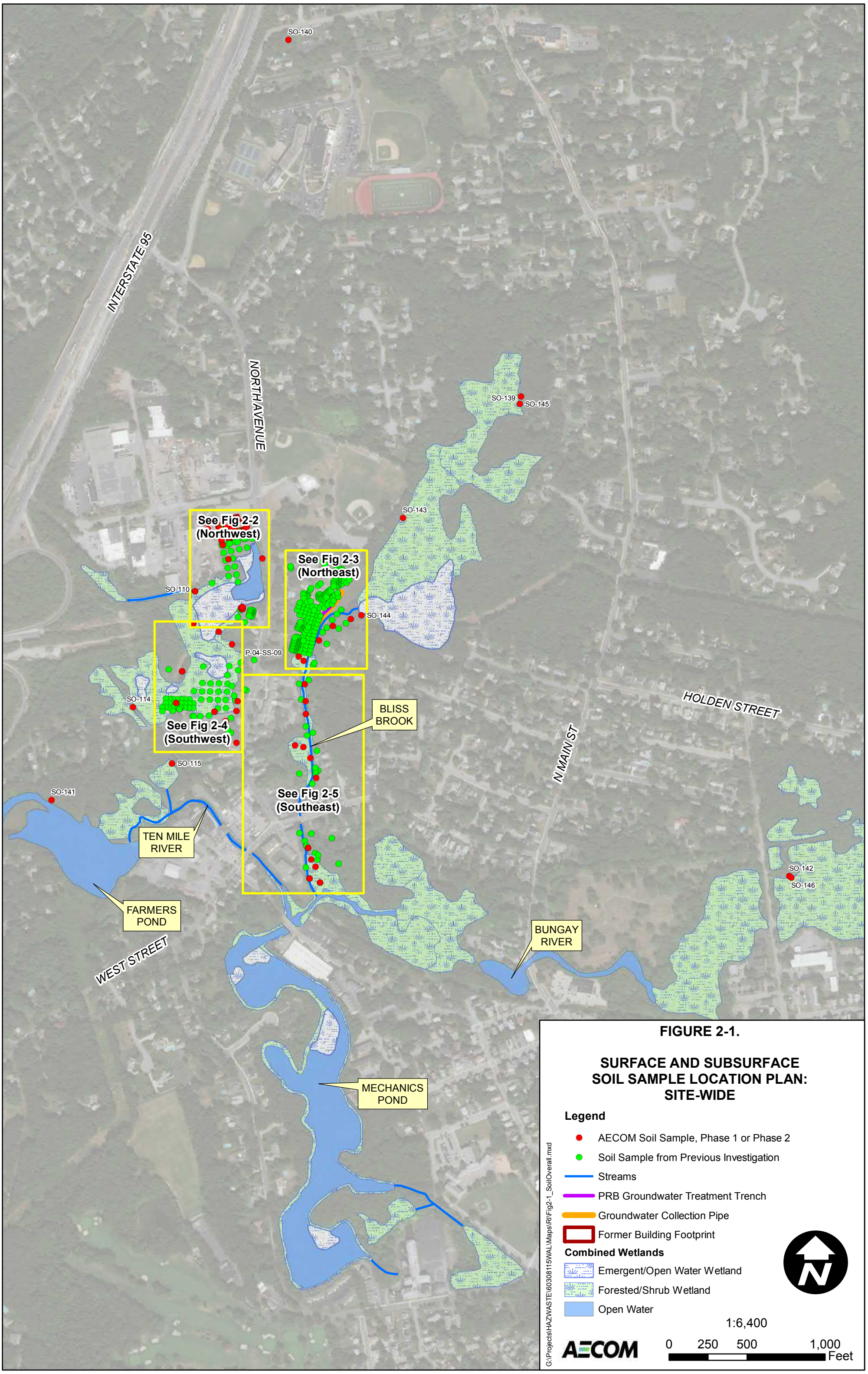


FIGURE 2-1.

SURFACE AND SUBSURFACE SOIL SAMPLE LOCATION PLAN: SITE-WIDE

FIGURE 2-2.

SURFACE AND SUBSURFACE SOIL SAMPLE LOCATION PLAN: NORTHWEST

Legend

- AECOM Soil Sample, Phase 1 or Phase 2
- Soil Sample from Previous Investigation
- Soil Sample from Previous Investigation, Excavated
- Excavation Extent
- Limit of Closed Lagoon Area
- Former Building Footprint

Combined Wetlands

- Emergent/Open Water Wetland
- Forested/Shrub Wetland
- Open Water

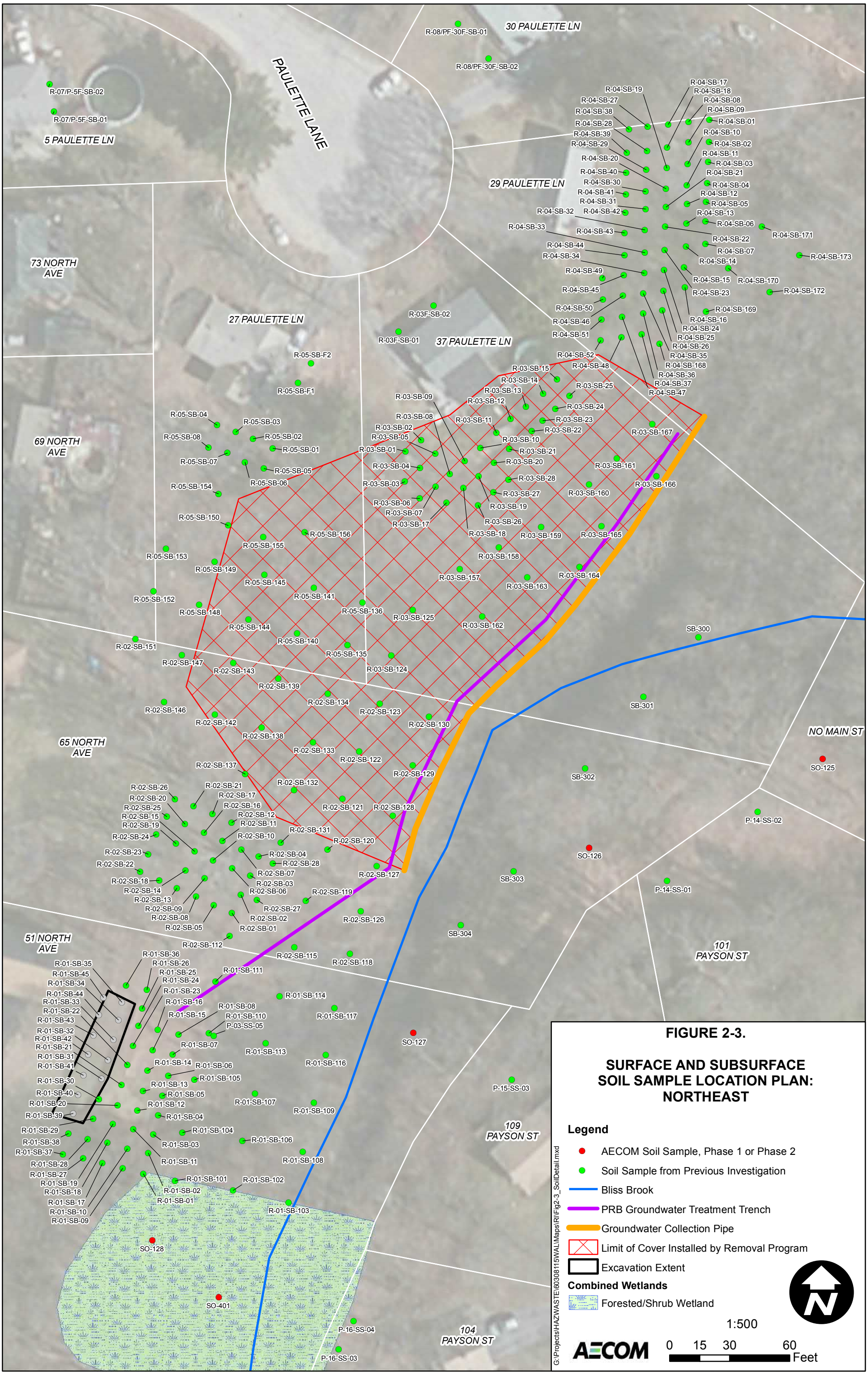


FIGURE 2-3.

SURFACE AND SUBSURFACE SOIL SAMPLE LOCATION PLAN: NORTHEAST

Legend

- AECOM Soil Sample, Phase 1 or Phase 2
- Soil Sample from Previous Investigation
- Bliss Brook
- PRB Groundwater Treatment Trench
- Groundwater Collection Pipe
- Limit of Cover Installed by Removal Program
- Excavation Extent

Combined Wetlands

- Forested/Shrub Wetland

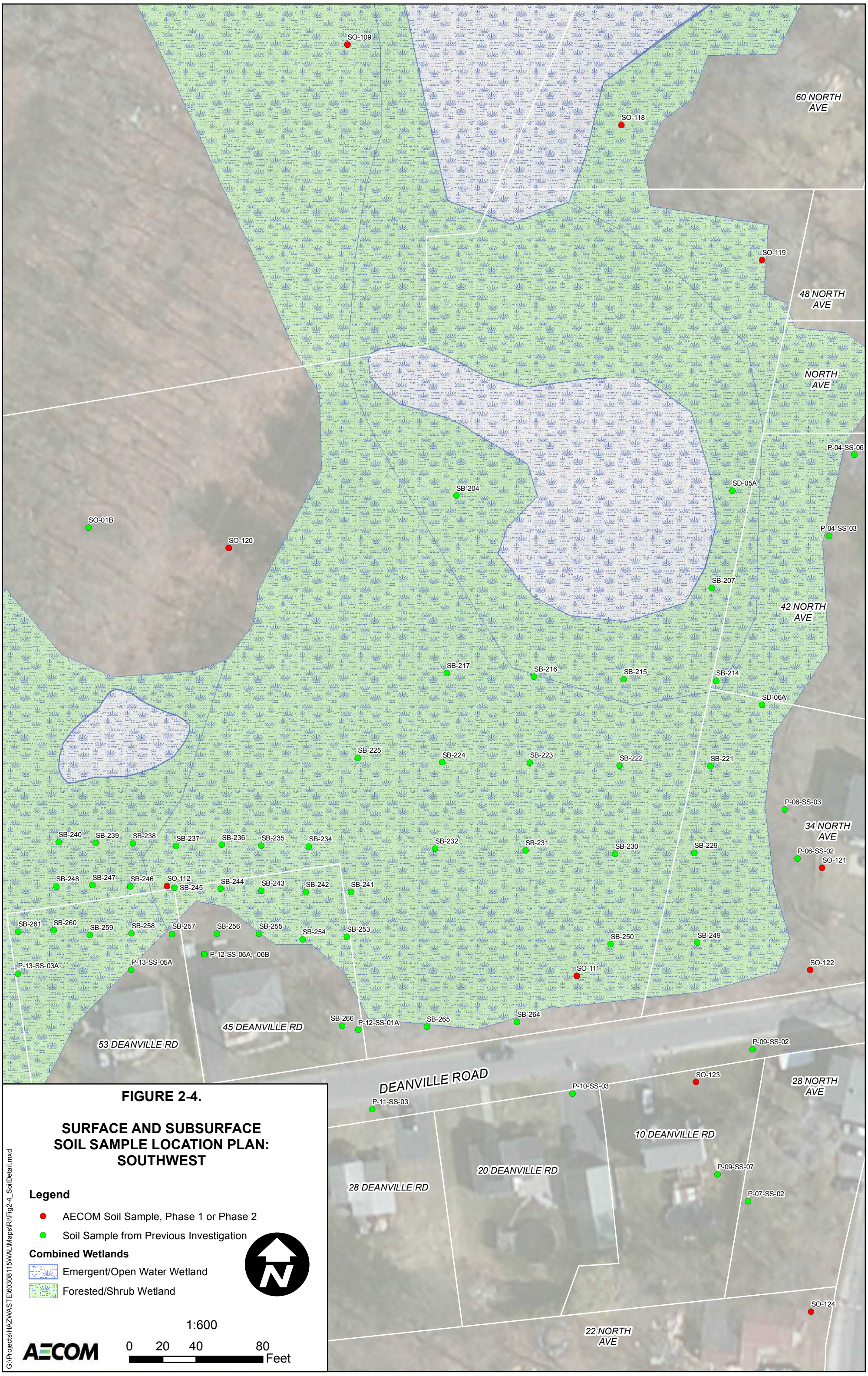


FIGURE 2-4.

SURFACE AND SUBSURFACE SOIL SAMPLE LOCATION PLAN: SOUTHWEST

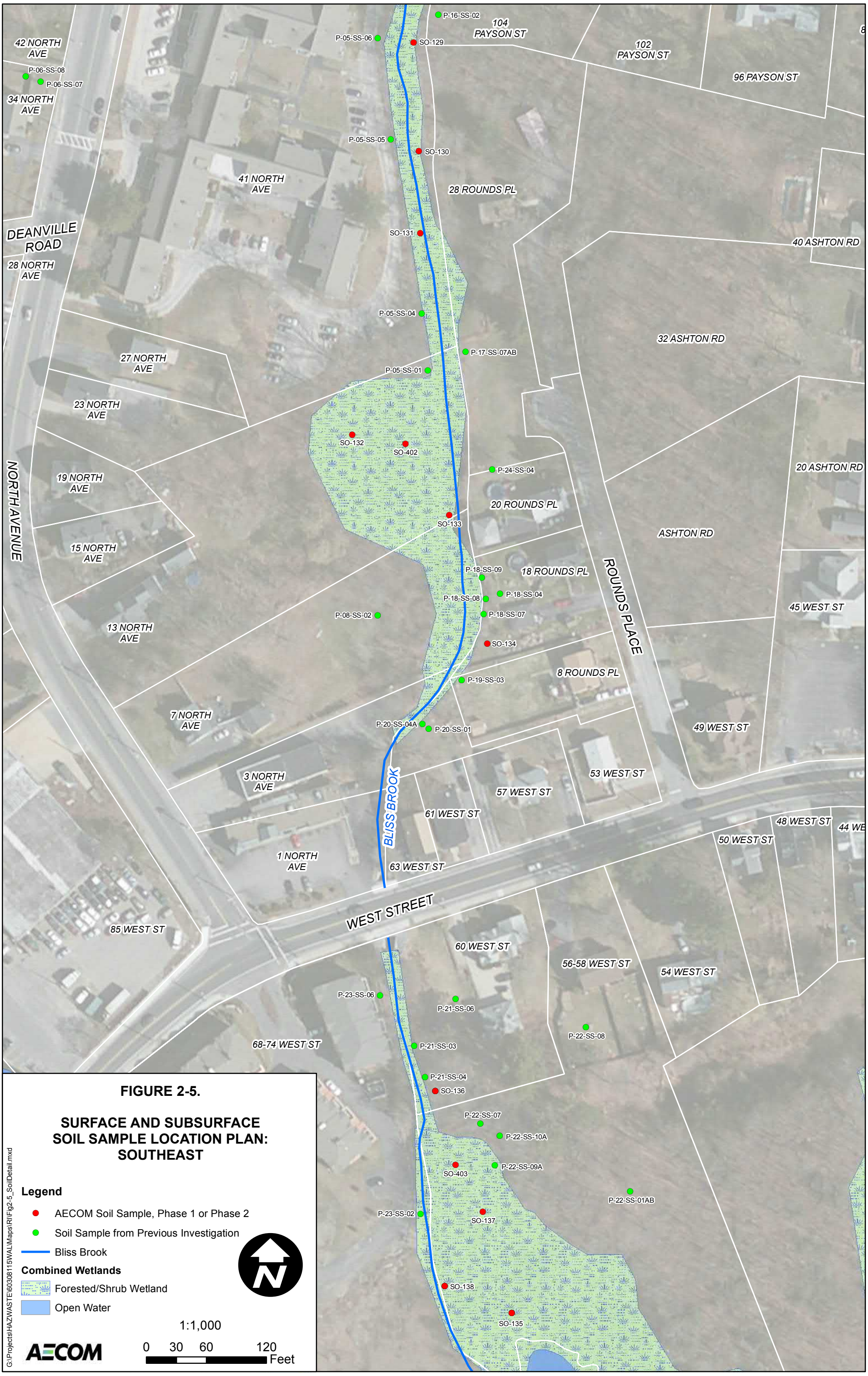


FIGURE 2-5.

SURFACE AND SUBSURFACE SOIL SAMPLE LOCATION PLAN: SOUTHEAST

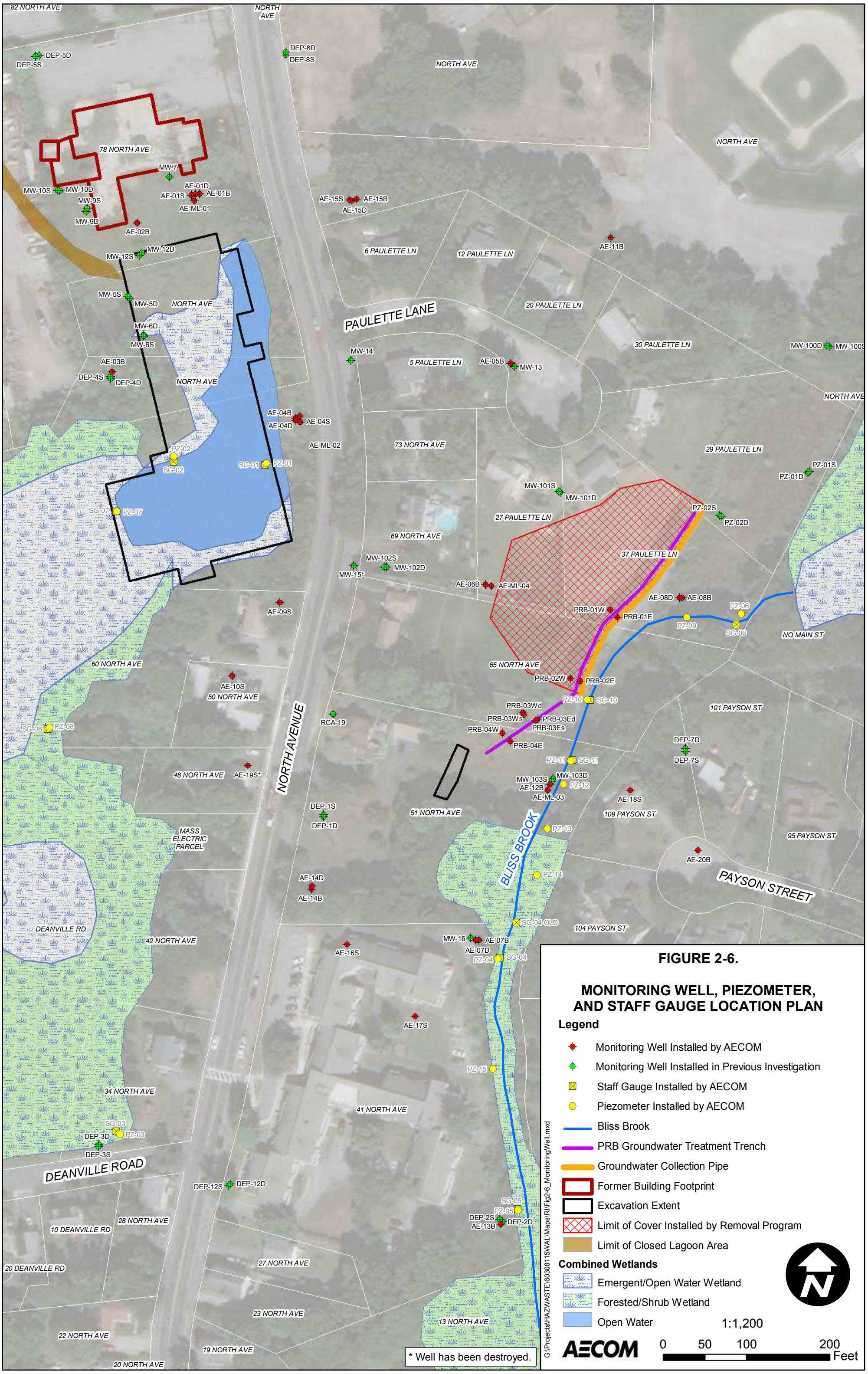


FIGURE 2-6.

MONITORING WELL, PIEZOMETER, AND STAFF GAUGE LOCATION PLAN

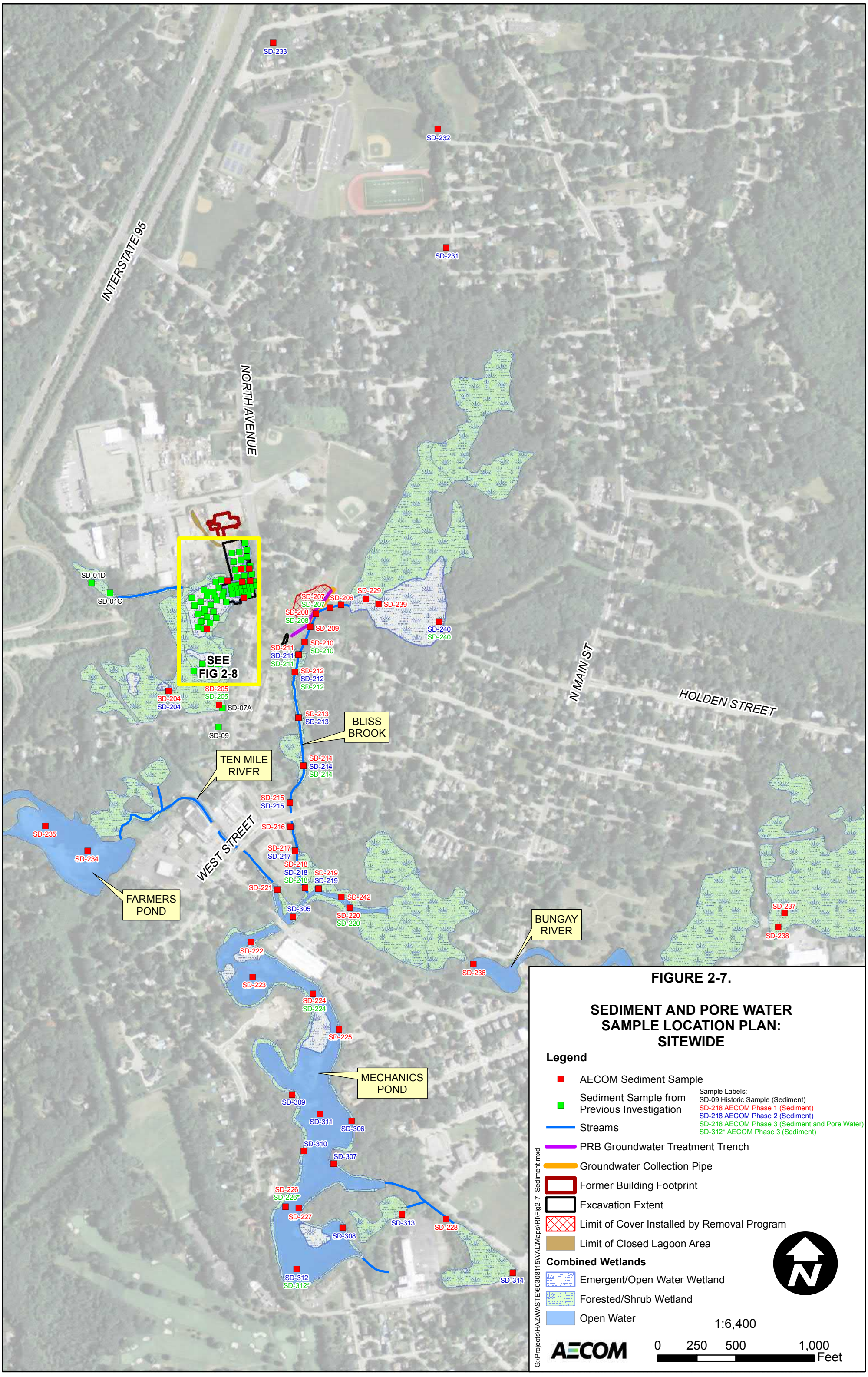


FIGURE 2-7.

SEDIMENT AND PORE WATER SAMPLE LOCATION PLAN: SITEWIDE

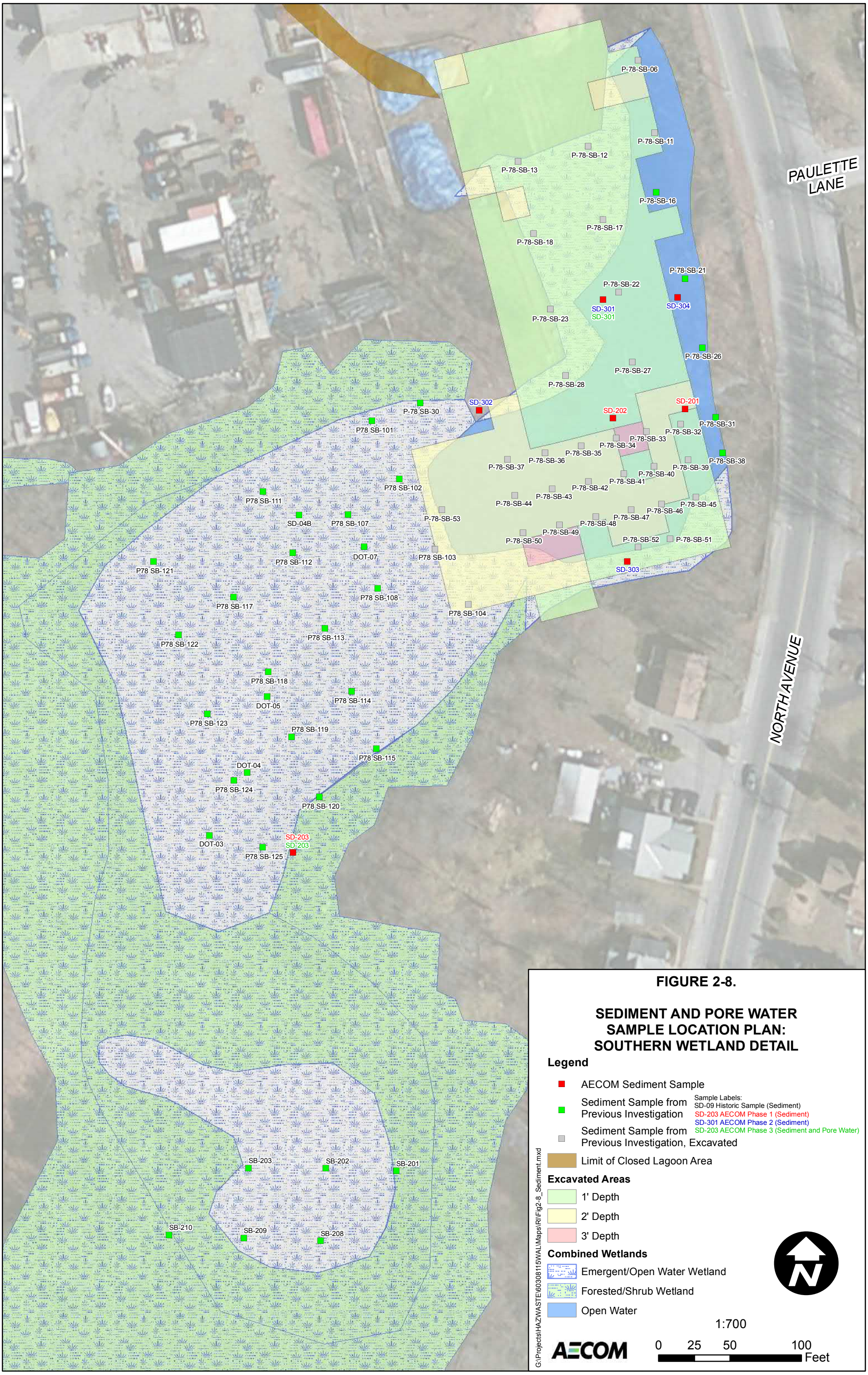
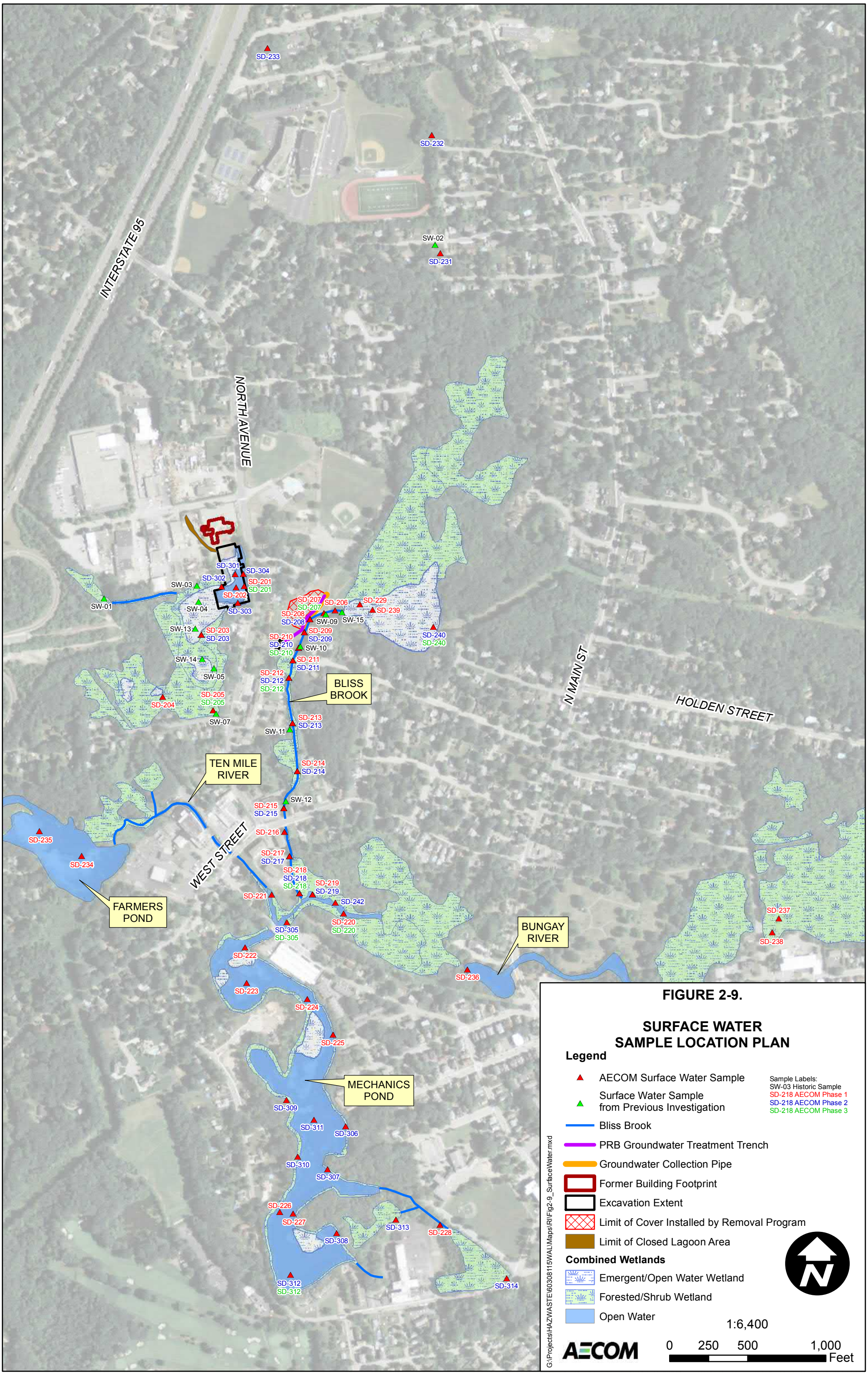


FIGURE 2-8.

SEDIMENT AND PORE WATER SAMPLE LOCATION PLAN: SOUTHERN WETLAND DETAIL


INTERSTATE 95
NORTH AVENUE
N MAIN ST
HOLDEN STREET
WEST STREET
BLISS BROOK
TEN MILE RIVER
FARMERS POND
BUNGAY RIVER
MECHANICS POND
SD-233
SD-232
SW-02
SD-231
SD-301
SD-304
SD-302
SD-201
SD-201
SW-03
SD-202
SW-01
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SD-226
SD-227
SD-308
SD-312
SD-312
SD-235
SD-234
SD-313
SD-228
SD-314
SD-236
SD-237
SD-238
FIGURE 2-9.
SURFACE WATER
SAMPLE LOCATION PLAN
Legend
AECOM Surface Water Sample
Surface Water Sample
from Previous Investigation
Sample Labels:
SW-03 Historic Sample
SD-218 AECOM Phase 1
SD-218 AECOM Phase 2
SD-218 AECOM Phase 3
Bliss Brook
PRB Groundwater Treatment Trench
Groundwater Collection Pipe
Former Building Footprint
Excavation Extent
Limit of Cover Installed by Removal Program
Limit of Closed Lagoon Area
Combined Wetlands
Emergent/Open Water Wetland
Forested/Shrub Wetland
Open Water
1:6,400
AECOM
0 250 500 1,000
Feet
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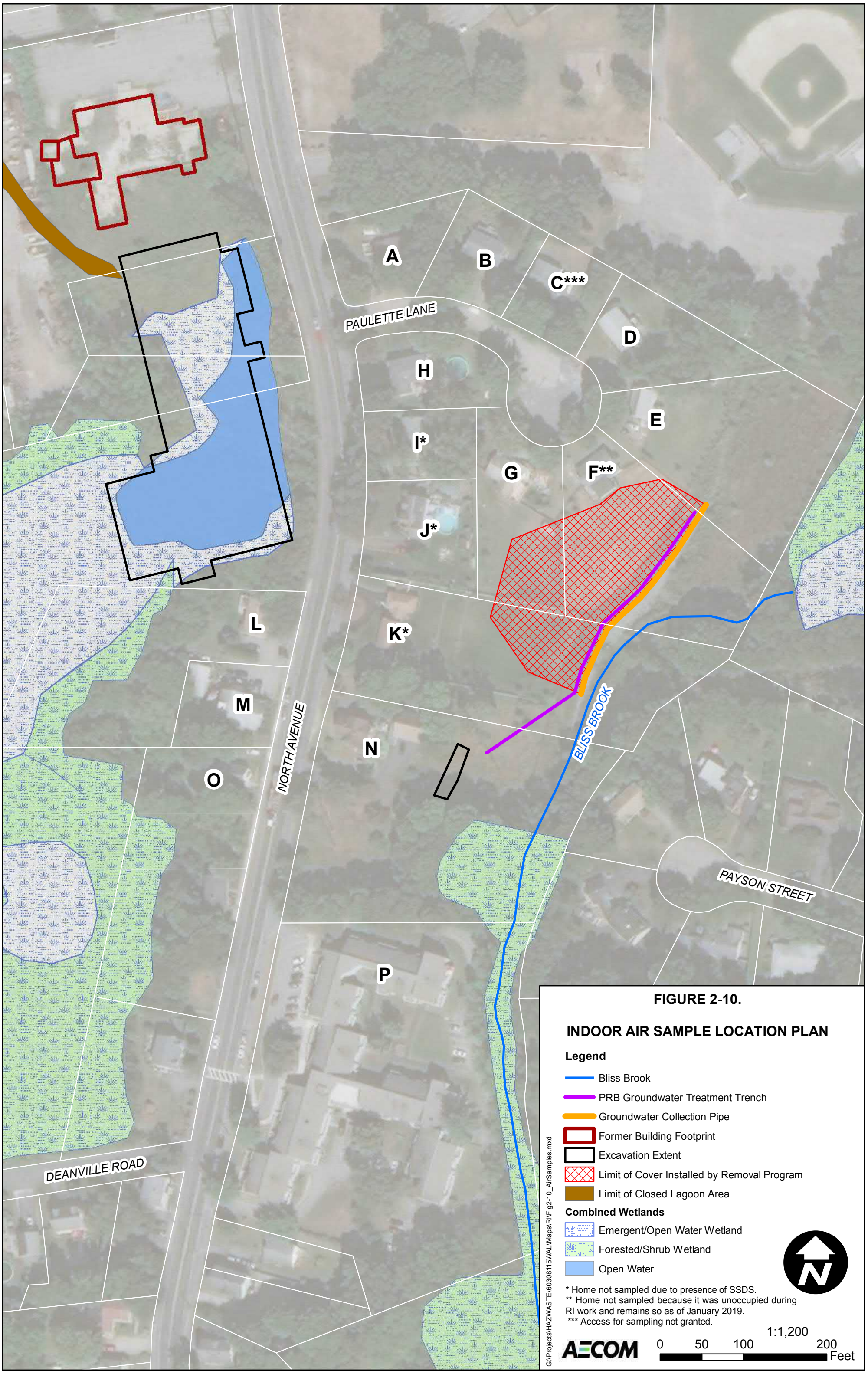


FIGURE 2-10.

INDOOR AIR SAMPLE LOCATION PLAN

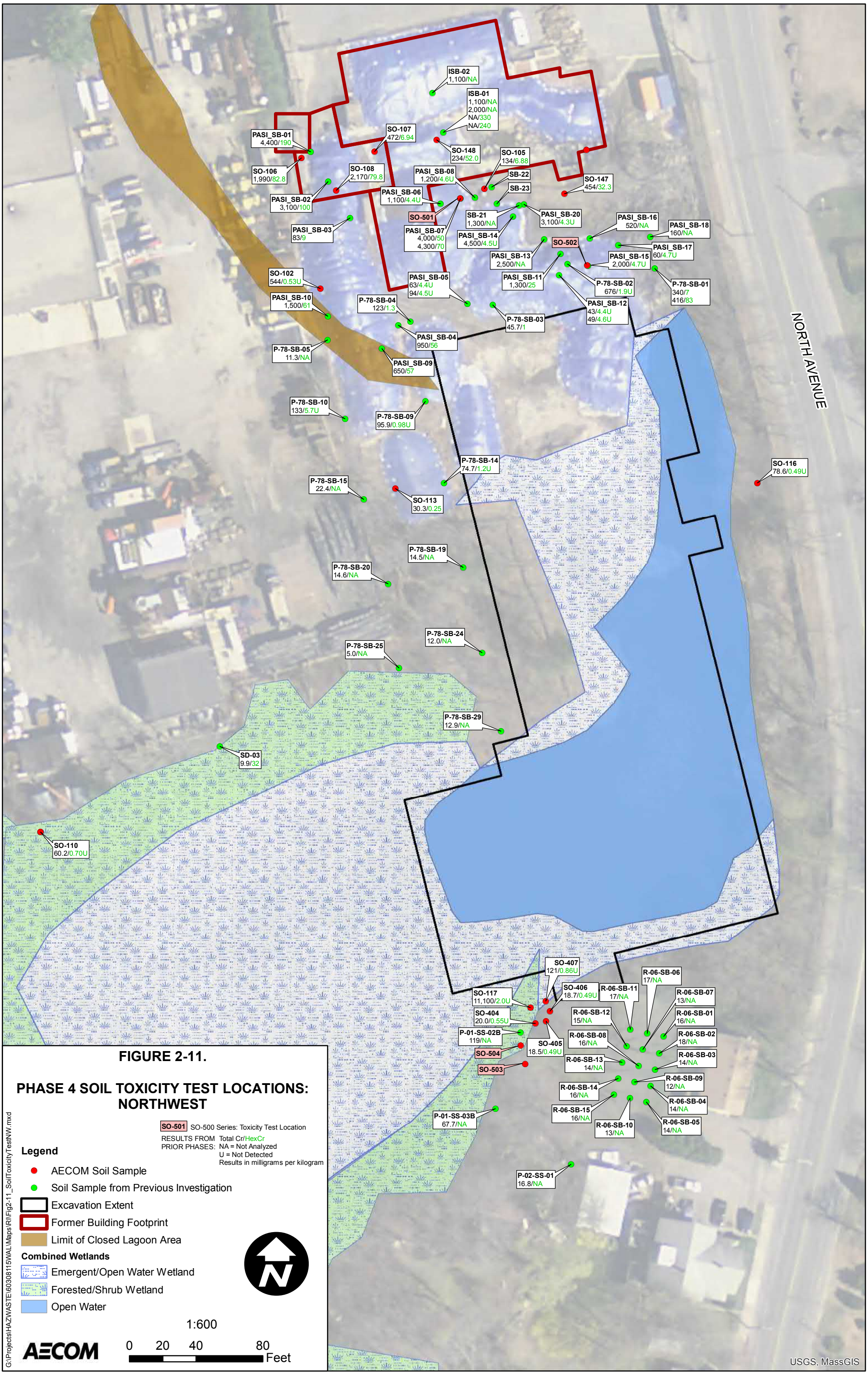


FIGURE 2-11.

PHASE 4 SOIL TOXICITY TEST LOCATIONS: NORTHWEST

SO-501 SO-500 Series: Toxicity Test Location

RESULTS FROM PRIOR PHASES: Total Cr/HexCr
NA = Not Analyzed
U = Not Detected
Results in milligrams per kilogram

Legend

- AECOM Soil Sample
- Soil Sample from Previous Investigation
- Excavation Extent
- Former Building Footprint
- Limit of Closed Lagoon Area

Combined Wetlands

- Emergent/Open Water Wetland
- Forested/Shrub Wetland
- Open Water

1:600

0 20 40 80 Feet

AECOM

G:\Projects\HAZWASTE\60308115WAL\Maps\RI\Fig2-11_SoilToxicityTestNW.mxd

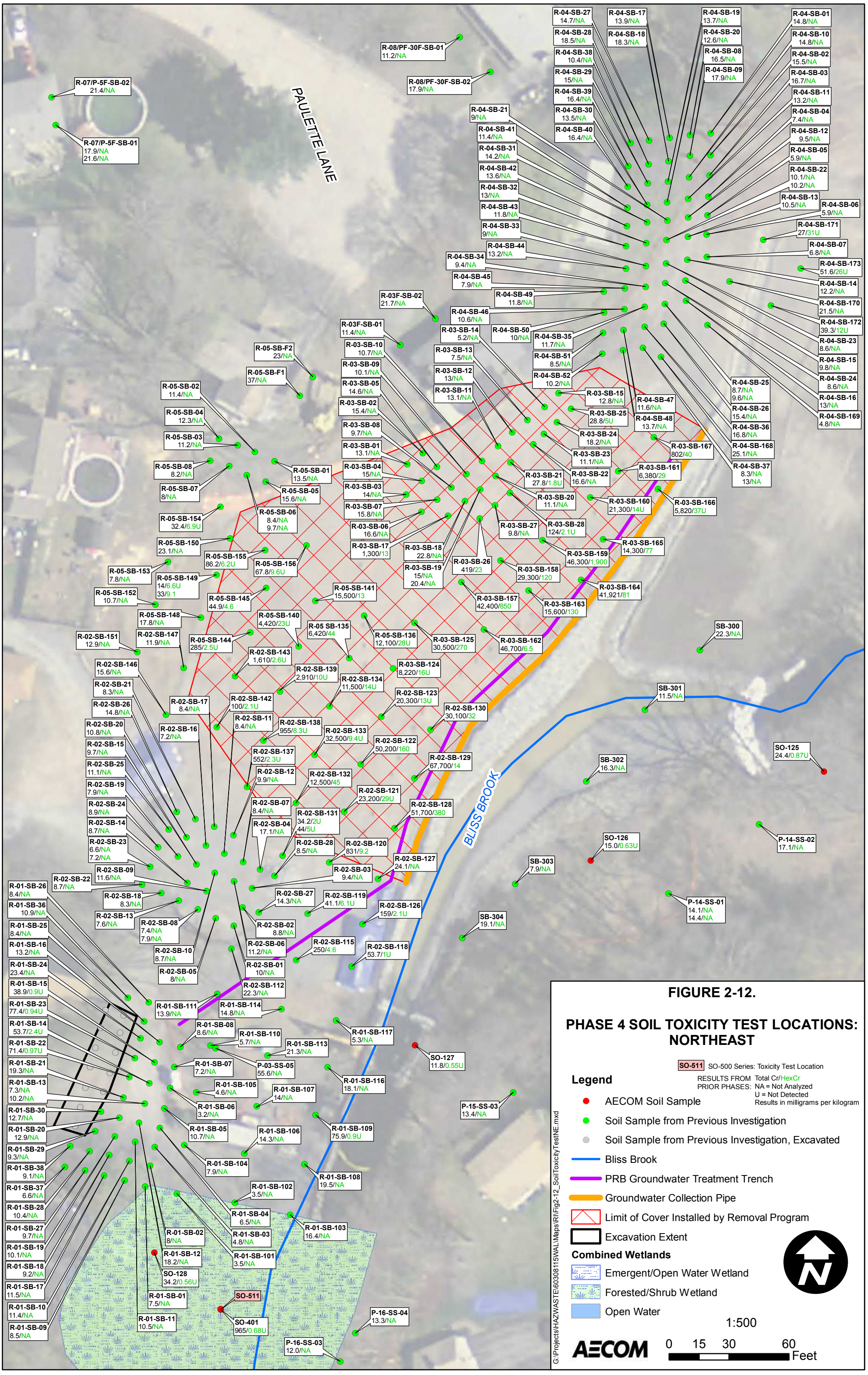


FIGURE 2-12.

PHASE 4 SOIL TOXICITY TEST LOCATIONS: NORTHEAST

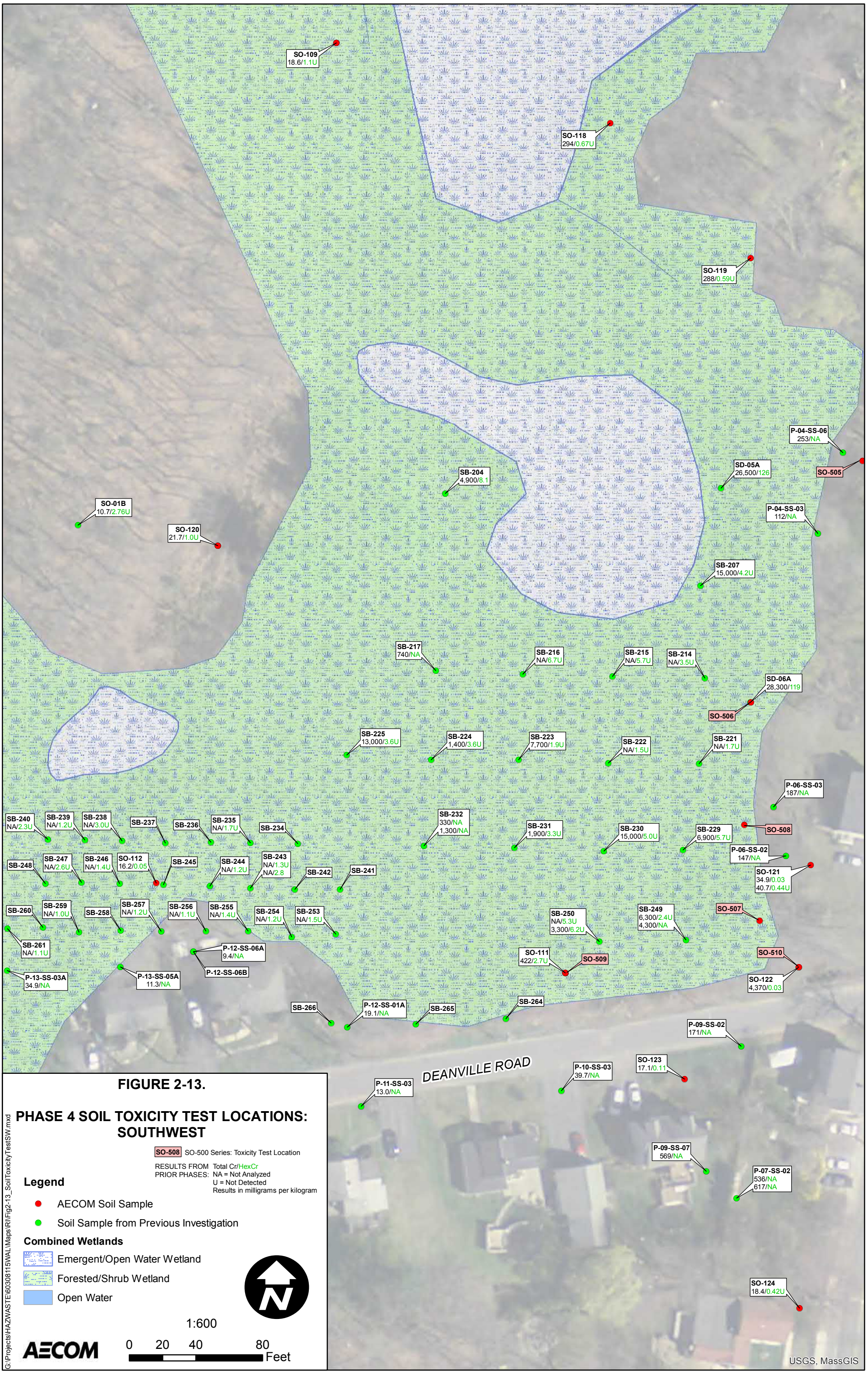


FIGURE 2-13.

PHASE 4 SOIL TOXICITY TEST LOCATIONS: SOUTHWEST

SO-508 SO-500 Series: Toxicity Test Location

RESULTS FROM PRIOR PHASES: Total Cr/HexCr
NA = Not Analyzed
U = Not Detected
Results in milligrams per kilogram

Legend

- AECOM Soil Sample
- Soil Sample from Previous Investigation

Combined Wetlands

- Emergent/Open Water Wetland
- Forested/Shrub Wetland
- Open Water

1:600

0 20 40 80 Feet

AECOM

G:\Projects\HAZWASTE\60308115\WAL\Maps\RI\Fig2-13_SoilToxicityTestSW.mxd

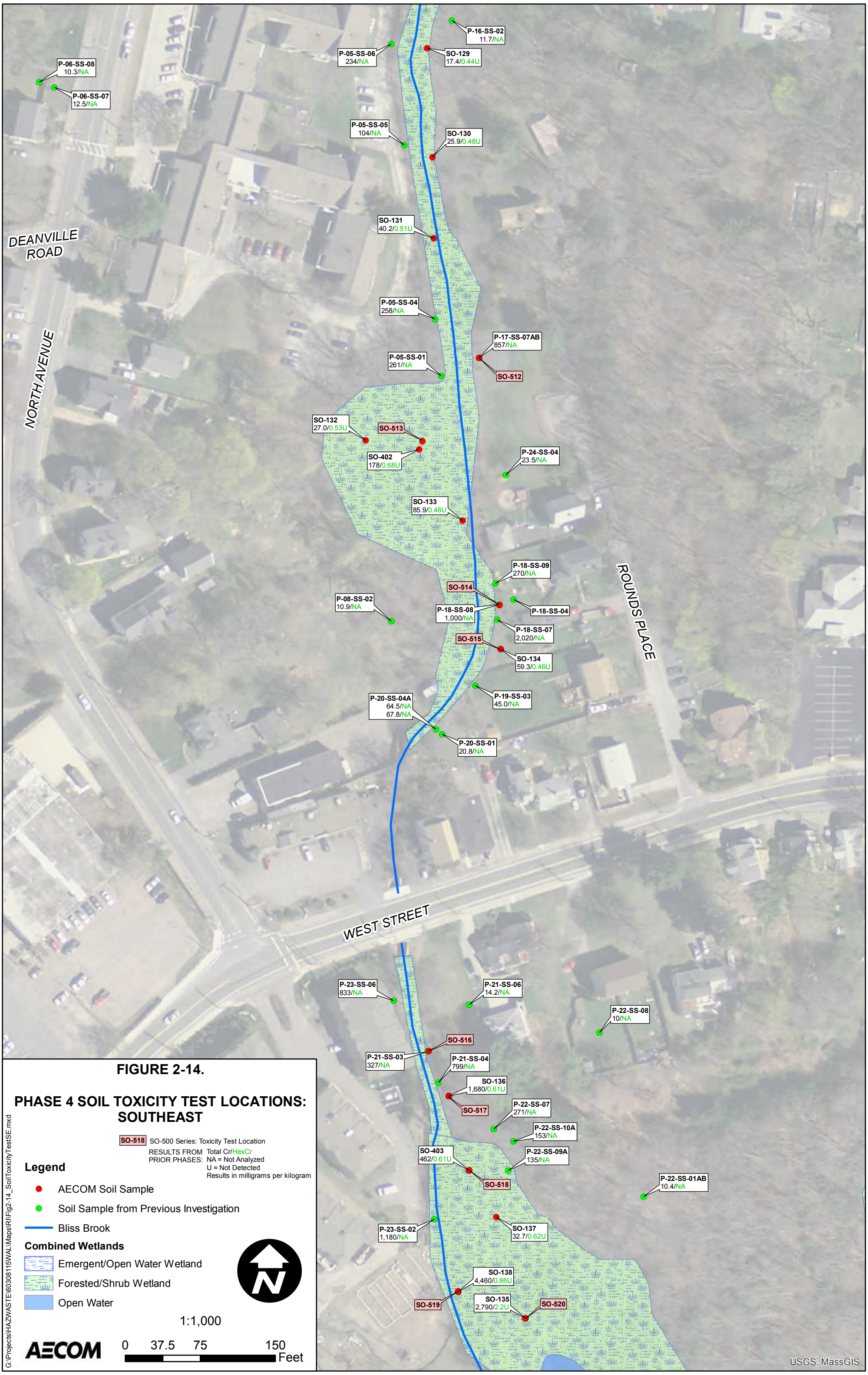


FIGURE 2-14.

PHASE 4 SOIL TOXICITY TEST LOCATIONS: SOUTHEAST

SO-518 SO-500 Series: Toxicity Test Location
RESULTS FROM PRIOR PHASES: Total Cr/HexCr
NA = Not Analyzed
U = Not Detected
Results in milligrams per kilogram

Legend

- AECOM Soil Sample
- Soil Sample from Previous Investigation
- Bliss Brook

Combined Wetlands

- Emergent/Open Water Wetland
- Forested/Shrub Wetland
- Open Water

1:1,000

AECOM

0 37.5 75 150 Feet

G:\Projects\HAZWASTE\60308115WAL\Maps\RI\Fig2-14_SoilToxicityTestSE.mxd

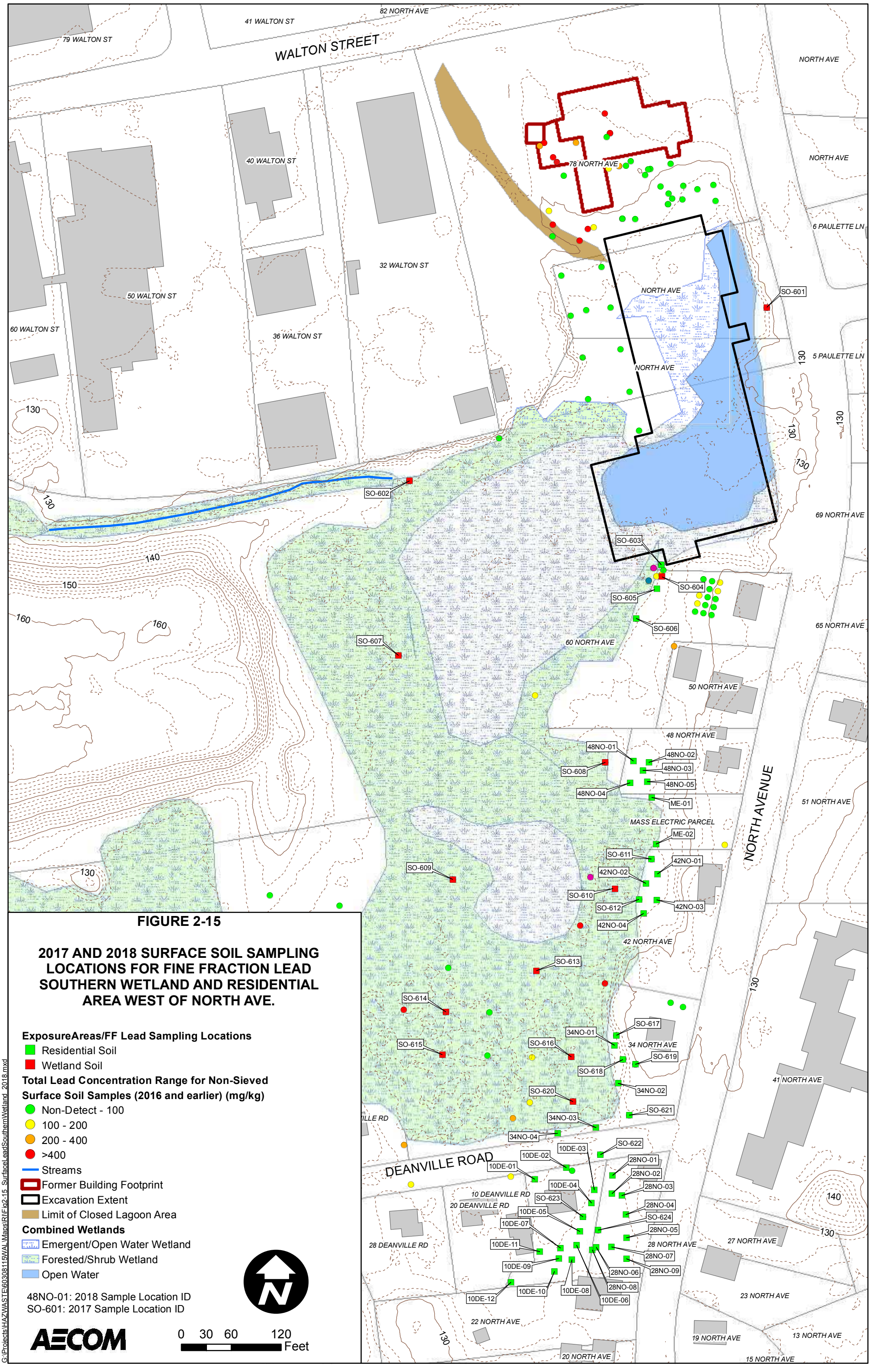


FIGURE 2-15

2017 AND 2018 SURFACE SOIL SAMPLING LOCATIONS FOR FINE FRACTION LEAD SOUTHERN WETLAND AND RESIDENTIAL AREA WEST OF NORTH AVE.

ExposureAreas/FF Lead Sampling Locations
- Residential Soil
- Wetland Soil

Total Lead Concentration Range for Non-Sieved Surface Soil Samples (2016 and earlier) (mg/kg)
- Non-Detect - 100
- 100 - 200
- 200 - 400
- >400
- Streams
- Former Building Footprint
- Excavation Extent
- Limit of Closed Lagoon Area

Combined Wetlands
- Emergent/Open Water Wetland
- Forested/Shrub Wetland
- Open Water

48NO-01: 2018 Sample Location ID
SO-601: 2017 Sample Location ID

AECOM

0 30 60 120 Feet

G:\Projects\HAZWASTE\60308115\WAL\Maps\R1\Fig2-15_SurfaceLeadSouthernWetland_2018.mxd

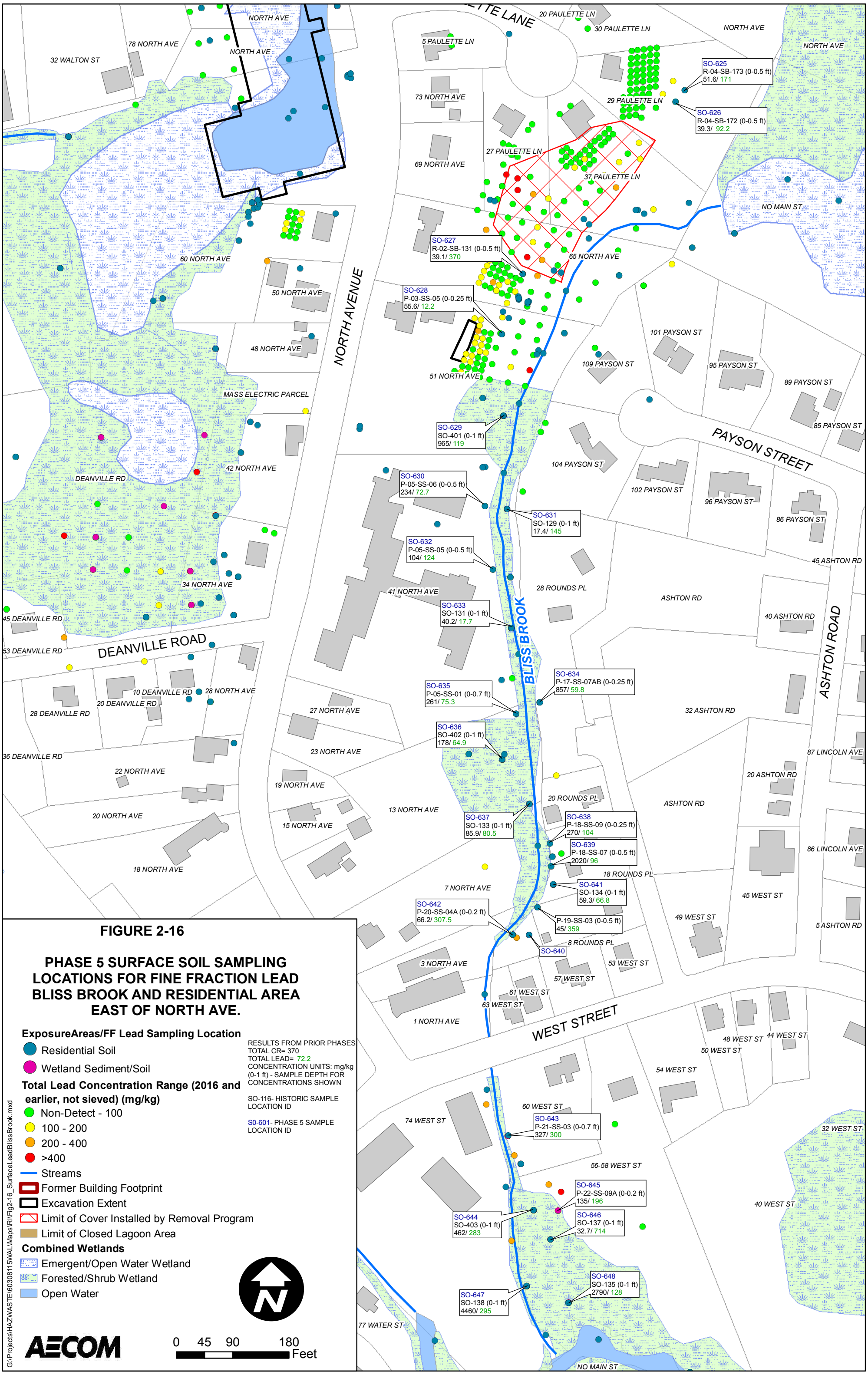


FIGURE 2-16

PHASE 5 SURFACE SOIL SAMPLING LOCATIONS FOR FINE FRACTION LEAD BLISS BROOK AND RESIDENTIAL AREA EAST OF NORTH AVE.

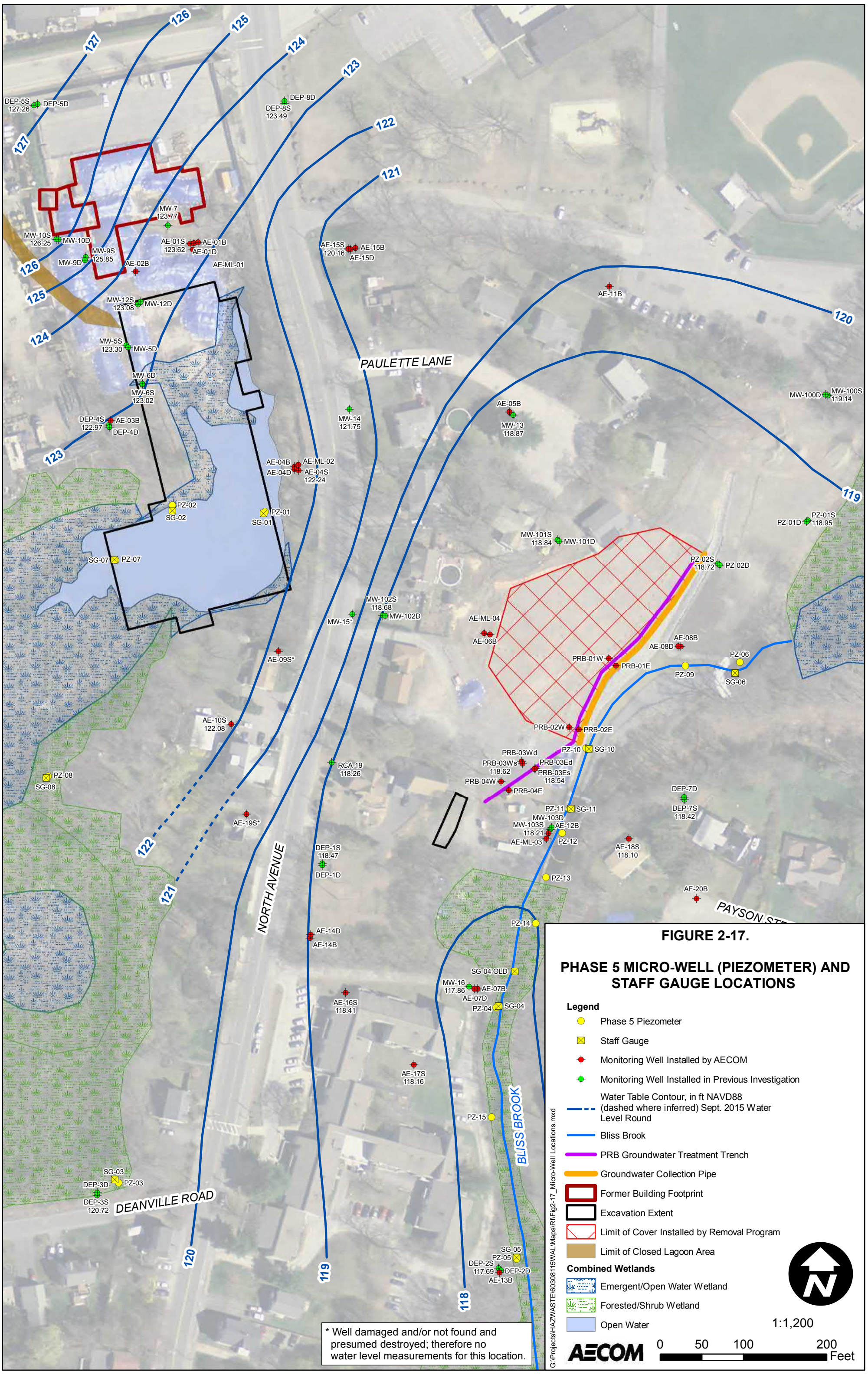


FIGURE 2-17.

PHASE 5 MICRO-WELL (PIEZOMETER) AND STAFF GAUGE LOCATIONS

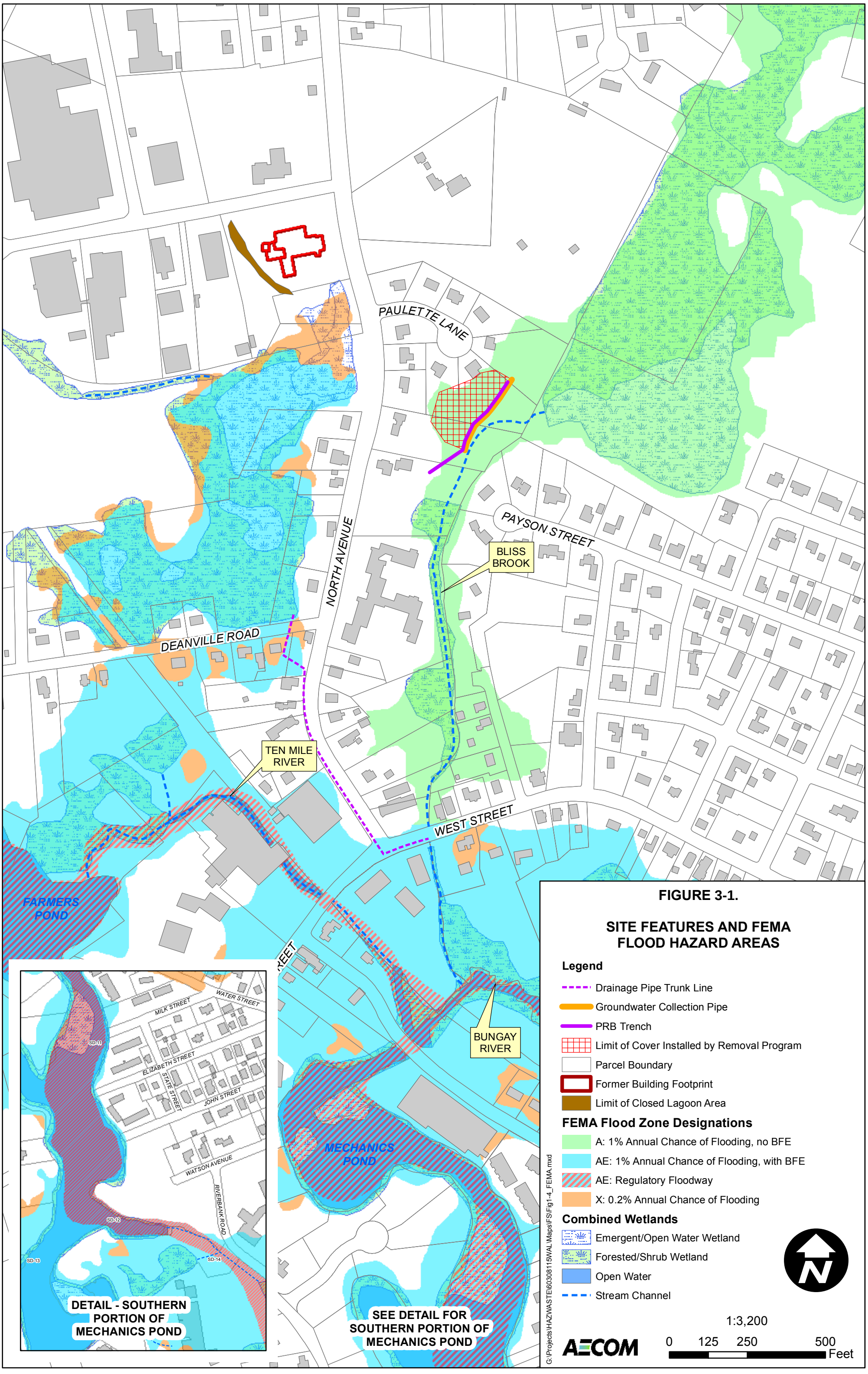
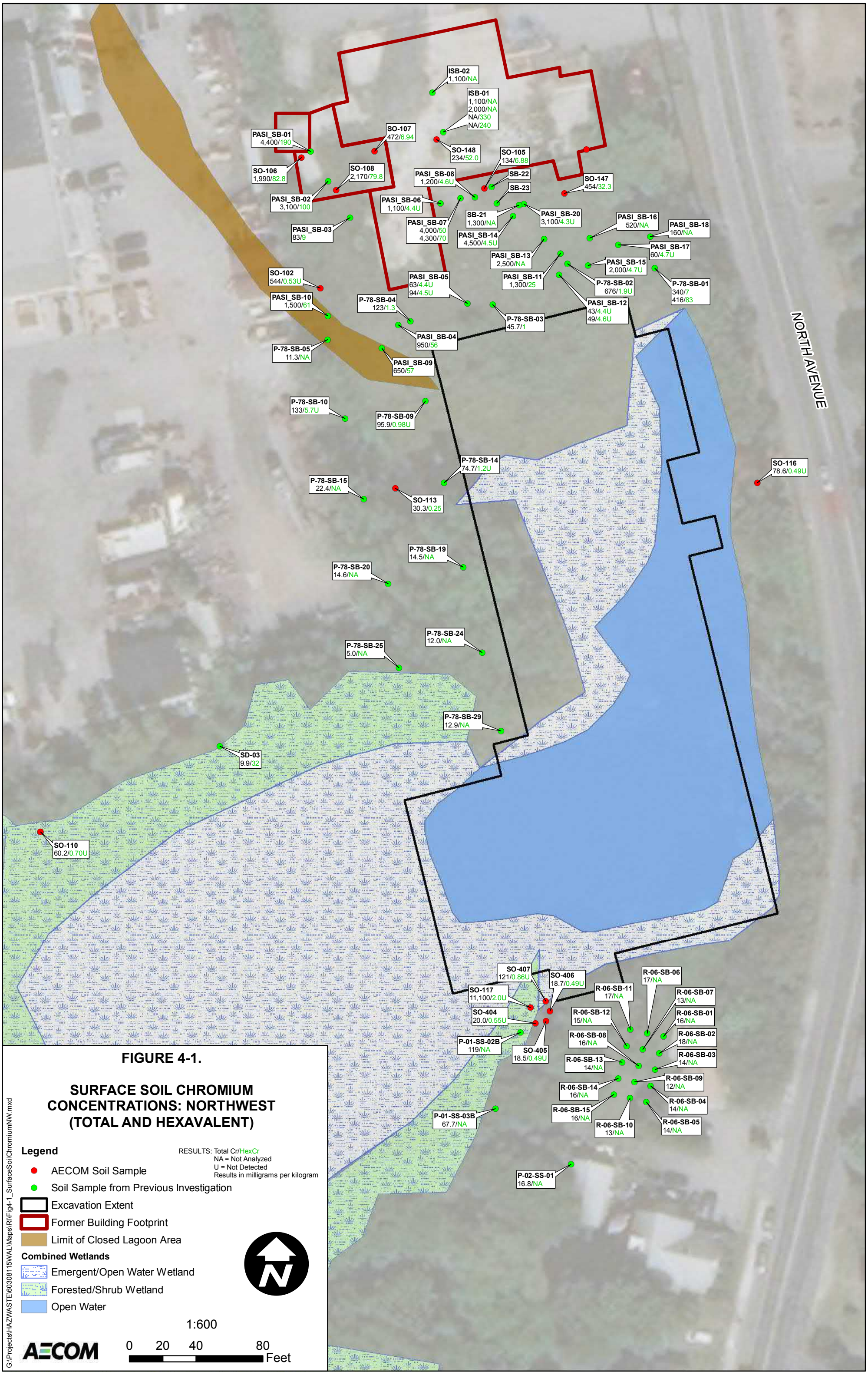


FIGURE 3-1.

SITE FEATURES AND FEMA FLOOD HAZARD AREAS


ISB-02
1,100/NA
ISB-01
1,100/NA
2,000/NA
NA/330
NA/240
PASI_SB-01
4,400/190
SO-107
472/6.94
SO-148
234/52.0
SO-105
134/6.88
SO-106
1,990/82.8
SO-108
2,170/79.8
PASI_SB-08
1,200/4.6U
SB-22
SO-147
454/32.3
SB-23
PASI_SB-02
3,100/100
PASI_SB-06
1,100/4.4U
SB-21
1,300/NA
PASI_SB-20
3,100/4.3U
PASI_SB-16
520/NA
PASI_SB-18
160/NA
PASI_SB-03
83/9
PASI_SB-07
4,000/50
4,300/70
PASI_SB-14
4,500/4.5U
PASI_SB-17
60/4.7U
PASI_SB-13
2,500/NA
PASI_SB-15
2,000/4.7U
SO-102
544/0.53U
PASI_SB-05
63/4.4U
94/4.5U
PASI_SB-11
1,300/25
P-78-SB-02
676/1.9U
P-78-SB-01
340/7
416/83
PASI_SB-10
1,500/61
P-78-SB-04
123/1.3
PASI_SB-12
43/4.4U
49/4.6U
P-78-SB-03
45.7/1
PASI_SB-04
950/56
P-78-SB-05
11.3/NA
PASI_SB-09
650/57
NORTH AVENUE
P-78-SB-10
133/5.7U
P-78-SB-09
95.9/0.98U
P-78-SB-14
74.7/1.2U
SO-116
78.6/0.49U
P-78-SB-15
22.4/NA
SO-113
30.3/0.25
P-78-SB-19
14.5/NA
P-78-SB-20
14.6/NA
P-78-SB-24
12.0/NA
P-78-SB-25
5.0/NA
P-78-SB-29
12.9/NA
SD-03
9.9/32
SO-110
60.2/0.70U
SO-407
121/0.86U
SO-406
18.7/0.49U
R-06-SB-06
17/NA
SO-117
11,100/2.0U
R-06-SB-11
17/NA
R-06-SB-07
13/NA
SO-404
20.0/0.55U
R-06-SB-12
15/NA
R-06-SB-01
16/NA
P-01-SS-02B
119/NA
R-06-SB-08
16/NA
R-06-SB-02
18/NA
SO-405
18.5/0.49U
R-06-SB-13
14/NA
R-06-SB-03
14/NA
R-06-SB-09
12/NA
R-06-SB-14
16/NA
R-06-SB-04
14/NA
P-01-SS-03B
67.7/NA
R-06-SB-15
16/NA
R-06-SB-10
13/NA
R-06-SB-05
14/NA
P-02-SS-01
16.8/NA
FIGURE 4-1.
SURFACE SOIL CHROMIUM CONCENTRATIONS: NORTHWEST (TOTAL AND HEXAVALENT)
Legend
RESULTS: Total Cr/HexCr
NA = Not Analyzed
U = Not Detected
Results in milligrams per kilogram
AECOM Soil Sample
Soil Sample from Previous Investigation
Excavation Extent
Former Building Footprint
Limit of Closed Lagoon Area
Combined Wetlands
Emergent/Open Water Wetland
Forested/Shrub Wetland
Open Water
N
1:600
AECOM
0 20 40 80
Feet
G:\Projects\HAZWASTE\60308115WAL\Maps\RI\Fig4-1_SurfaceSoilChromiumNW.mxd

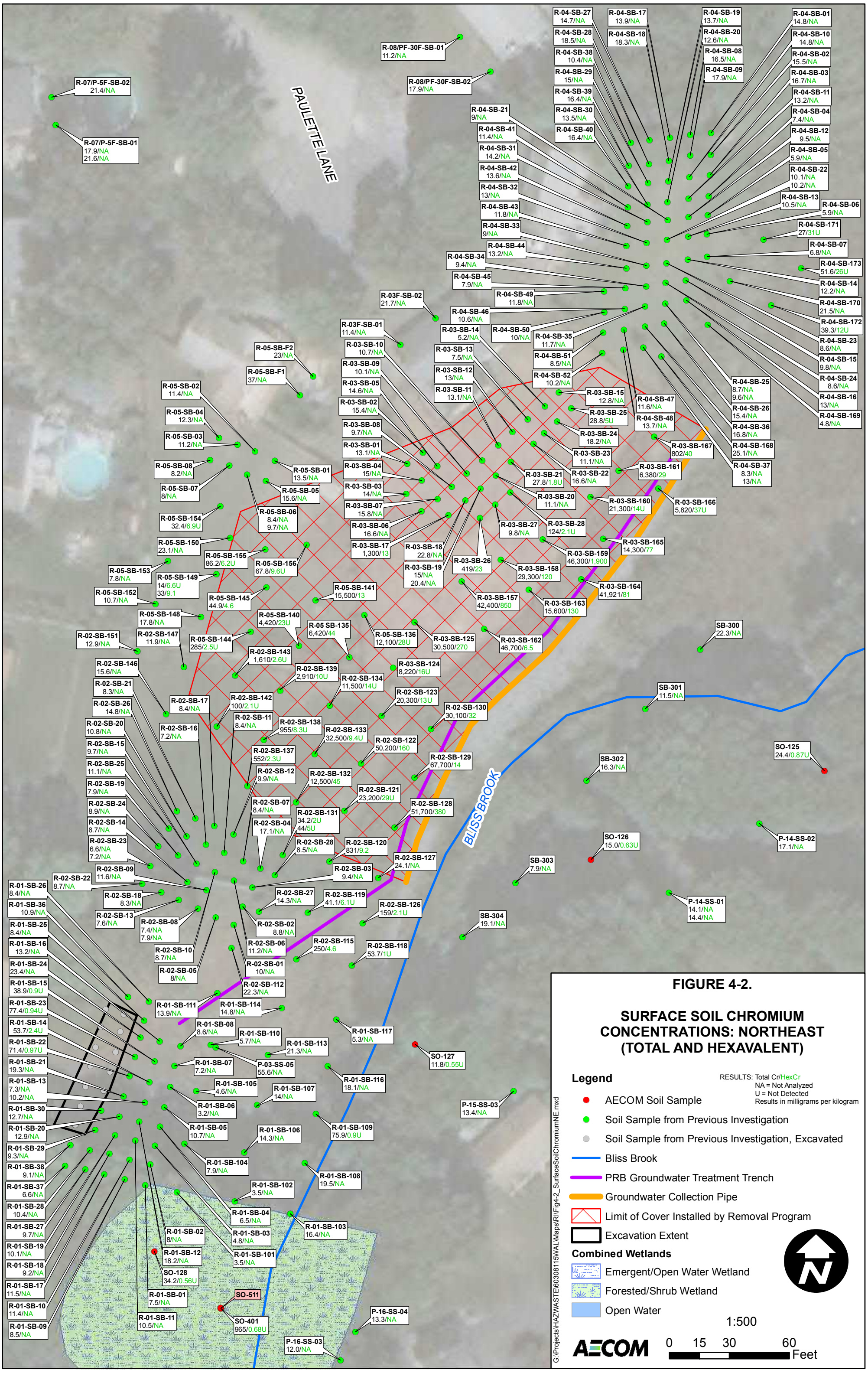
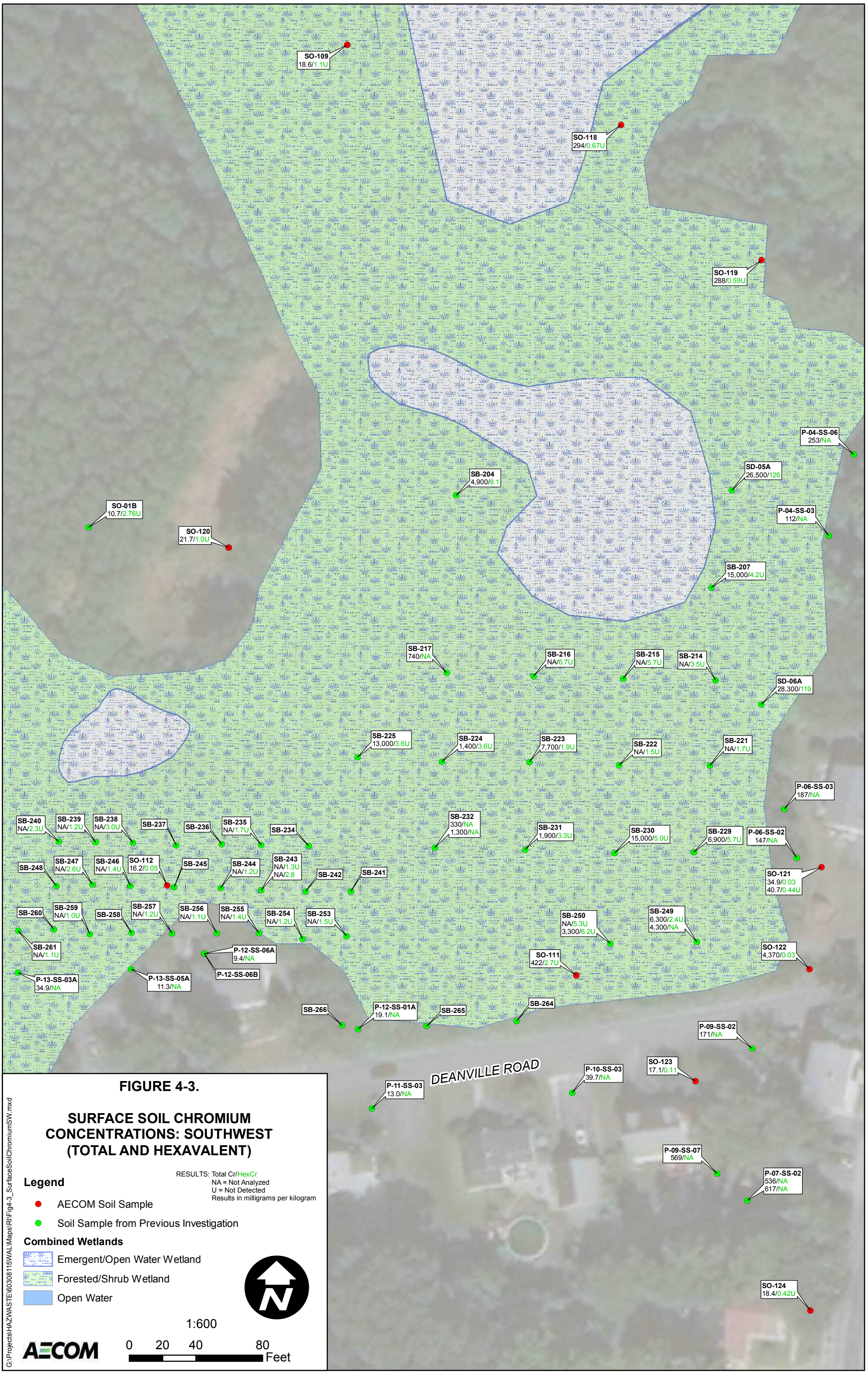
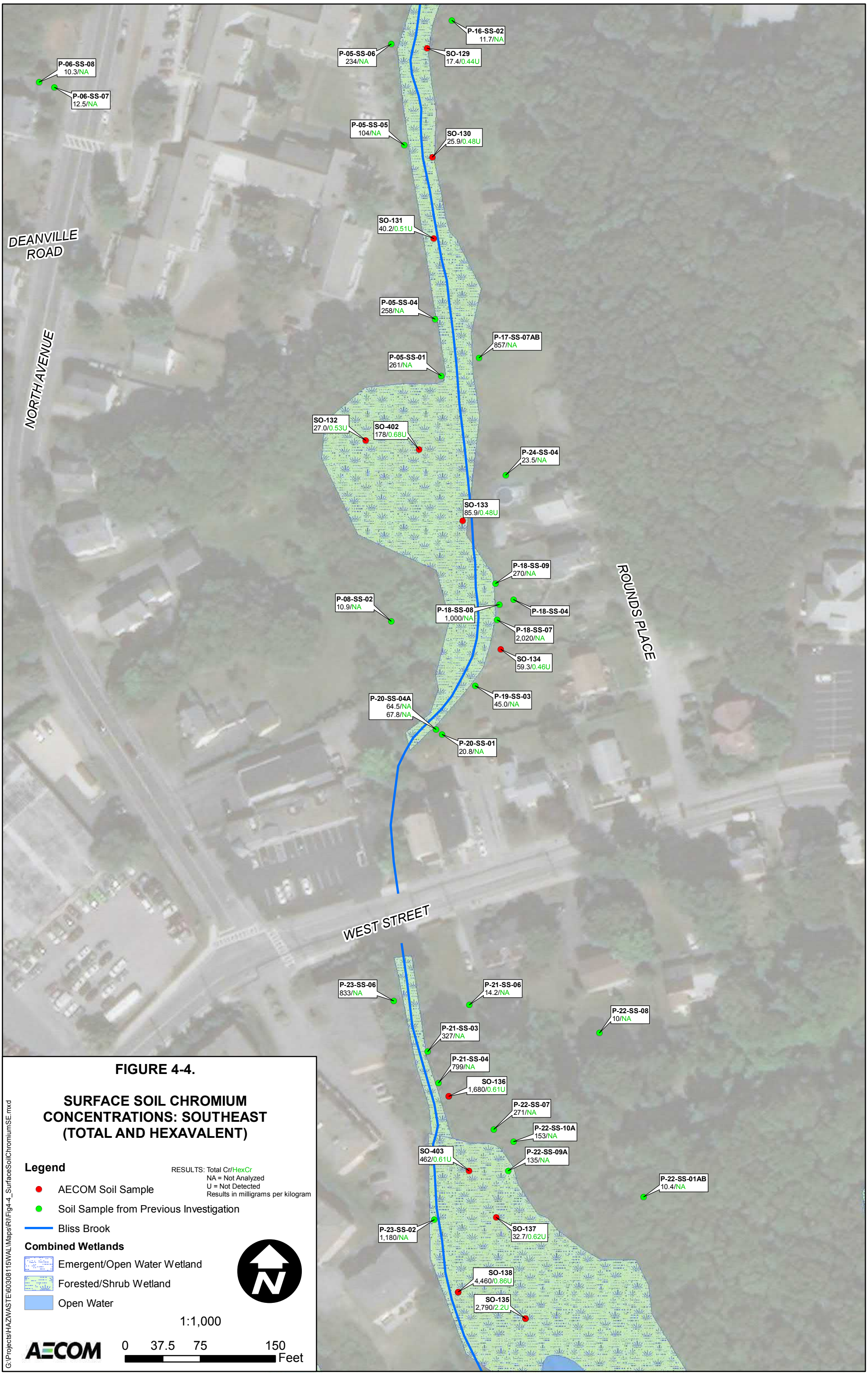


FIGURE 4-2.

SURFACE SOIL CHROMIUM CONCENTRATIONS: NORTHEAST (TOTAL AND HEXAVALENT)


SO-109
18.6/1.1U
SO-118
294/0.67U
SO-119
288/0.59U
P-04-SS-06
253/NA
SD-05A
26,500/126
SB-204
4,900/8.1
SO-01B
10.7/2.76U
SO-120
21.7/1.0U
P-04-SS-03
112/NA
SB-207
15,000/4.2U
SB-217
740/NA
SB-216
NA/6.7U
SB-215
NA/5.7U
SB-214
NA/3.5U
SD-06A
28,300/119
SB-225
13,000/3.6U
SB-224
1,400/3.6U
SB-223
7,700/1.9U
SB-222
NA/1.5U
SB-221
NA/1.7U
P-06-SS-03
187/NA
SB-240
NA/2.3U
SB-239
NA/1.2U
SB-238
NA/3.0U
SB-237
SB-236
SB-235
NA/1.7U
SB-234
SB-232
330/NA
1,300/NA
SB-231
1,900/3.3U
SB-230
15,000/5.0U
SB-229
6,900/5.7U
P-06-SS-02
147/NA
SB-248
SB-247
NA/2.6U
SB-246
NA/1.4U
SO-112
16.2/0.05
SB-245
SB-244
NA/1.2U
SB-243
NA/1.3U
NA/2.8
SB-242
SB-241
SO-121
34.9/0.03
40.7/0.44U
SB-260
SB-259
NA/1.0U
SB-258
SB-257
NA/1.2U
SB-256
NA/1.1U
SB-255
NA/1.4U
SB-254
NA/1.2U
SB-253
NA/1.5U
SB-250
NA/5.3U
3,300/6.2U
SB-249
6,300/2.4U
4,300/NA
SB-261
NA/1.1U
P-12-SS-06A
9.4/NA
P-12-SS-06B
SO-111
422/2.7U
SO-122
4,370/0.03
P-13-SS-03A
34.9/NA
P-13-SS-05A
11.3/NA
SB-266
P-12-SS-01A
19.1/NA
SB-265
SB-264
P-09-SS-02
171/NA
DEANVILLE ROAD
SO-123
17.1/0.11
P-10-SS-03
39.7/NA
P-11-SS-03
13.0/NA
P-09-SS-07
569/NA
P-07-SS-02
536/NA
617/NA
SO-124
18.4/0.42U
FIGURE 4-3.
SURFACE SOIL CHROMIUM CONCENTRATIONS: SOUTHWEST (TOTAL AND HEXAVALENT)
RESULTS: Total Cr/HexCr
NA = Not Analyzed
U = Not Detected
Results in milligrams per kilogram
Legend
AECOM Soil Sample
Soil Sample from Previous Investigation
Combined Wetlands
Emergent/Open Water Wetland
Forested/Shrub Wetland
Open Water
N
1:600
AECOM
0 20 40 80
Feet
G:\Projects\HAZWASTE\60308115\WAL\Maps\RI\Fig4-3_SurfaceSoilChromiumSW.mxd


P-16-SS-02
11.7/NA
P-05-SS-06
234/NA
SO-129
17.4/0.44U
P-06-SS-08
10.3/NA
P-06-SS-07
12.5/NA
P-05-SS-05
104/NA
SO-130
25.9/0.48U
SO-131
40.2/0.51U
DEANVILLE ROAD
P-05-SS-04
258/NA
P-17-SS-07AB
857/NA
NORTH AVENUE
P-05-SS-01
261/NA
SO-132
27.0/0.53U
SO-402
178/0.68U
P-24-SS-04
23.5/NA
SO-133
85.9/0.48U
P-18-SS-09
270/NA
ROUNDS PLACE
P-08-SS-02
10.9/NA
P-18-SS-08
1,000/NA
P-18-SS-04
P-18-SS-07
2,020/NA
SO-134
59.3/0.46U
P-19-SS-03
45.0/NA
P-20-SS-04A
64.5/NA
67.8/NA
P-20-SS-01
20.8/NA
WEST STREET
P-23-SS-06
833/NA
P-21-SS-06
14.2/NA
P-22-SS-08
10/NA
P-21-SS-03
327/NA
P-21-SS-04
799/NA
SO-136
1,680/0.61U
P-22-SS-07
271/NA
P-22-SS-10A
153/NA
SO-403
462/0.61U
P-22-SS-09A
135/NA
P-22-SS-01AB
10.4/NA
P-23-SS-02
1,180/NA
SO-137
32.7/0.62U
SO-138
4,460/0.86U
SO-135
2,790/2.2U
FIGURE 4-4.
SURFACE SOIL CHROMIUM CONCENTRATIONS: SOUTHEAST (TOTAL AND HEXAVALENT)
Legend
RESULTS: Total Cr/HexCr
NA = Not Analyzed
U = Not Detected
Results in milligrams per kilogram
AECOM Soil Sample
Soil Sample from Previous Investigation
Bliss Brook
Combined Wetlands
Emergent/Open Water Wetland
Forested/Shrub Wetland
Open Water
N
1:1,000
AECOM
0 37.5 75 150
Feet
G:\Projects\HAZWASTE\60308115WAL\Maps\RI\Fig4-4_SurfaceSoilChromiumSE.mxd

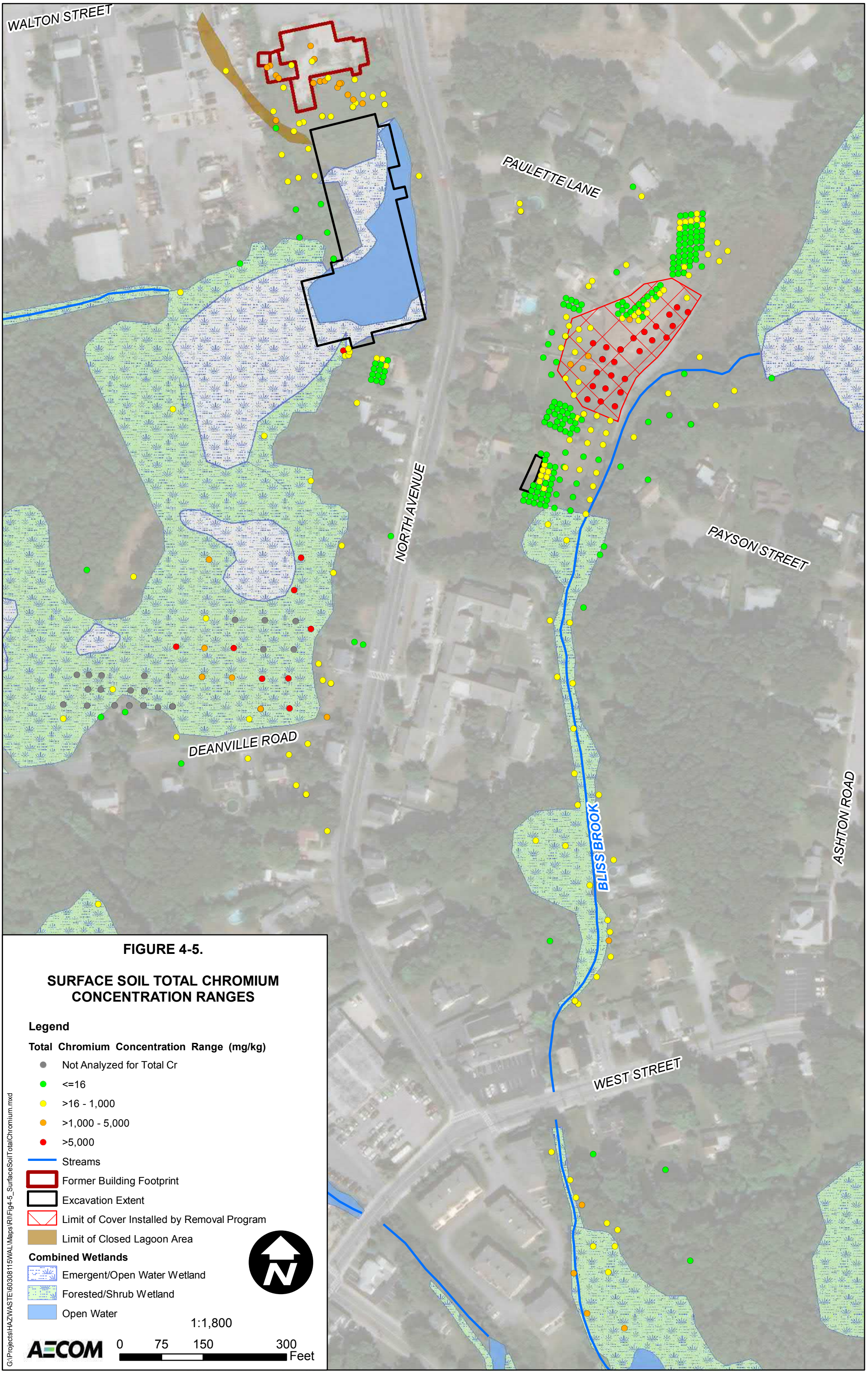


FIGURE 4-5.

SURFACE SOIL TOTAL CHROMIUM CONCENTRATION RANGES

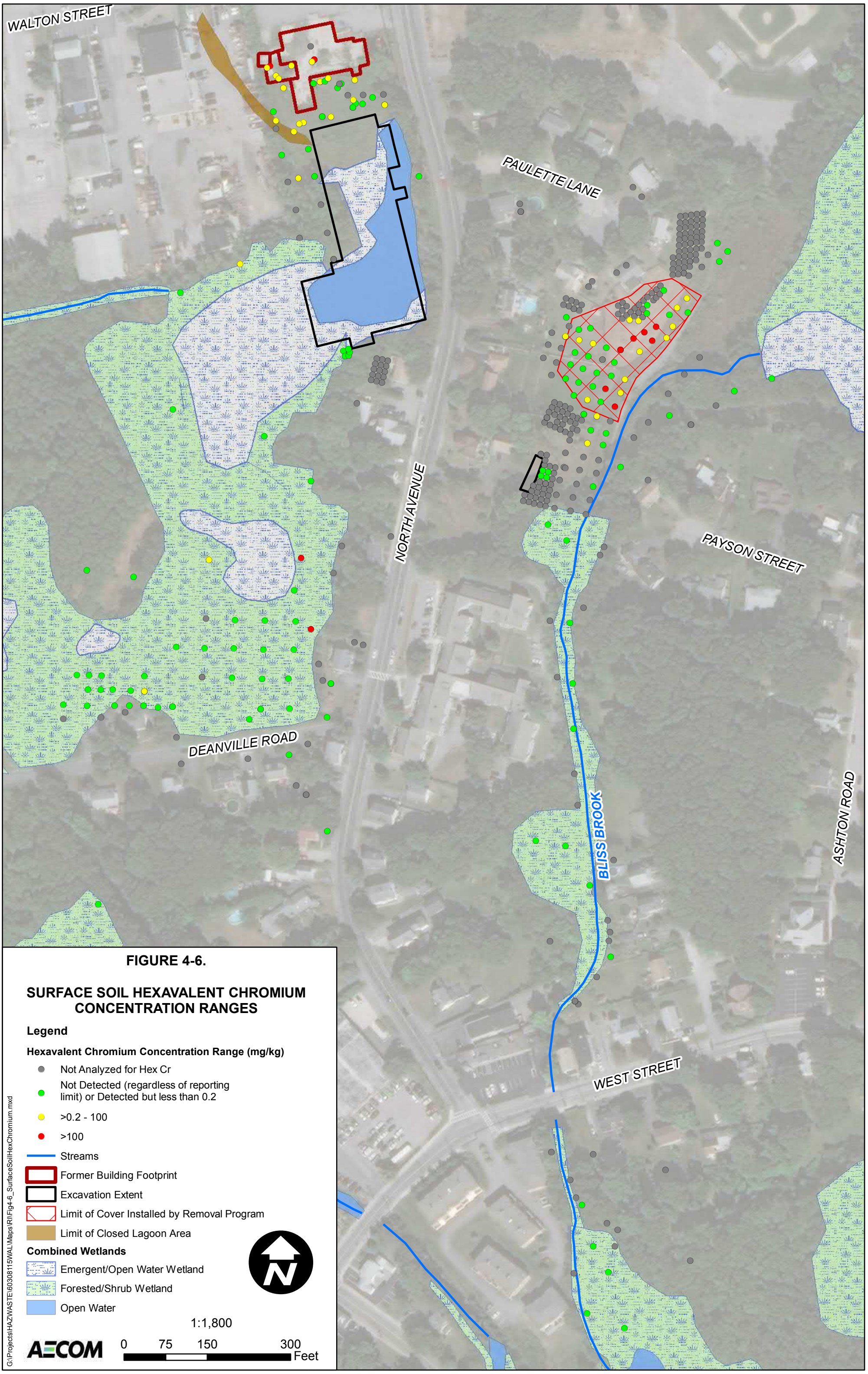


FIGURE 4-6.

SURFACE SOIL HEXAVALENT CHROMIUM CONCENTRATION RANGES

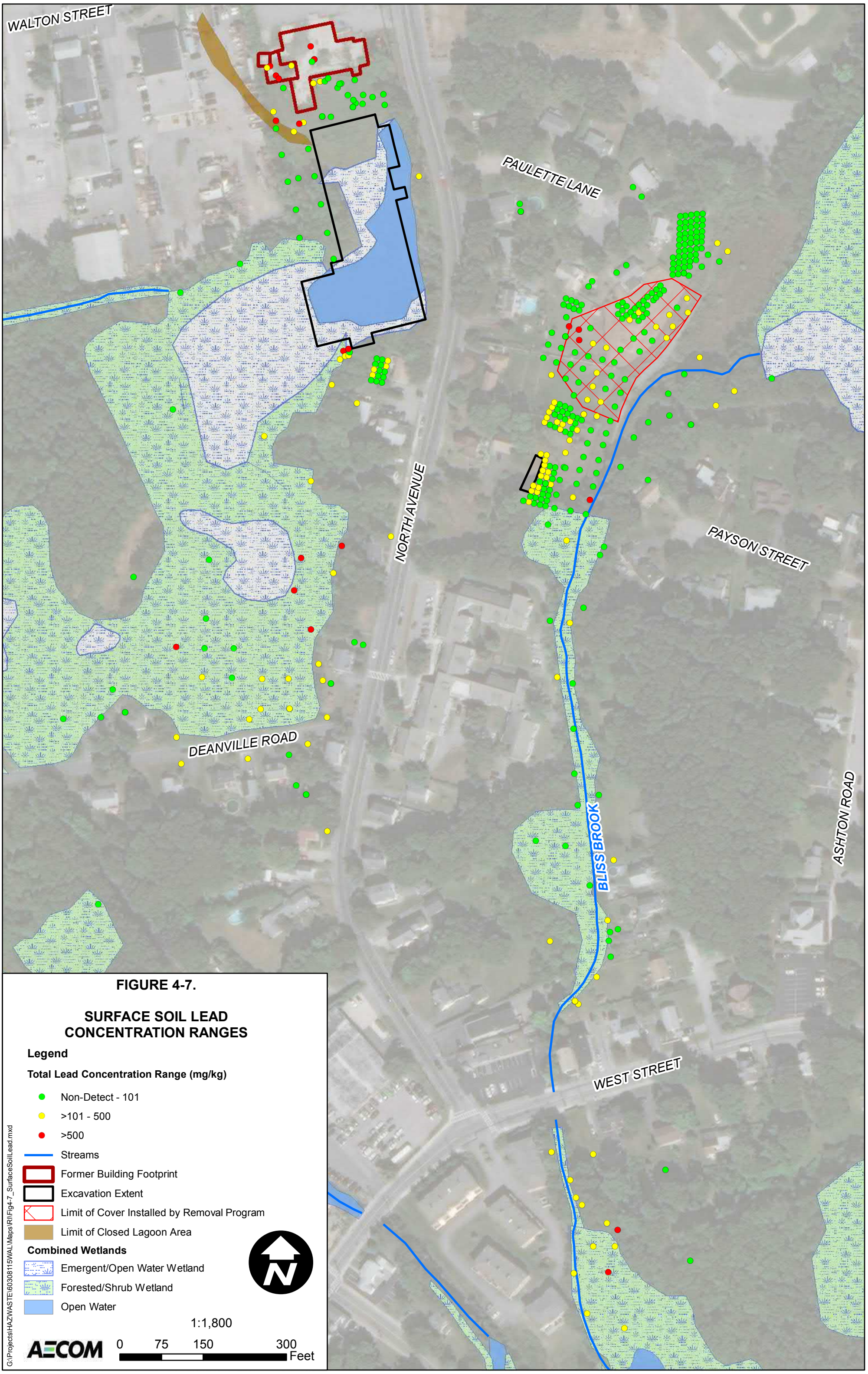
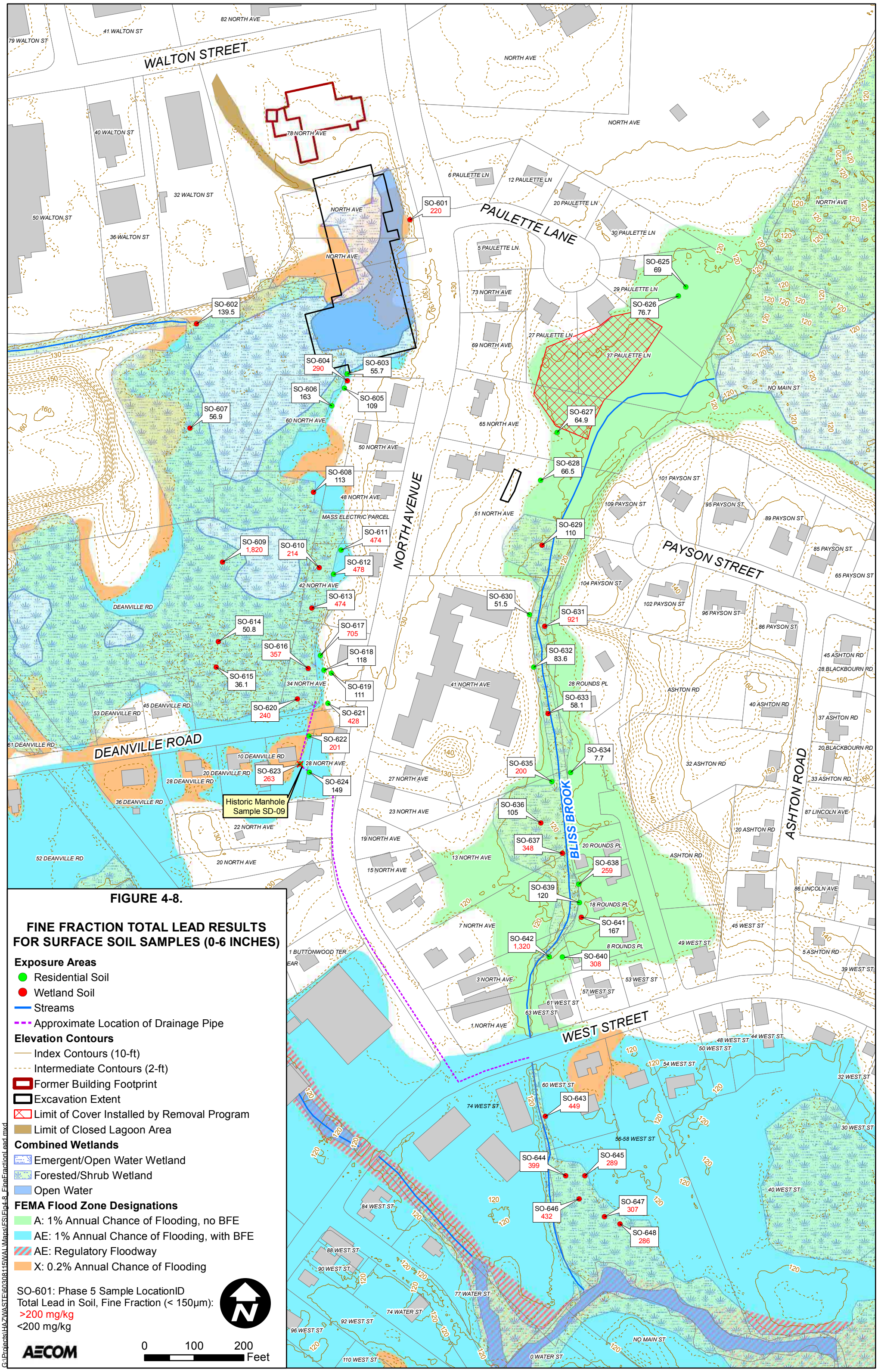


FIGURE 4-7.

SURFACE SOIL LEAD CONCENTRATION RANGES


WALTON STREET
PAULETTE LANE
NORTH AVENUE
PAYSON STREET
DEANVILLE ROAD
ASHTON ROAD
WEST STREET
BLISS BROOK
SO-601 220
SO-602 139.5
SO-603 55.7
SO-604 290
SO-605 109
SO-606 163
SO-607 56.9
SO-608 113
SO-609 1,820
SO-610 214
SO-611 474
SO-612 478
SO-613 474
SO-614 50.8
SO-615 36.1
SO-616 357
SO-617 705
SO-618 118
SO-619 111
SO-620 240
SO-621 428
SO-622 201
SO-623 263
SO-624 149
SO-625 69
SO-626 76.7
SO-627 64.9
SO-628 66.5
SO-629 110
SO-630 51.5
SO-631 921
SO-632 83.6
SO-633 58.1
SO-634 7.7
SO-635 200
SO-636 105
SO-637 348
SO-638 259
SO-639 120
SO-640 308
SO-641 167
SO-642 1,320
SO-643 449
SO-644 399
SO-645 289
SO-646 432
SO-647 307
SO-648 286
Historic Manhole Sample SD-09
MASS ELECTRIC PARCEL
FIGURE 4-8.
FINE FRACTION TOTAL LEAD RESULTS FOR SURFACE SOIL SAMPLES (0-6 INCHES)
Exposure Areas
Residential Soil
Wetland Soil
Streams
Approximate Location of Drainage Pipe
Elevation Contours
Index Contours (10-ft)
Intermediate Contours (2-ft)
Former Building Footprint
Excavation Extent
Limit of Cover Installed by Removal Program
Limit of Closed Lagoon Area
Combined Wetlands
Emergent/Open Water Wetland
Forested/Shrub Wetland
Open Water
FEMA Flood Zone Designations
A: 1% Annual Chance of Flooding, no BFE
AE: 1% Annual Chance of Flooding, with BFE
AE: Regulatory Floodway
X: 0.2% Annual Chance of Flooding
SO-601: Phase 5 Sample LocationID
Total Lead in Soil, Fine Fraction (< 150µm):
>200 mg/kg
<200 mg/kg
AECOM
0 100 200 Feet
G:\Projects\HAZWASTE\60308115\WAL\Maps\FS\Fig4-8_FineFractionLead.mxd

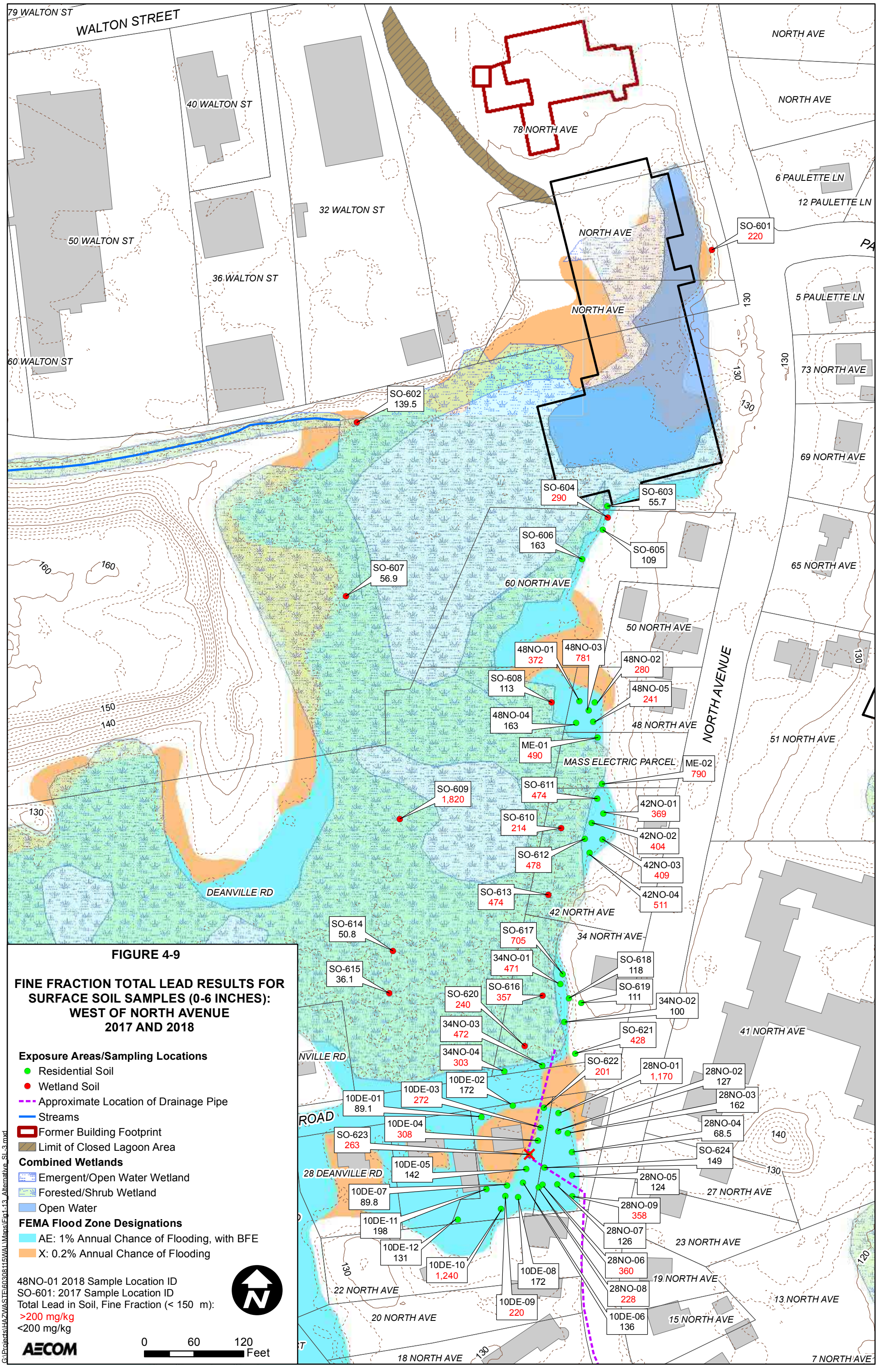


FIGURE 4-9

FINE FRACTION TOTAL LEAD RESULTS FOR SURFACE SOIL SAMPLES (0-6 INCHES): WEST OF NORTH AVENUE 2017 AND 2018

Exposure Areas/Sampling Locations

- Residential Soil
- Wetland Soil
- Approximate Location of Drainage Pipe
- Streams
- Former Building Footprint
- Limit of Closed Lagoon Area

Combined Wetlands

- Emergent/Open Water Wetland
- Forested/Shrub Wetland
- Open Water

FEMA Flood Zone Designations

- AE: 1% Annual Chance of Flooding, with BFE
- X: 0.2% Annual Chance of Flooding

48NO-01 2018 Sample Location ID
SO-601: 2017 Sample Location ID
Total Lead in Soil, Fine Fraction (< 150 m):
>200 mg/kg
<200 mg/kg

AECOM

G:\Projects\HAZWASTE\60308115\WAL\Maps\Fig1-13_Alternative_SL-3.mxd

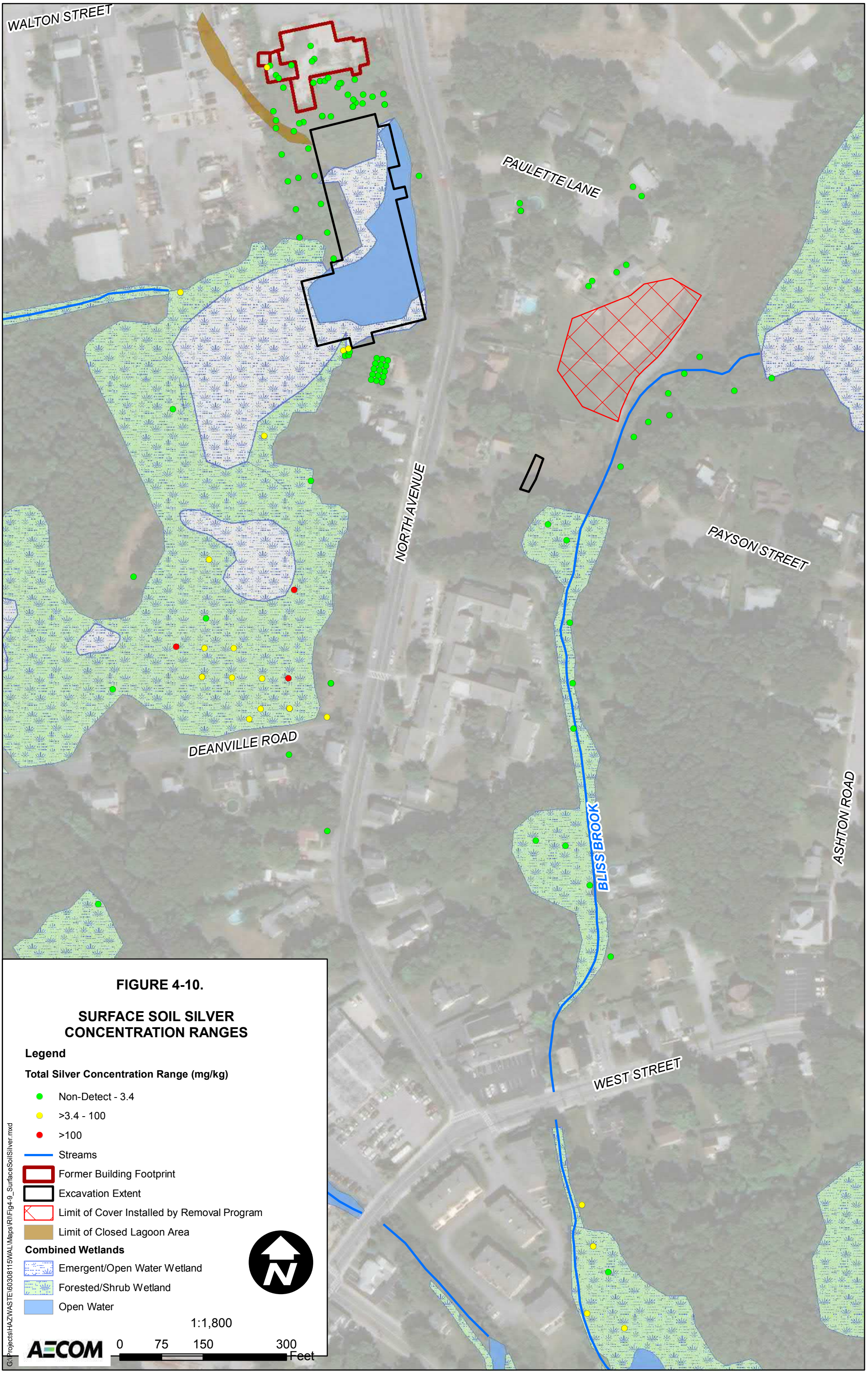


FIGURE 4-10.

SURFACE SOIL SILVER CONCENTRATION RANGES

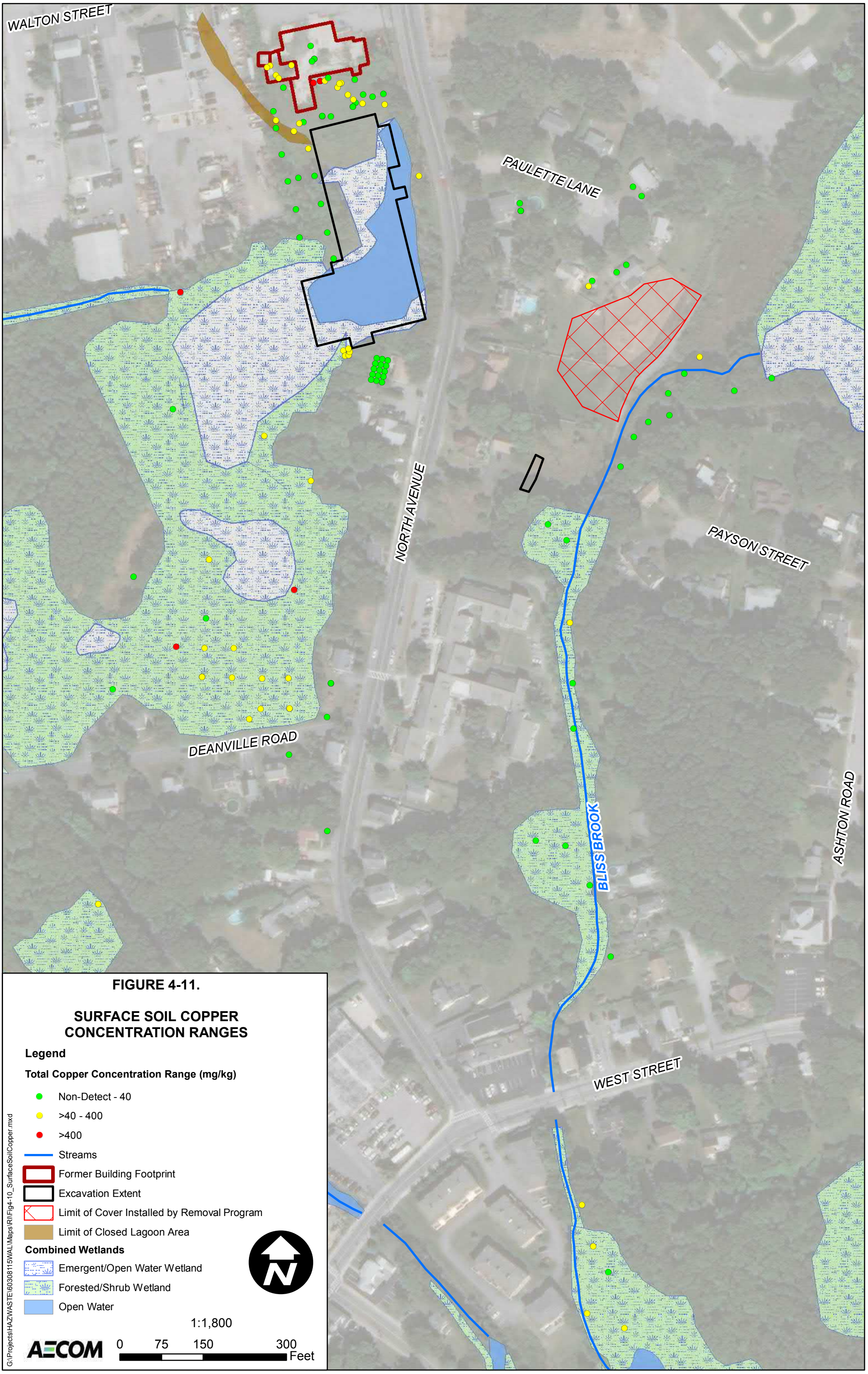


FIGURE 4-11.

SURFACE SOIL COPPER CONCENTRATION RANGES

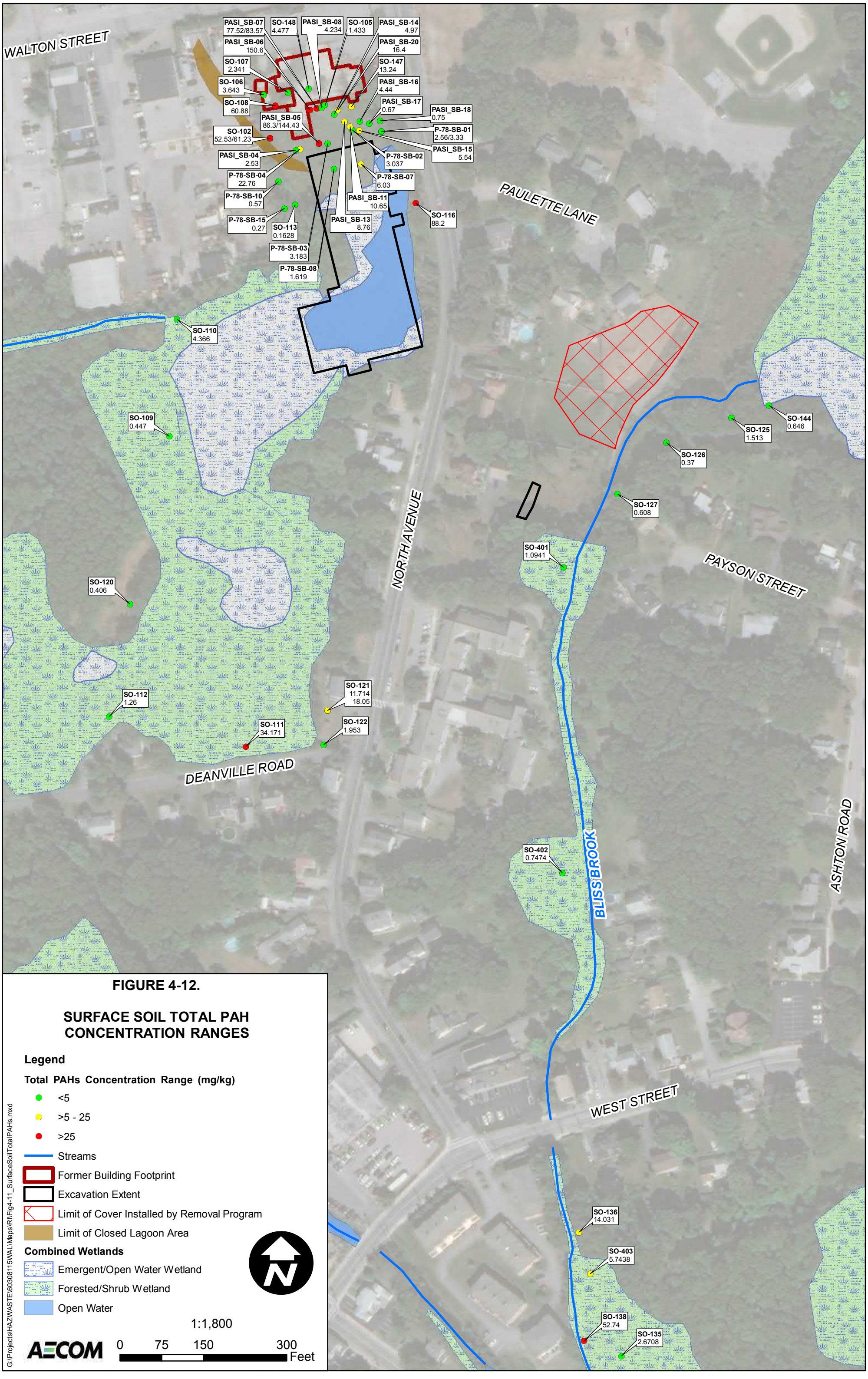


FIGURE 4-12.

SURFACE SOIL TOTAL PAH CONCENTRATION RANGES

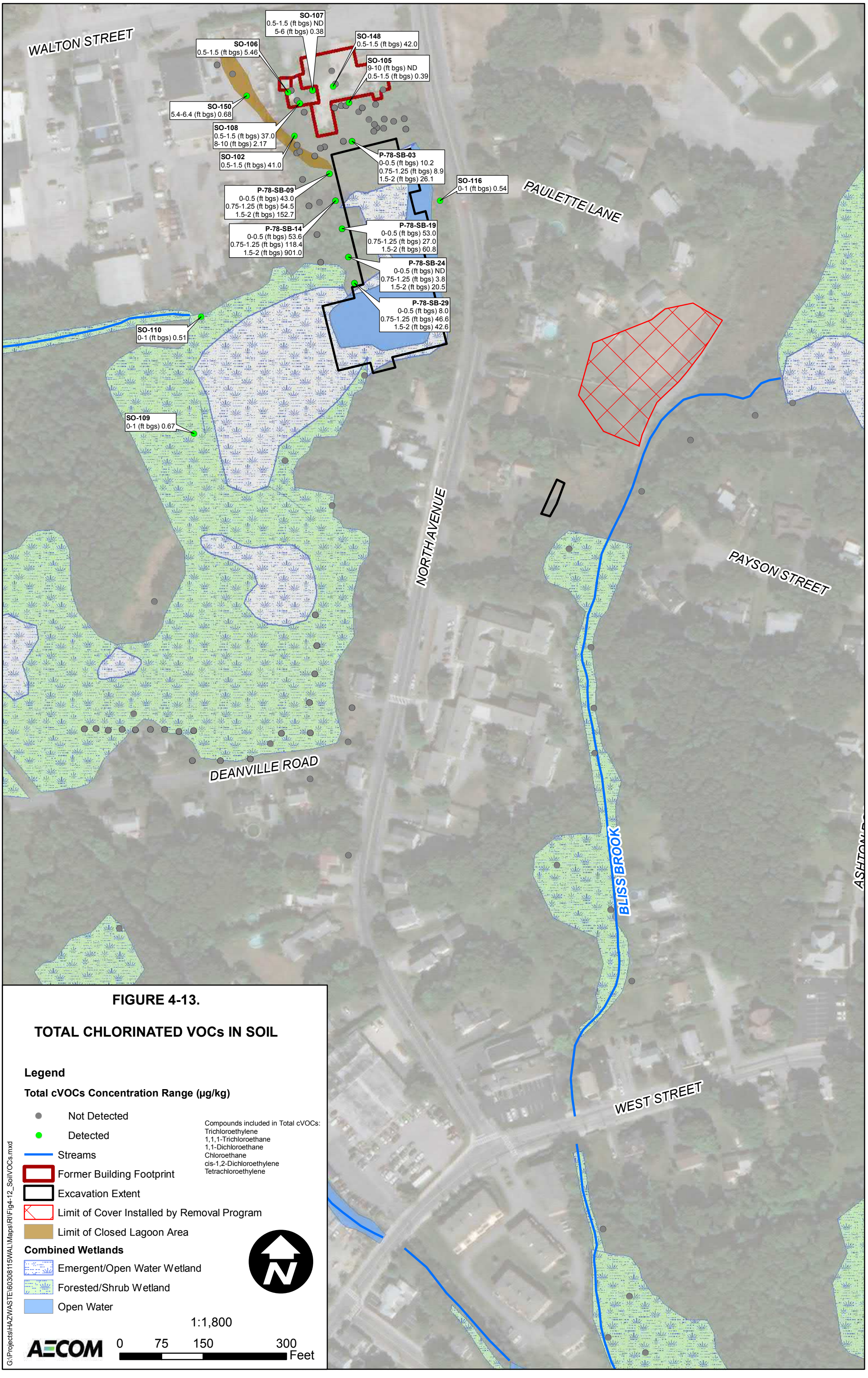


FIGURE 4-13.

TOTAL CHLORINATED VOCs IN SOIL

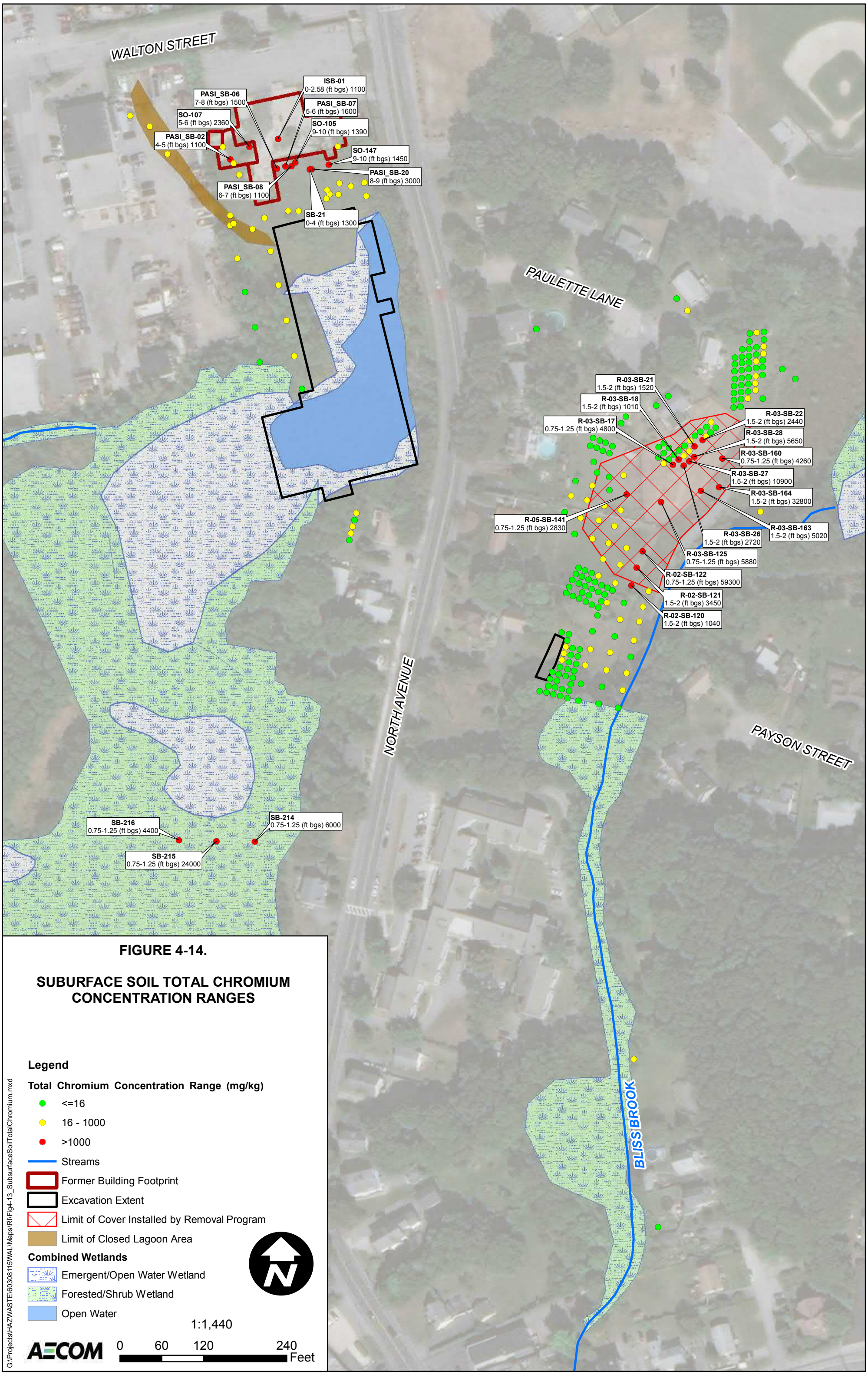


FIGURE 4-14.

SUBURFACE SOIL TOTAL CHROMIUM CONCENTRATION RANGES

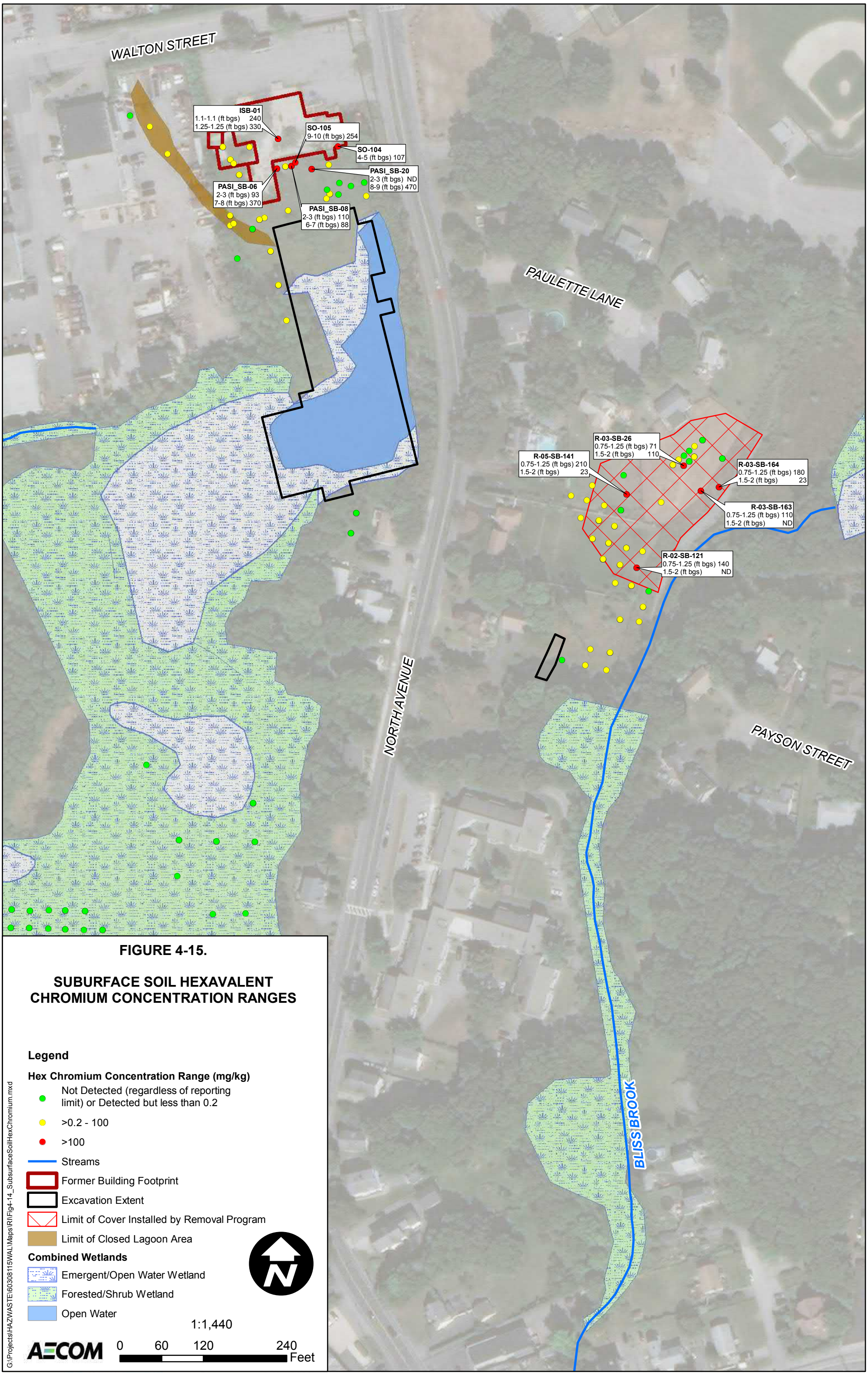
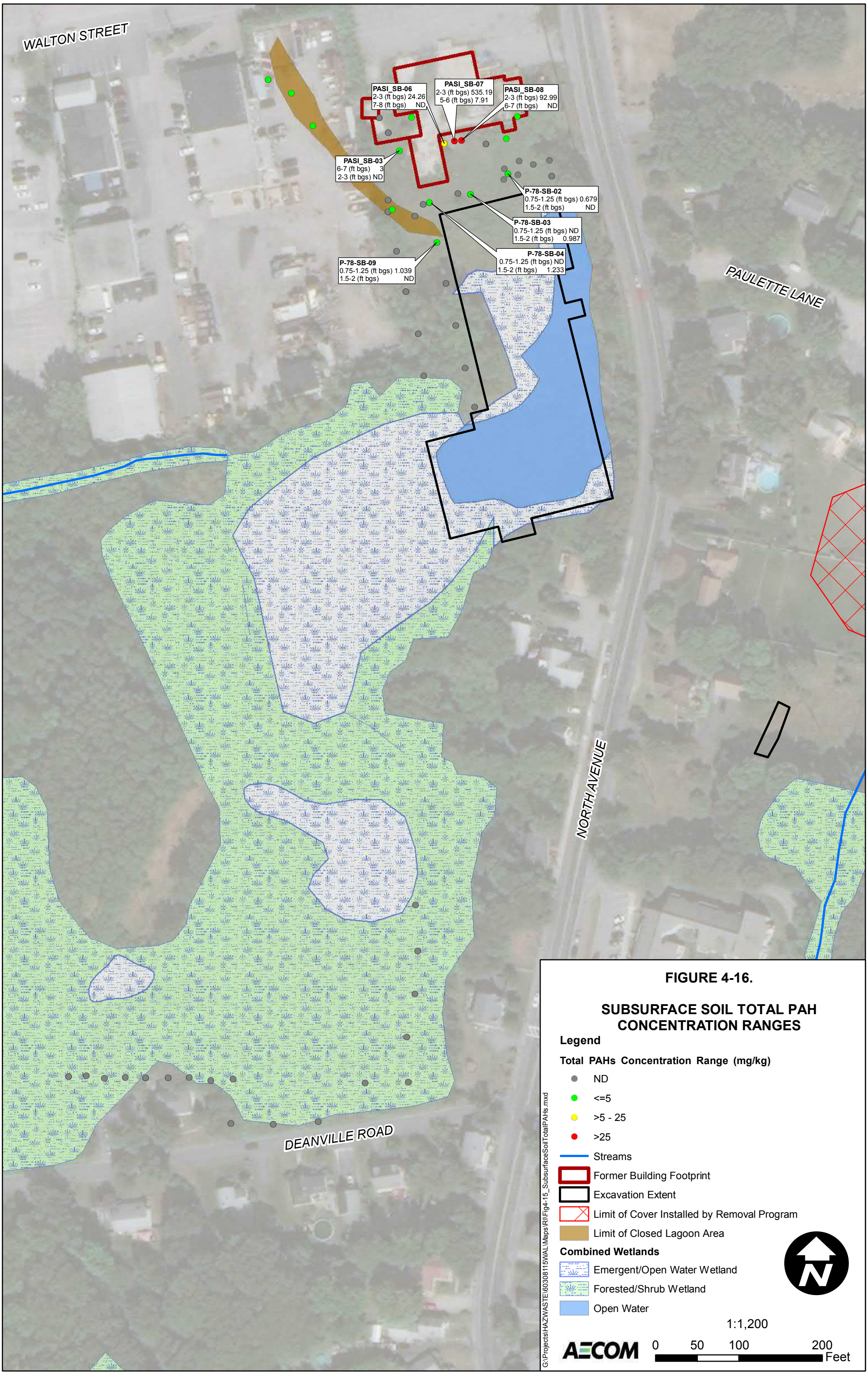


FIGURE 4-15.

SUBURFACE SOIL HEXAVALENT CHROMIUM CONCENTRATION RANGES


WALTON STREET
PASI_SB-06
2-3 (ft bgs) 24.26
7-8 (ft bgs) ND
PASI_SB-07
2-3 (ft bgs) 535.19
5-6 (ft bgs) 7.91
PASI_SB-08
2-3 (ft bgs) 92.99
6-7 (ft bgs) ND
PASI_SB-03
6-7 (ft bgs) 3
2-3 (ft bgs) ND
P-78-SB-02
0.75-1.25 (ft bgs) 0.679
1.5-2 (ft bgs) ND
P-78-SB-03
0.75-1.25 (ft bgs) ND
1.5-2 (ft bgs) 0.987
P-78-SB-04
0.75-1.25 (ft bgs) ND
1.5-2 (ft bgs) 1.233
P-78-SB-09
0.75-1.25 (ft bgs) 1.039
1.5-2 (ft bgs) ND
PAULETTE LANE
NORTH AVENUE
DEANVILLE ROAD
FIGURE 4-16.
SUBSURFACE SOIL TOTAL PAH CONCENTRATION RANGES
Legend
Total PAHs Concentration Range (mg/kg)
ND
<=5
>5 - 25
>25
Streams
Former Building Footprint
Excavation Extent
Limit of Cover Installed by Removal Program
Limit of Closed Lagoon Area
Combined Wetlands
Emergent/Open Water Wetland
Forested/Shrub Wetland
Open Water
N
1:1,200
AECOM
0 50 100 200
Feet
G:\Projects\HAZWASTE\60308115WAL\Maps\RI\Fig4-15_SubsurfaceSoilTotalPAHs.mxd

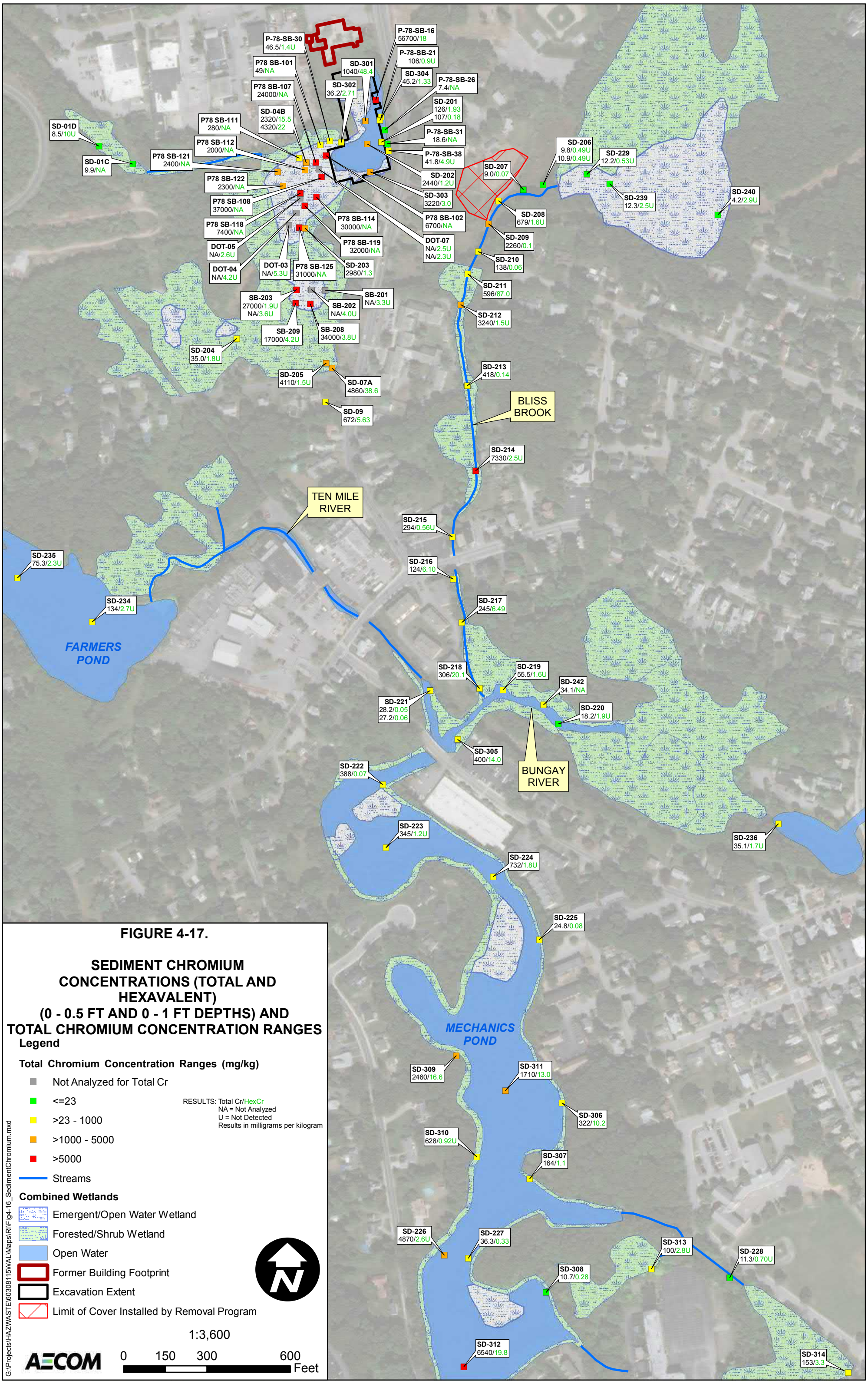


FIGURE 4-17.

SEDIMENT CHROMIUM CONCENTRATIONS (TOTAL AND HEXAVALENT) (0 - 0.5 FT AND 0 - 1 FT DEPTHS) AND TOTAL CHROMIUM CONCENTRATION RANGES

Legend

Total Chromium Concentration Ranges (mg/kg)

- Not Analyzed for Total Cr
- <=23
- >23 - 1000
- >1000 - 5000
- >5000
- Streams

RESULTS: Total Cr/HexCr
NA = Not Analyzed
U = Not Detected
Results in milligrams per kilogram

Combined Wetlands

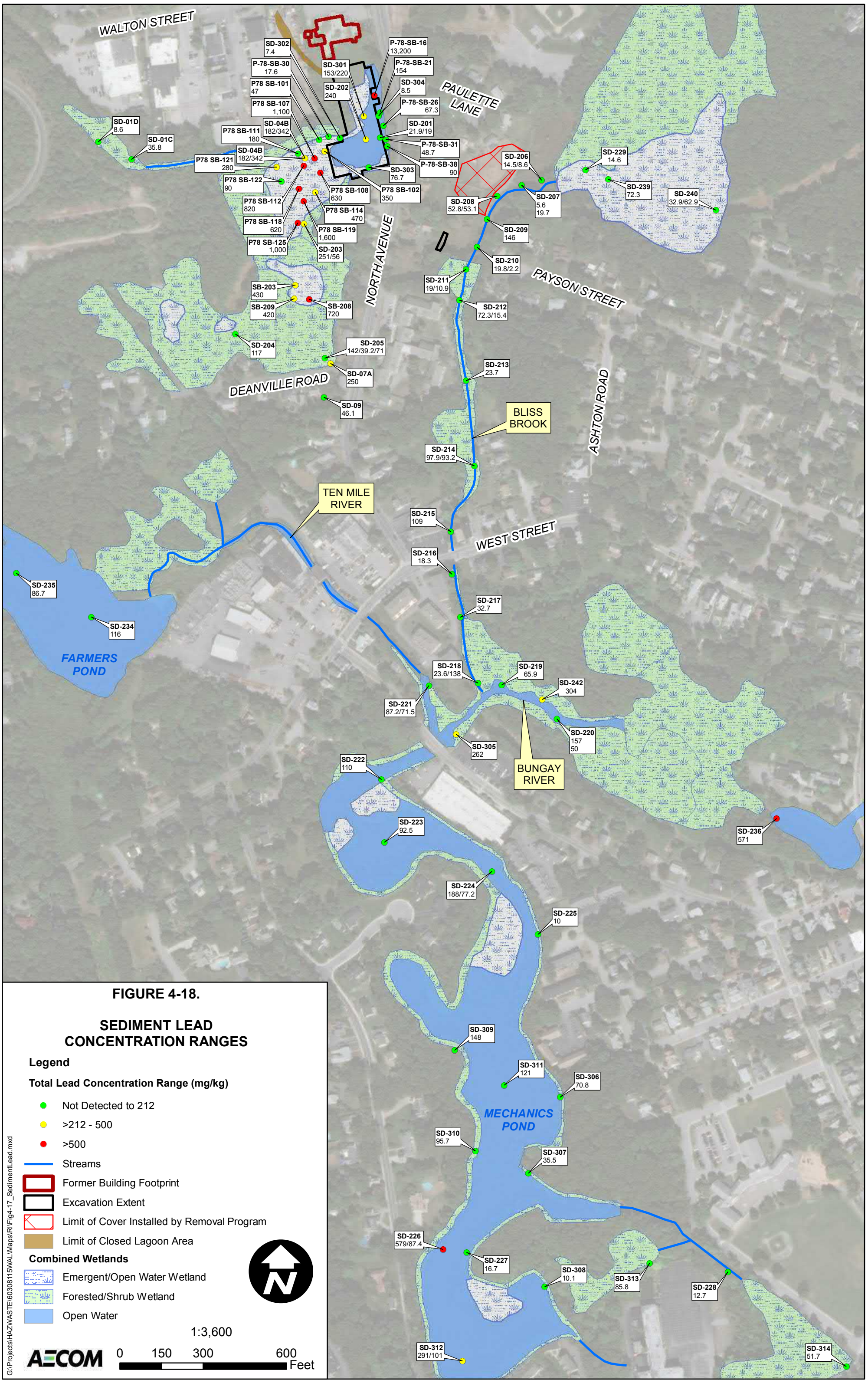
- Emergent/Open Water Wetland
- Forested/Shrub Wetland
- Open Water
- Former Building Footprint
- Excavation Extent
- Limit of Cover Installed by Removal Program

1:3,600

AECOM

0 150 300 600 Feet

G:\Projects\HAZWASTE\60308115WAL\Maps\RI\Fig4-16_SedimentChromium.mxd


WALTON STREET
PAULETTE LANE
NORTH AVENUE
PAYSON STREET
DEANVILLE ROAD
ASHTON ROAD
WEST STREET
BLISS BROOK
TEN MILE RIVER
BUNGAY RIVER
FARMERS POND
MECHANICS POND
SD-01D 8.6
SD-01C 35.8
SD-302 7.4
P-78-SB-30 17.6
P78 SB-101 47
P78 SB-107 1,100
SD-04B 182/342
P78 SB-111 180
SD-04B 182/342
P78 SB-121 280
P78 SB-122 90
P78 SB-112 820
P78 SB-118 620
P78 SB-125 1,000
SD-301 153/220
SD-202 240
P-78-SB-16 13,200
P-78-SB-21 154
SD-304 8.5
P-78-SB-26 67.3
SD-201 21.9/19
P-78-SB-31 48.7
P-78-SB-38 90
SD-303 76.7
P78 SB-102 350
P78 SB-108 630
P78 SB-114 470
P78 SB-119 1,600
SD-203 251/56
SB-203 430
SB-209 420
SB-208 720
SD-204 117
SD-205 142/39.2/71
SD-07A 250
SD-09 46.1
SD-206 14.5/8.6
SD-207 5.6 19.7
SD-208 52.8/53.1
SD-209 146
SD-210 19.8/2.2
SD-211 19/10.9
SD-212 72.3/15.4
SD-213 23.7
SD-214 97.9/93.2
SD-229 14.6
SD-239 72.3
SD-240 32.9/62.9
SD-215 109
SD-216 18.3
SD-217 32.7
SD-218 23.6/138
SD-219 65.9
SD-242 304
SD-221 87.2/71.5
SD-305 262
SD-220 157 50
SD-222 110
SD-223 92.5
SD-224 188/77.2
SD-225 10
SD-236 571
SD-235 86.7
SD-234 116
SD-309 148
SD-311 121
SD-306 70.8
SD-310 95.7
SD-307 35.5
SD-226 579/87.4
SD-227 16.7
SD-308 10.1
SD-313 85.8
SD-228 12.7
SD-312 291/101
SD-314 51.7
FIGURE 4-18.
SEDIMENT LEAD CONCENTRATION RANGES
Legend
Total Lead Concentration Range (mg/kg)
Not Detected to 212
>212 - 500
>500
Streams
Former Building Footprint
Excavation Extent
Limit of Cover Installed by Removal Program
Limit of Closed Lagoon Area
Combined Wetlands
Emergent/Open Water Wetland
Forested/Shrub Wetland
Open Water
N
1:3,600
AECOM
0 150 300 600 Feet
G:\Projects\HAZWASTE\60308115\WAL\Maps\RI\Fig4-17_SedimentLead.mxd

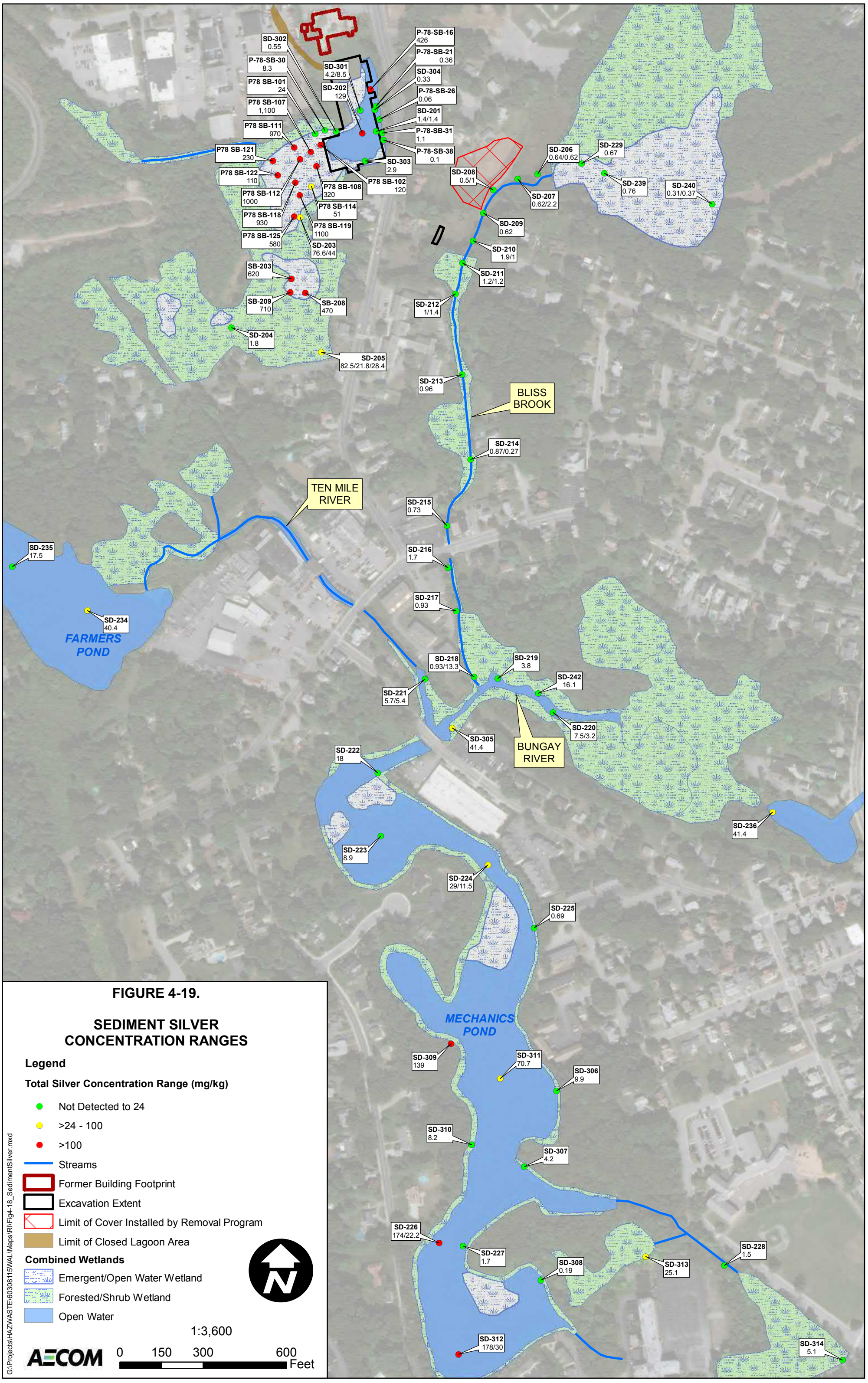
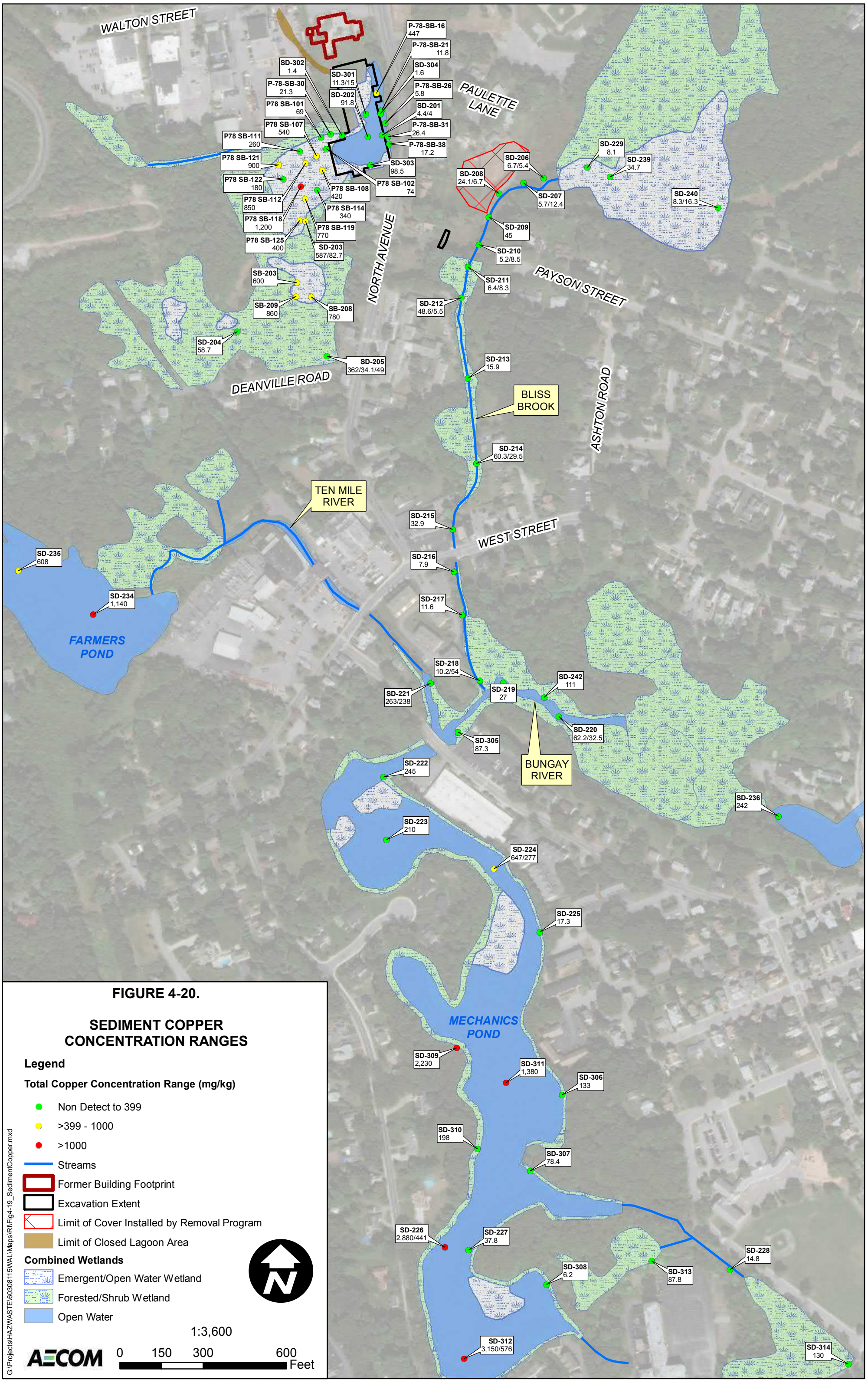
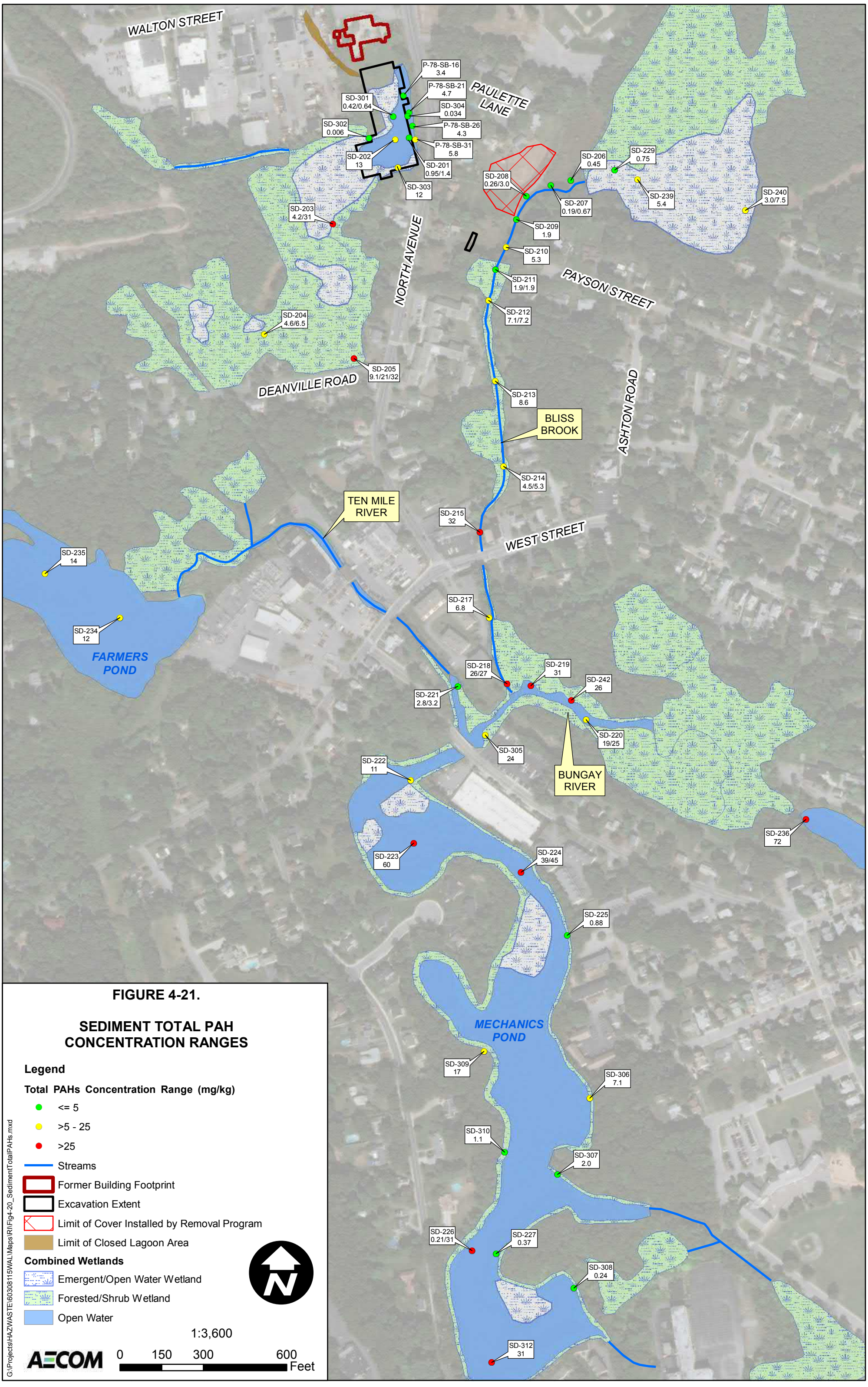
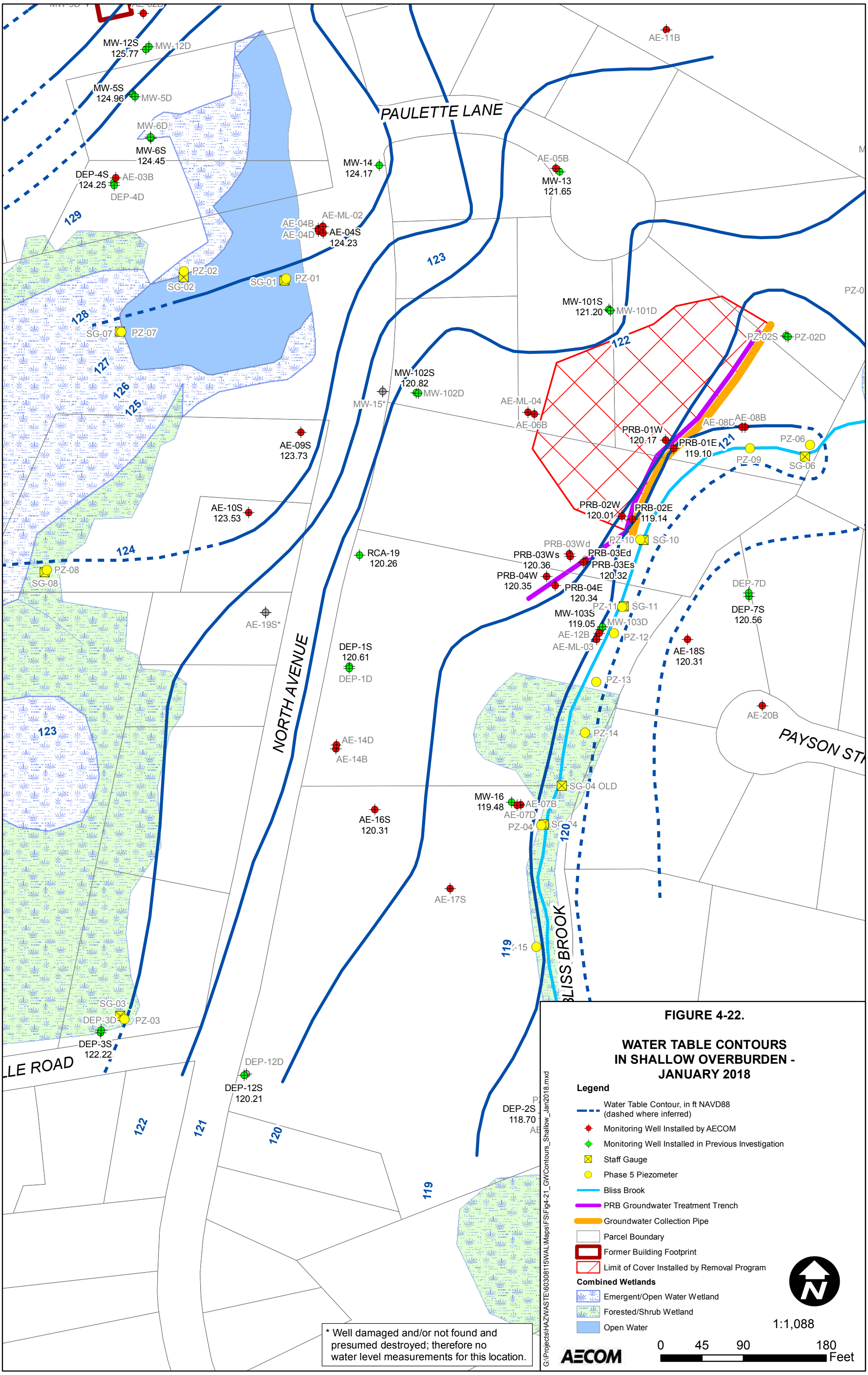


FIGURE 4-19.

SEDIMENT SILVER CONCENTRATION RANGES


WALTON STREET
PAULETTE LANE
NORTH AVENUE
PAYSON STREET
DEANVILLE ROAD
ASHTON ROAD
WEST STREET
BLISS BROOK
TEN MILE RIVER
BUNGAY RIVER
FARMERS POND
MECHANICS POND
P-78-SB-16 447
P-78-SB-21 11.8
SD-302 1.4
SD-301 11.3/15
SD-304 1.6
P-78-SB-30 21.3
SD-202 91.8
P-78-SB-26 5.8
P78 SB-101 69
SD-201 4.4/4
P78 SB-107 540
P-78-SB-31 26.4
P78 SB-111 260
P-78-SB-38 17.2
P78 SB-121 900
SD-303 98.5
P78 SB-122 180
P78 SB-102 74
P78 SB-108 420
P78 SB-112 850
P78 SB-114 340
P78 SB-118 1,200
P78 SB-119 770
P78 SB-125 400
SD-203 587/82.7
SB-203 600
SB-209 860
SB-208 780
SD-204 58.7
SD-205 362/34.1/49
SD-206 6.7/5.4
SD-229 8.1
SD-239 34.7
SD-208 24.1/6.7
SD-207 5.7/12.4
SD-240 8.3/16.3
SD-209 45
SD-210 5.2/8.5
SD-211 6.4/8.3
SD-212 48.6/5.5
SD-213 15.9
SD-214 60.3/29.5
SD-215 32.9
SD-216 7.9
SD-217 11.6
SD-235 608
SD-234 1,140
SD-218 10.2/54
SD-221 263/238
SD-219 27
SD-242 111
SD-220 62.2/32.5
SD-305 87.3
SD-222 245
SD-223 210
SD-224 647/277
SD-236 242
SD-225 17.3
SD-309 2,230
SD-311 1,380
SD-306 133
SD-310 198
SD-307 78.4
SD-226 2,880/441
SD-227 37.8
SD-308 6.2
SD-313 87.8
SD-228 14.8
SD-312 3,150/576
SD-314 130
FIGURE 4-20.
SEDIMENT COPPER CONCENTRATION RANGES
Legend
Total Copper Concentration Range (mg/kg)
Non Detect to 399
>399 - 1000
>1000
Streams
Former Building Footprint
Excavation Extent
Limit of Cover Installed by Removal Program
Limit of Closed Lagoon Area
Combined Wetlands
Emergent/Open Water Wetland
Forested/Shrub Wetland
Open Water
N
1:3,600
AECOM
0 150 300 600 Feet
G:\Projects\HAZWASTE\60308115WAL\Maps\RI\Fig4-19_SedimentCopper.mxd


WALTON STREET
PAULETTE LANE
NORTH AVENUE
PAYSON STREET
DEANVILLE ROAD
ASHTON ROAD
WEST STREET
BLISS BROOK
TEN MILE RIVER
BUNGAY RIVER
FARMERS POND
MECHANICS POND
P-78-SB-16 3.4
P-78-SB-21 4.7
SD-304 0.034
P-78-SB-26 4.3
P-78-SB-31 5.8
SD-301 0.42/0.64
SD-302 0.006
SD-202 13
SD-201 0.95/1.4
SD-303 12
SD-203 4.2/31
SD-204 4.6/6.5
SD-205 9.1/21/32
SD-206 0.45
SD-229 0.75
SD-208 0.26/3.0
SD-207 0.19/0.67
SD-239 5.4
SD-240 3.0/7.5
SD-209 1.9
SD-210 5.3
SD-211 1.9/1.9
SD-212 7.1/7.2
SD-213 8.6
SD-214 4.5/5.3
SD-215 32
SD-235 14
SD-234 12
SD-217 6.8
SD-218 26/27
SD-219 31
SD-242 26
SD-221 2.8/3.2
SD-220 19/25
SD-305 24
SD-222 11
SD-236 72
SD-223 60
SD-224 39/45
SD-225 0.88
SD-309 17
SD-306 7.1
SD-310 1.1
SD-307 2.0
SD-226 0.21/31
SD-227 0.37
SD-308 0.24
SD-312 31
FIGURE 4-21.
SEDIMENT TOTAL PAH CONCENTRATION RANGES
Legend
Total PAHs Concentration Range (mg/kg)
<= 5
>5 - 25
>25
Streams
Former Building Footprint
Excavation Extent
Limit of Cover Installed by Removal Program
Limit of Closed Lagoon Area
Combined Wetlands
Emergent/Open Water Wetland
Forested/Shrub Wetland
Open Water
N
1:3,600
AECOM
0 150 300 600 Feet
G:\Projects\HAZWASTE\60308115WAL\Maps\RI\Fig4-20_SedimentTotalPAHs.mxd



* Well damaged and/or not found and presumed destroyed; therefore no water level measurements for this location.

FIGURE 4-22.

WATER TABLE CONTOURS IN SHALLOW OVERBURDEN - JANUARY 2018

Legend

- Water Table Contour, in ft NAVD88 (dashed where inferred)
- Monitoring Well Installed by AECOM
- Monitoring Well Installed in Previous Investigation
- Staff Gauge
- Phase 5 Piezometer
- Bliss Brook
- PRB Groundwater Treatment Trench
- Groundwater Collection Pipe
- Parcel Boundary
- Former Building Footprint
- Limit of Cover Installed by Removal Program

Combined Wetlands

- Emergent/Open Water Wetland
- Forested/Shrub Wetland
- Open Water

1:1,088

0 45 90 180 Feet

AECOM

G:\Projects\HAZWASTE\60308115\WAL\Maps\FS\Fig4-21_GWContours_Shallow_Jan2018.mxd

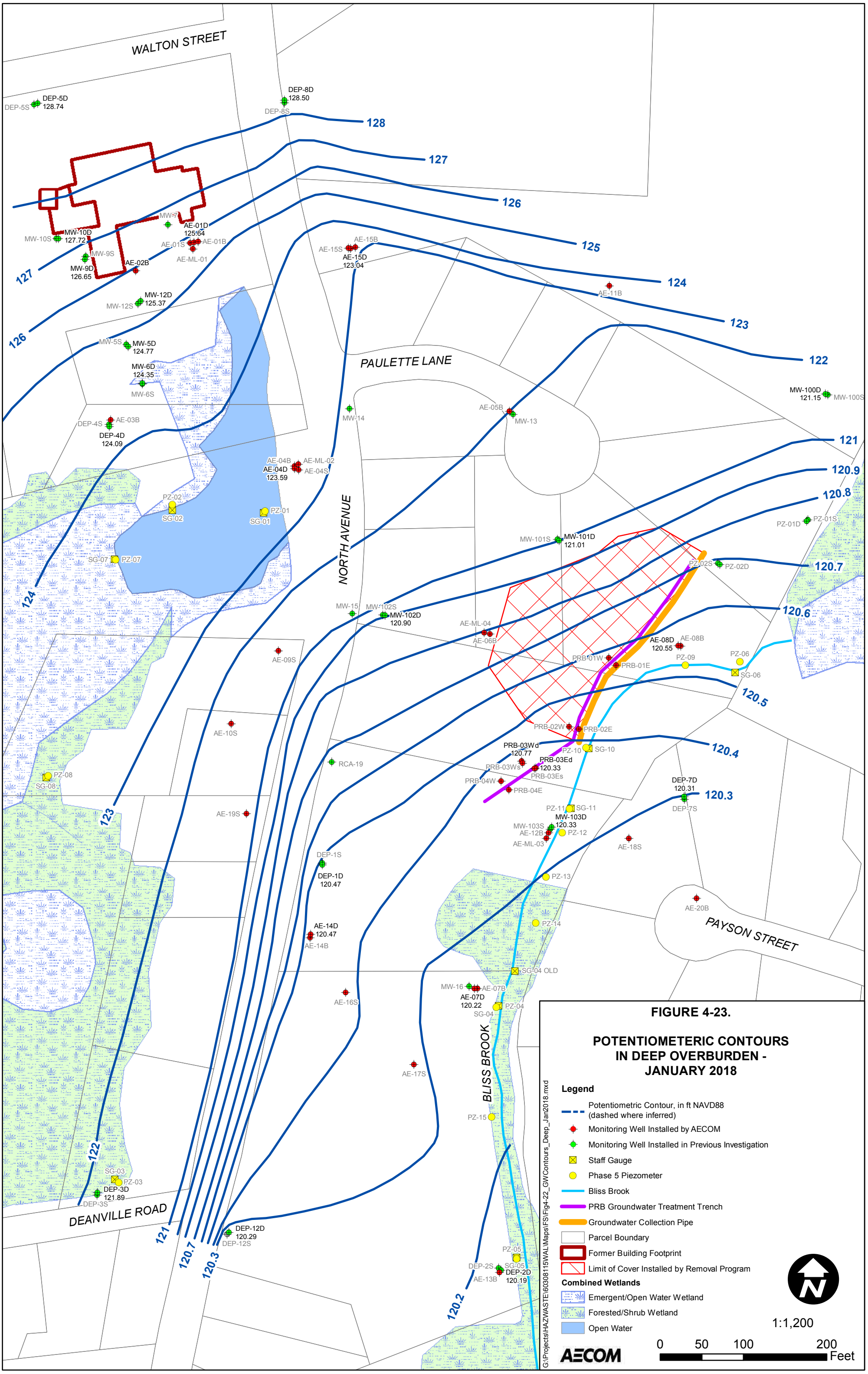


FIGURE 4-23.

POTENTIOMETERIC CONTOURS IN DEEP OVERBURDEN - JANUARY 2018

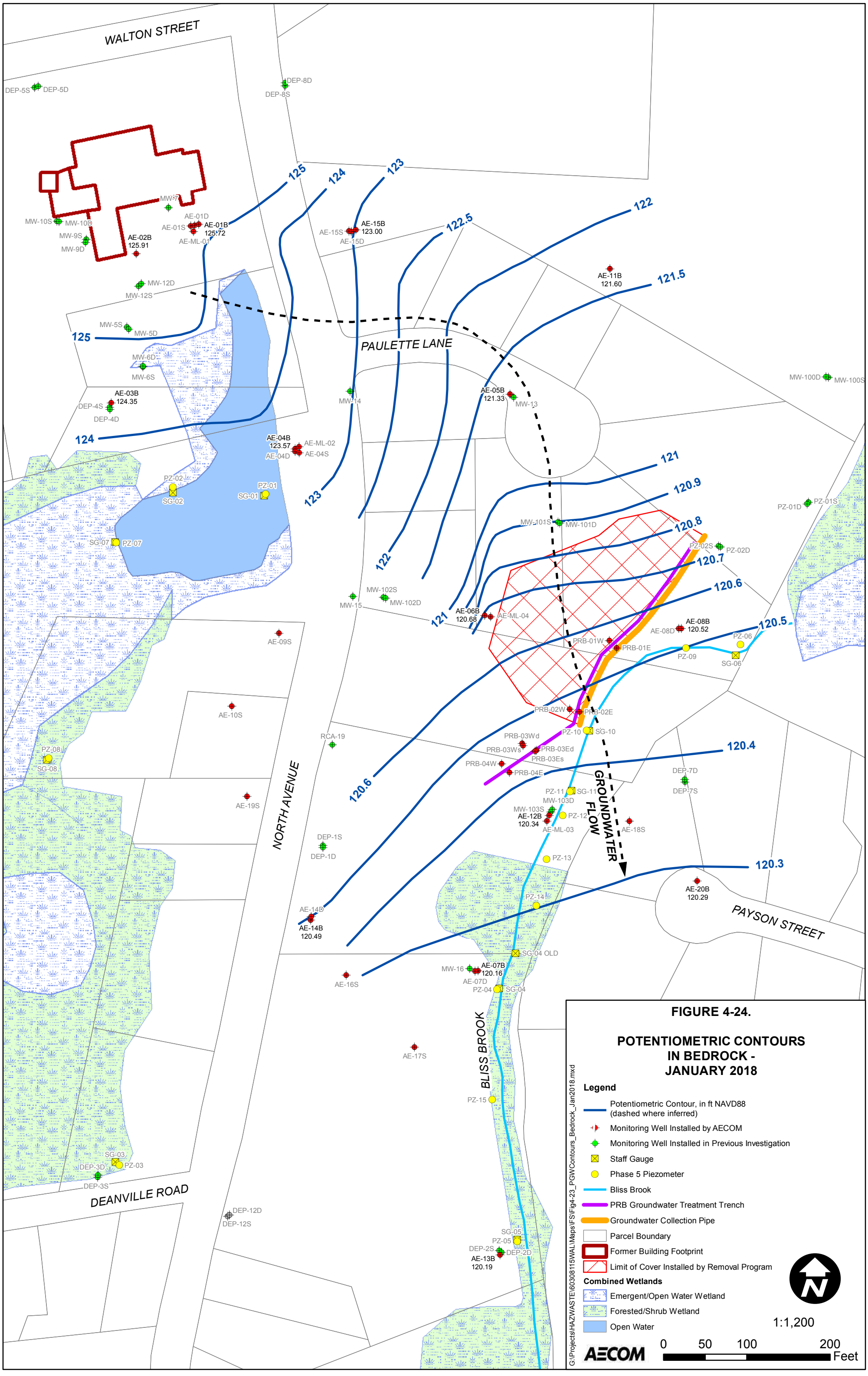
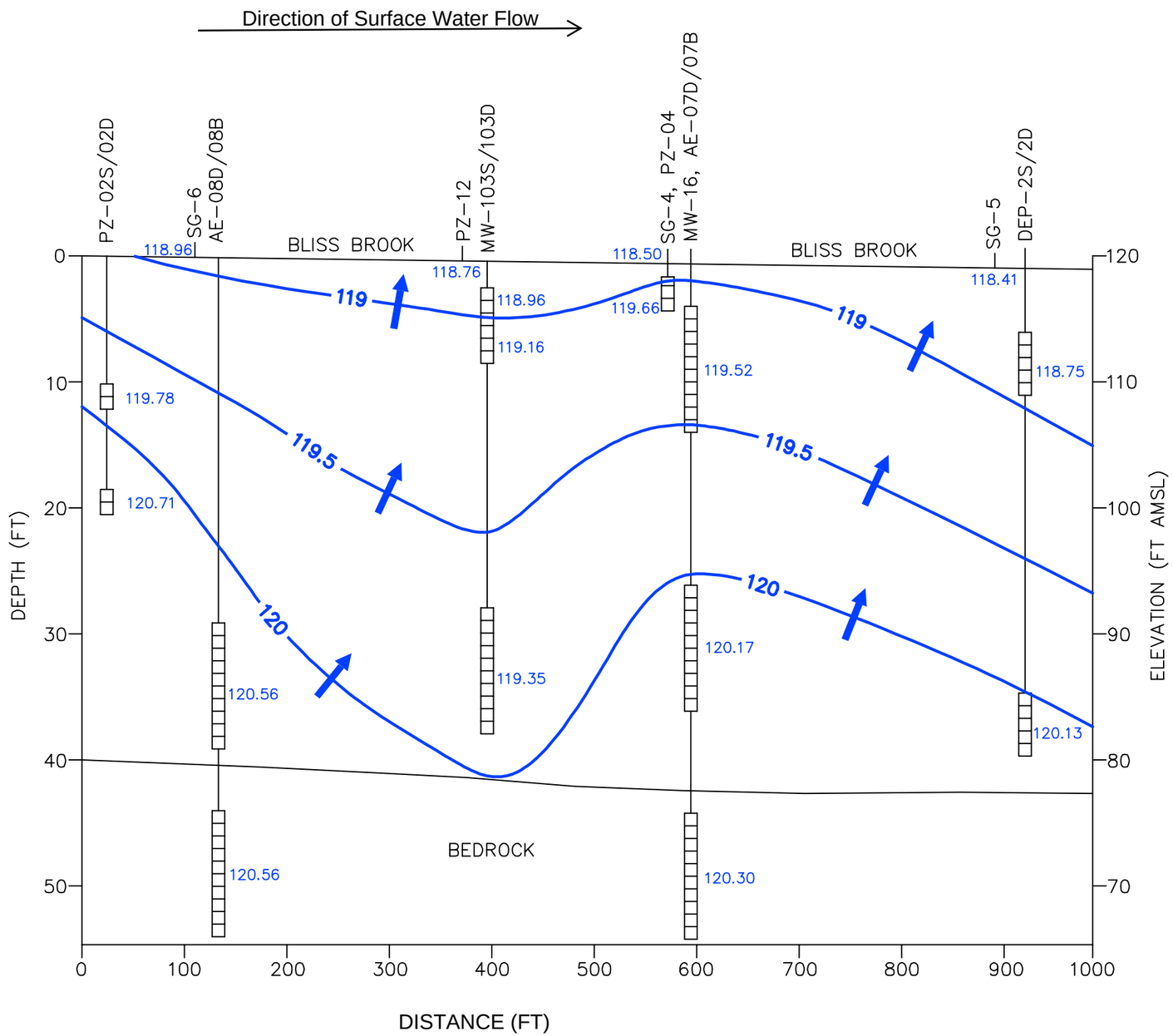


FIGURE 4-24.

POTENTIOMETRIC CONTOURS IN BEDROCK - JANUARY 2018



AECOM

WALTON & LONSBURY 78 NORTH AVENUE, ATTLEBORO, MA			VERTICAL GRADIENTS BENEATH BLISS BROOK APRIL 2018
DATE: 08/09/2018	DRWN: JB		FIGURE 4-25

File: \\uschi1fp002\data\Library\GISData\Projects\HAZWASTE\60308115\WAL\Cross_Sections\Vertical_Gradients_Beneath_Bliss_Brook.dwg Layout: Cross Section User: bourdeauj Plotted: Aug 09, 2018 – 2:06pm Xref's:

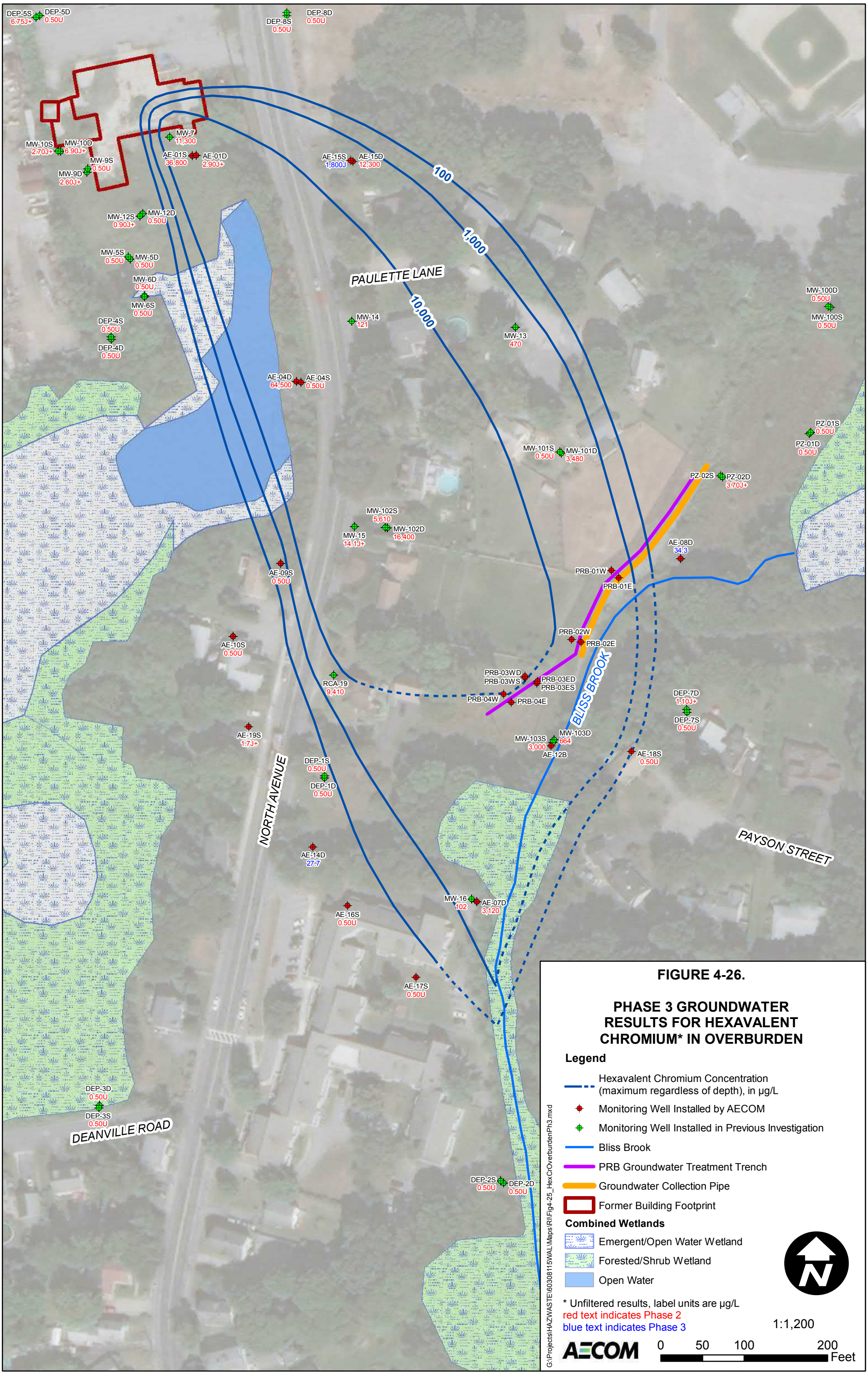


FIGURE 4-26.

PHASE 3 GROUNDWATER RESULTS FOR HEXAVALENT CHROMIUM* IN OVERBURDEN

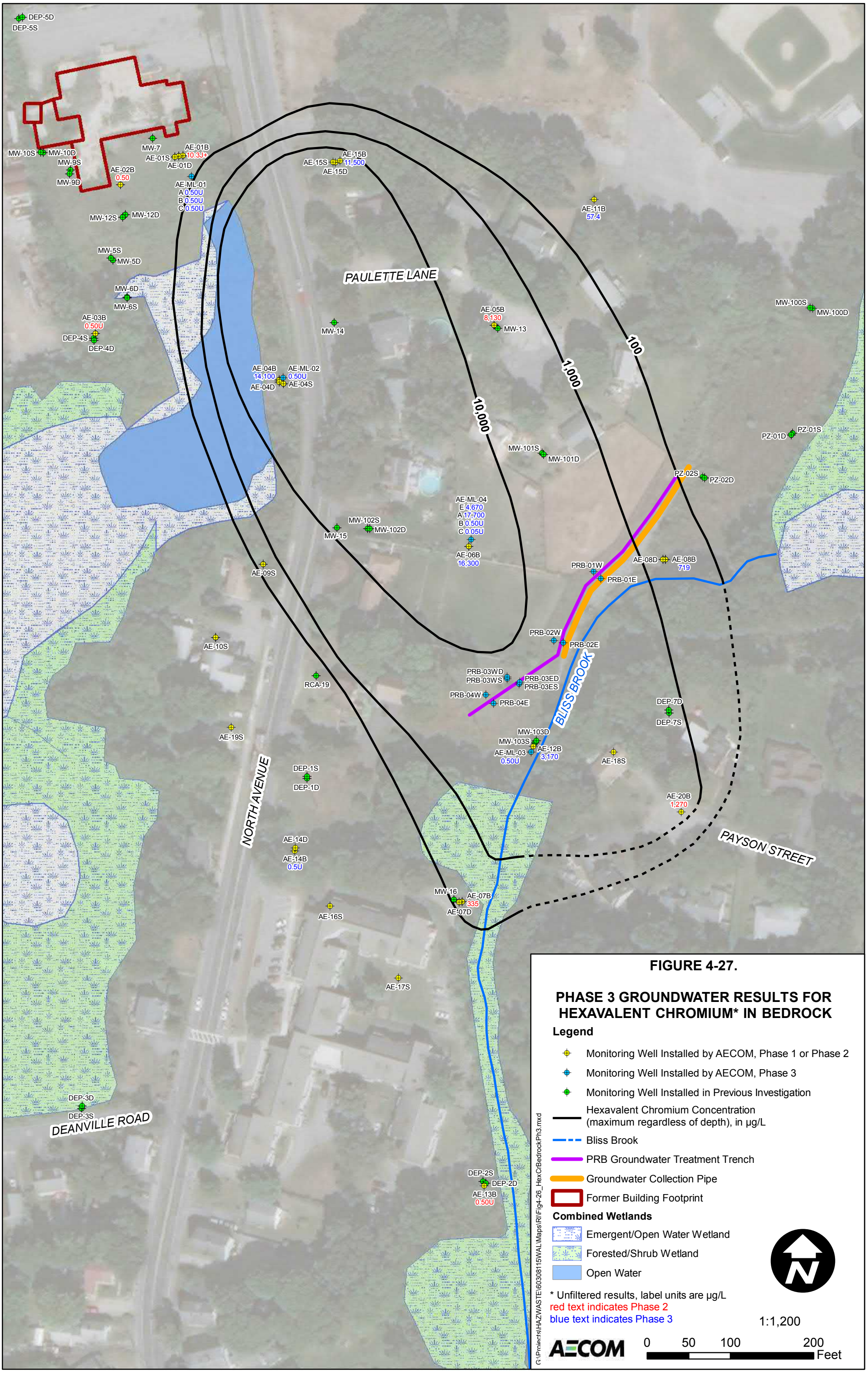


FIGURE 4-27.

PHASE 3 GROUNDWATER RESULTS FOR HEXAVALENT CHROMIUM* IN BEDROCK

Legend

- Monitoring Well Installed by AECOM, Phase 1 or Phase 2
- Monitoring Well Installed by AECOM, Phase 3
- Monitoring Well Installed in Previous Investigation
- Hexavalent Chromium Concentration (maximum regardless of depth), in µg/L
- Bliss Brook
- PRB Groundwater Treatment Trench
- Groundwater Collection Pipe
- Former Building Footprint

Combined Wetlands

- Emergent/Open Water Wetland
- Forested/Shrub Wetland
- Open Water

* Unfiltered results, label units are µg/L
red text indicates Phase 2
blue text indicates Phase 3

1:1,200

AECOM

0 50 100 200 Feet

G:\Projects\HAZWASTE\60308115WAL\Maps\RI\Fig4-26_HexCrBedrockPh3.mxd

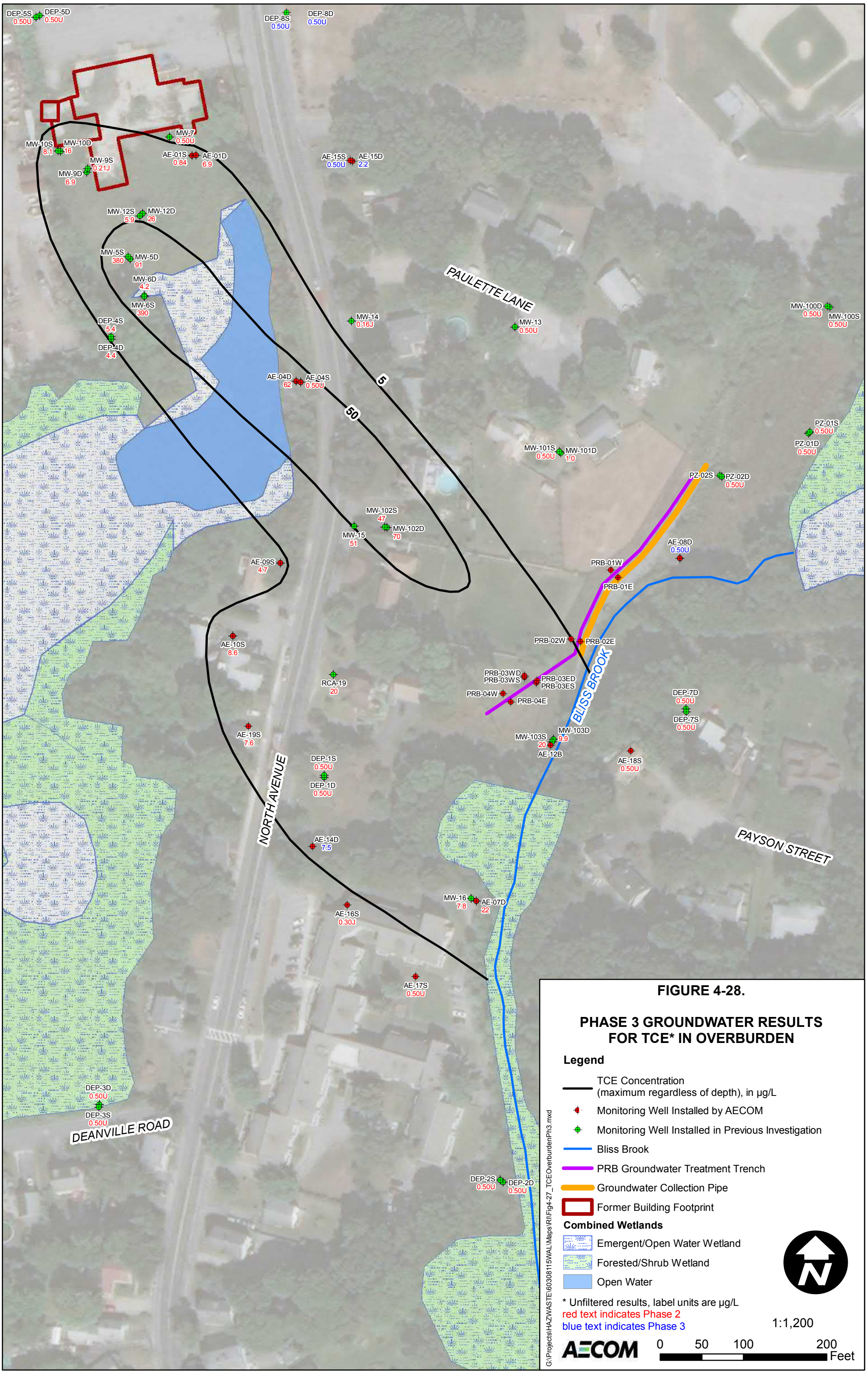
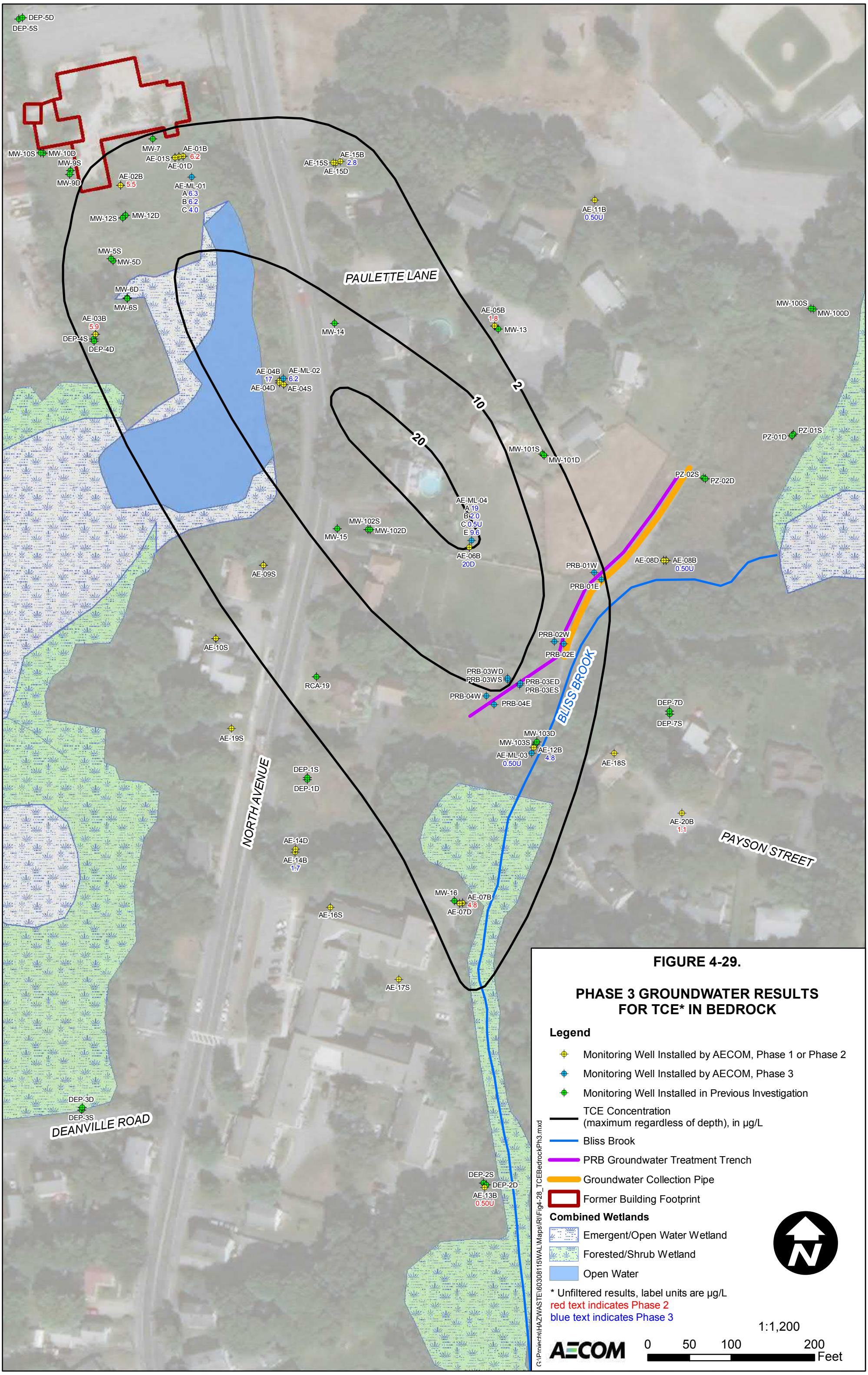


FIGURE 4-28.

PHASE 3 GROUNDWATER RESULTS FOR TCE* IN OVERBURDEN


DEP-5D
DEP-5S
MW-10S
MW-10D
MW-9S
MW-9D
MW-7
AE-01S
AE-01B
6.2
AE-01D
AE-02B
5.5
AE-ML-01
A 6.3
B 6.2
C 4.0
MW-12S
MW-12D
MW-5S
MW-5D
MW-6D
MW-6S
AE-03B
5.9
DEP-4S
DEP-4D
AE-15S
AE-15B
2.8
AE-15D
AE-11B
0.50U
PAULETTE LANE
MW-14
AE-05B
1.8
MW-13
MW-100S
MW-100D
AE-04B
17
AE-ML-02
6.2
AE-04D
AE-04S
20
10
2
MW-101S
MW-101D
PZ-01D
PZ-01S
PZ-02S
PZ-02D
AE-ML-04
A 19
B 2.0
C 0.5U
E 9.6
MW-102S
MW-102D
MW-15
AE-06B
20D
AE-09S
AE-08D
AE-08B
0.50U
PRB-01W
PRB-01E
AE-10S
PRB-02W
PRB-02E
PRB-03WD
PRB-03WS
PRB-03ED
PRB-03ES
RCA-19
PRB-04W
PRB-04E
BLISS BROOK
DEP-7D
DEP-7S
AE-19S
MW-103D
MW-103S
AE-12B
4.8
AE-ML-03
0.50U
AE-18S
NORTH AVENUE
DEP-1S
DEP-1D
AE-20B
1.1
PAYSON STREET
AE-14D
AE-14B
1.7
MW-16
AE-07B
4.8
AE-07D
AE-16S
AE-17S
DEP-3D
DEP-3S
DEANVILLE ROAD
DEP-2S
DEP-2D
AE-13B
0.50U
FIGURE 4-29.
PHASE 3 GROUNDWATER RESULTS
FOR TCE* IN BEDROCK
Legend
Monitoring Well Installed by AECOM, Phase 1 or Phase 2
Monitoring Well Installed by AECOM, Phase 3
Monitoring Well Installed in Previous Investigation
TCE Concentration
(maximum regardless of depth), in µg/L
Bliss Brook
PRB Groundwater Treatment Trench
Groundwater Collection Pipe
Former Building Footprint
Combined Wetlands
Emergent/Open Water Wetland
Forested/Shrub Wetland
Open Water
* Unfiltered results, label units are µg/L
red text indicates Phase 2
blue text indicates Phase 3
1:1,200
AECOM
0 50 100 200
Feet
G:\Projects\HAZWASTE\60308115WAL\Maps\RI\Fig4-28_TCEBedrockPh3.mxd

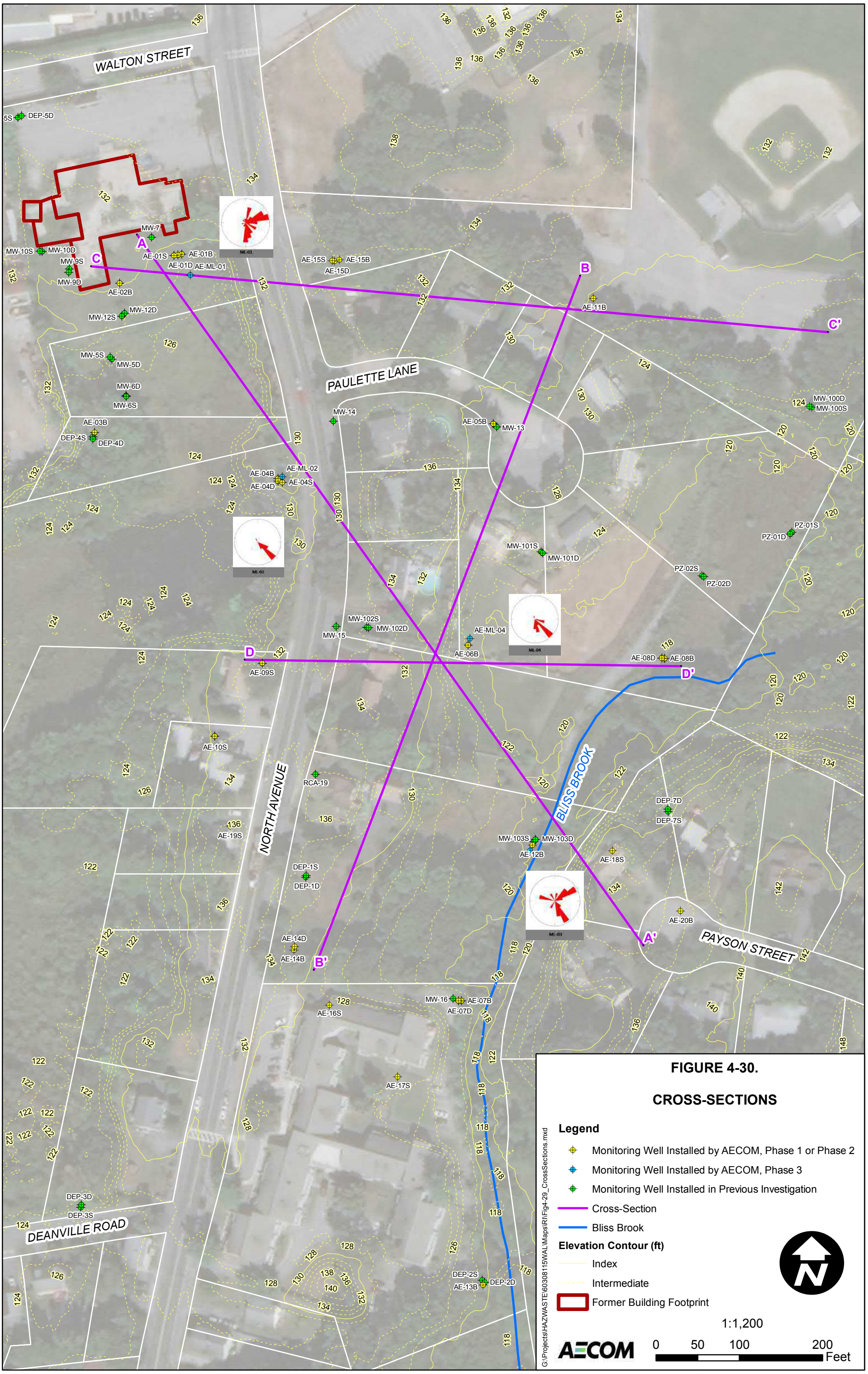


FIGURE 4-30.

CROSS-SECTIONS

Legend

- Monitoring Well Installed by AECOM, Phase 1 or Phase 2
- Monitoring Well Installed by AECOM, Phase 3
- Monitoring Well Installed in Previous Investigation
- Cross-Section
- Bliss Brook

Elevation Contour (ft)

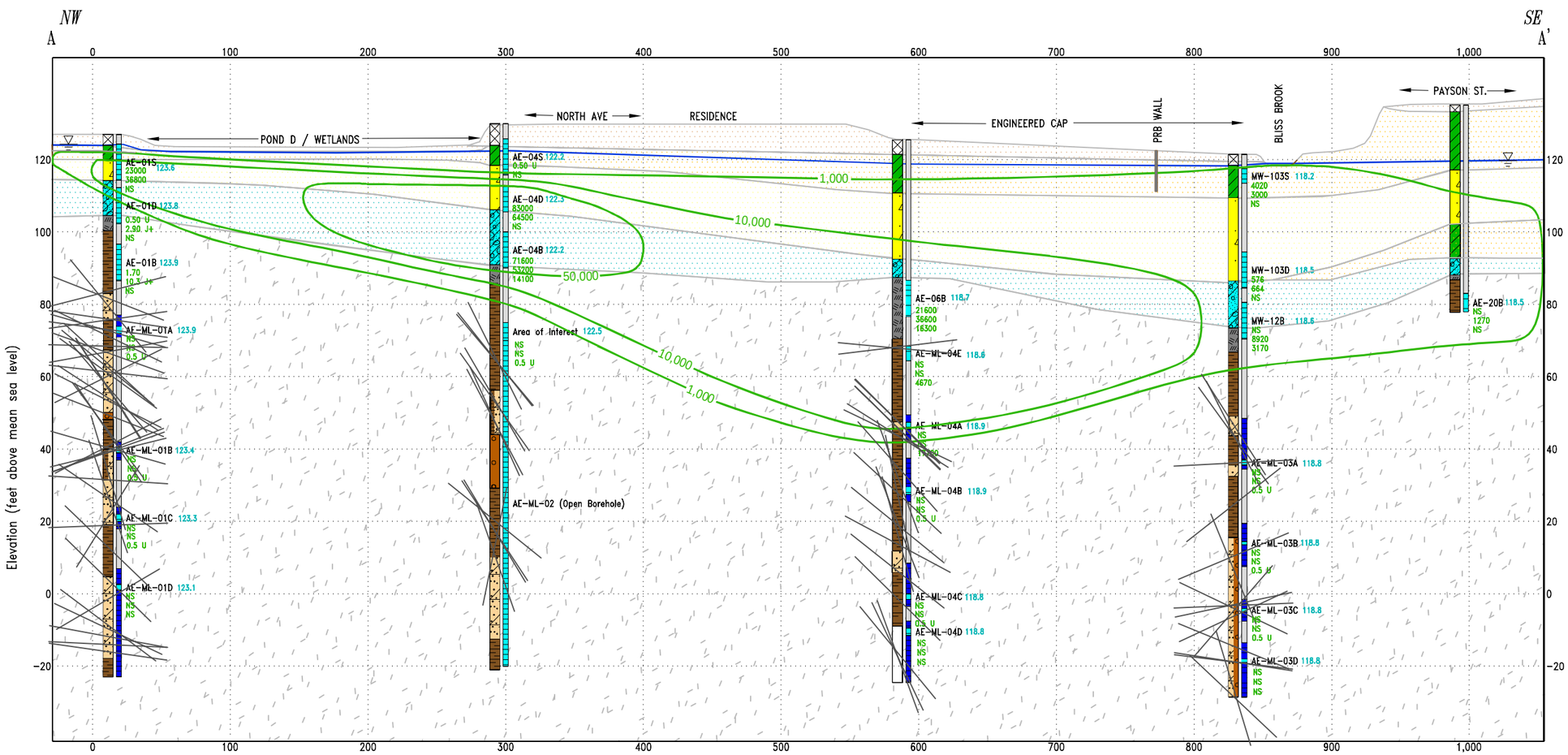
- Index
- Intermediate
- Former Building Footprint

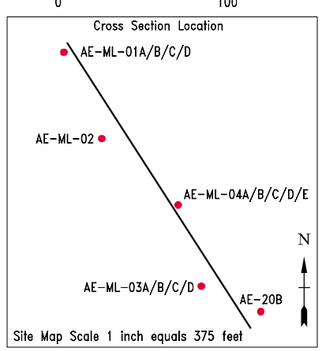
1:1,200

AECOM

0 50 100 200 Feet

G:\Projects\HAZWASTE\60308115WAL\Maps\RI\Fig4-29_CrossSections.mxd





LEGEND:

- PVC Casing
- Well Screen – Overburden Wells / Well Port – Multilevel Wells
- Multi-Level Well Borehole Sand Pack
- Fill
- Alluvial Fs + Si, trace Cl
- Alluvial M-C Sands and Gravels
- Glacial Till
- Weathered Bedrock
- Siltstone
- Sandstone
- Conglomerate
- Siltstone/Sandstone
- Sandstone interbedded with Conglomerate

Water Level Elevation NAD83/NAVD88
Date: 9/24/2015

Groundwater Sample Results
Hexavalent Chromium
Phase 1 8/2014
Phase 2 12/2014
Phase 3 9/2015

All results in parts per billion (ppb)
U – Not detected above the detection limit
J – estimated concentration

PRB – Passive Reactive Barrier

HEXAVALENT CHROMIUM CONCENTRATION (ppb) CONTOUR

OPEN BEDROCK FRACTURES (BASED ON DOWNHOLE GEOPHYSICS)

Horizontal Scale (feet): 0 – 73

Vertical Scale (feet): 0 – 28

Vertical Exaggeration: 2.5x

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
7							
6							
5							
4							
3							
2							
1							
0							

AECOM
AECOM
500 ENTERPRISE DR, STE 1A
ROCKY HILL, CT 06067
www.aecom.com

WALTON LONSBURY - EPA SUPERFUND SITE
78 NORTH AVENUE
ATTLEBORO, MA

DATE: 03/18/2016

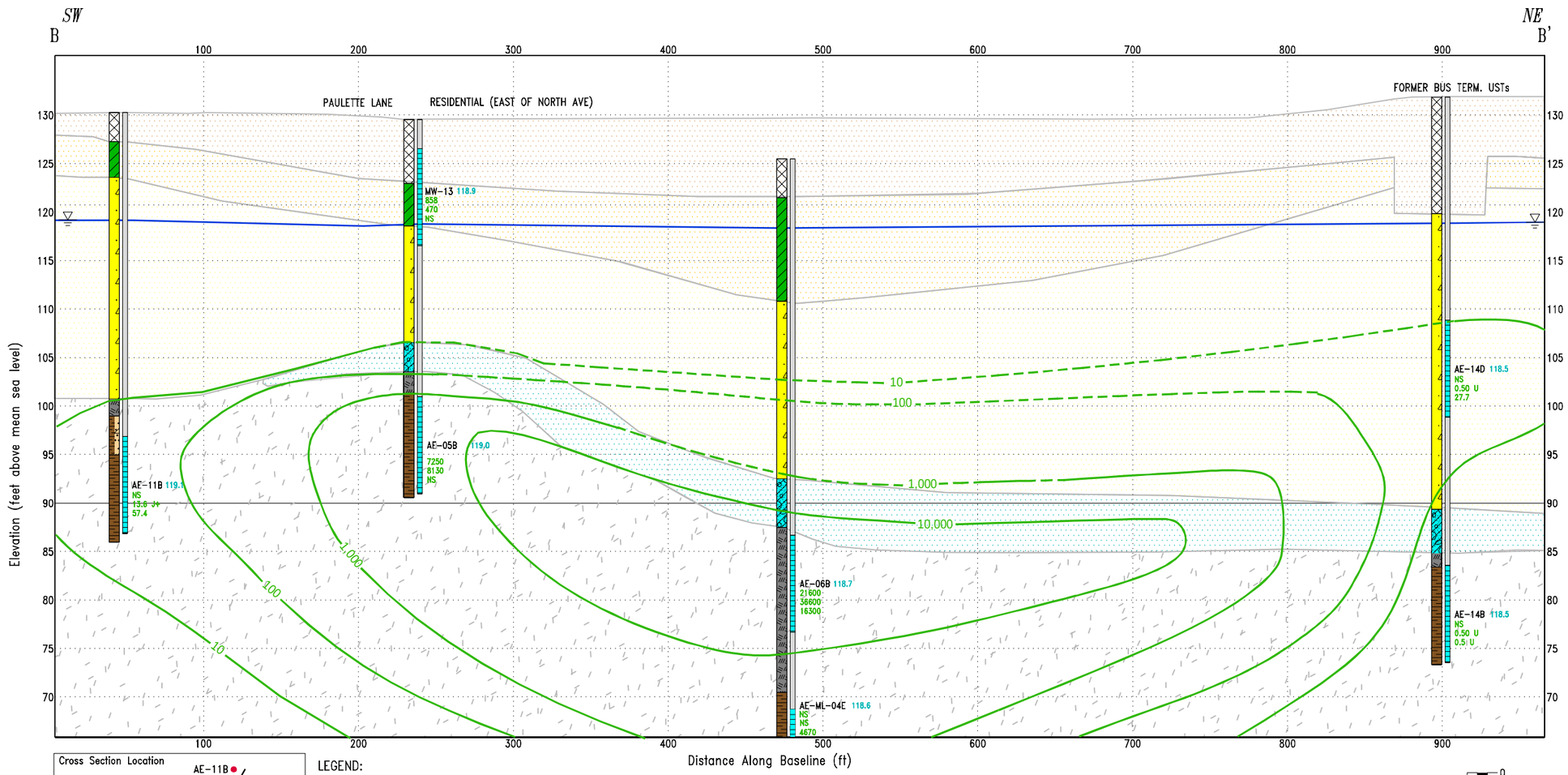
PROJ. NO.: 60308115.09

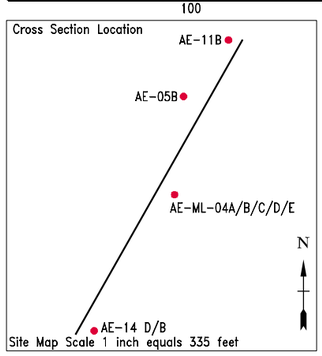
FIGURE 4-31
CROSS SECTION A-A'
HEXAVALENT CHROMIUM CONCENTRATIONS (ppb)

DRAWING NUMBER:

SHEET NUMBER:

REVISION 0





LEGEND:

- PVC Casing
- Well Screen – Overburden Wells / Well Port – Multilevel Wells
- Multi-Level Well Borehole Sand Pack
- Fill
- Alluvial Fs + Si, trace Cl
- Alluvial M-C Sands and Gravels
- Glacial Till
- Weathered Bedrock
- Siltstone
- Sandstone
- Conglomerate
- Siltstone/Sandstone
- Sandstone interbedded with Conglomerate

Water Level Elevation NAD83/NAVD88
Date: 9/24/2015

Groundwater Sample Results
Hexavalent Chromium
Phase 1 8/2014
Phase 2 12/2014
Phase 3 9/2015

All results in parts per billion (ppb)
U – Not detected above the detection limit
J – estimated concentration

PRB – Passive Reactive Barrier

HEXAVALENT CHROMIUM CONCENTRATION (ppb) CONTOUR

158.7/57.7 BEDROCK FRACTURES AZIMUTH/DIP

0 65 Horizontal Scale (feet)

0 10 Vertical Scale (feet)

Vertical Exaggeration: 6.5x

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
7							
6							
5							
4							
3							
2							
1							
0							

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WALTON LONSBURY - EPA SUPERFUND SITE
78 NORTH AVENUE
ATTLEBORO, MA

DATE: 03/18/2016

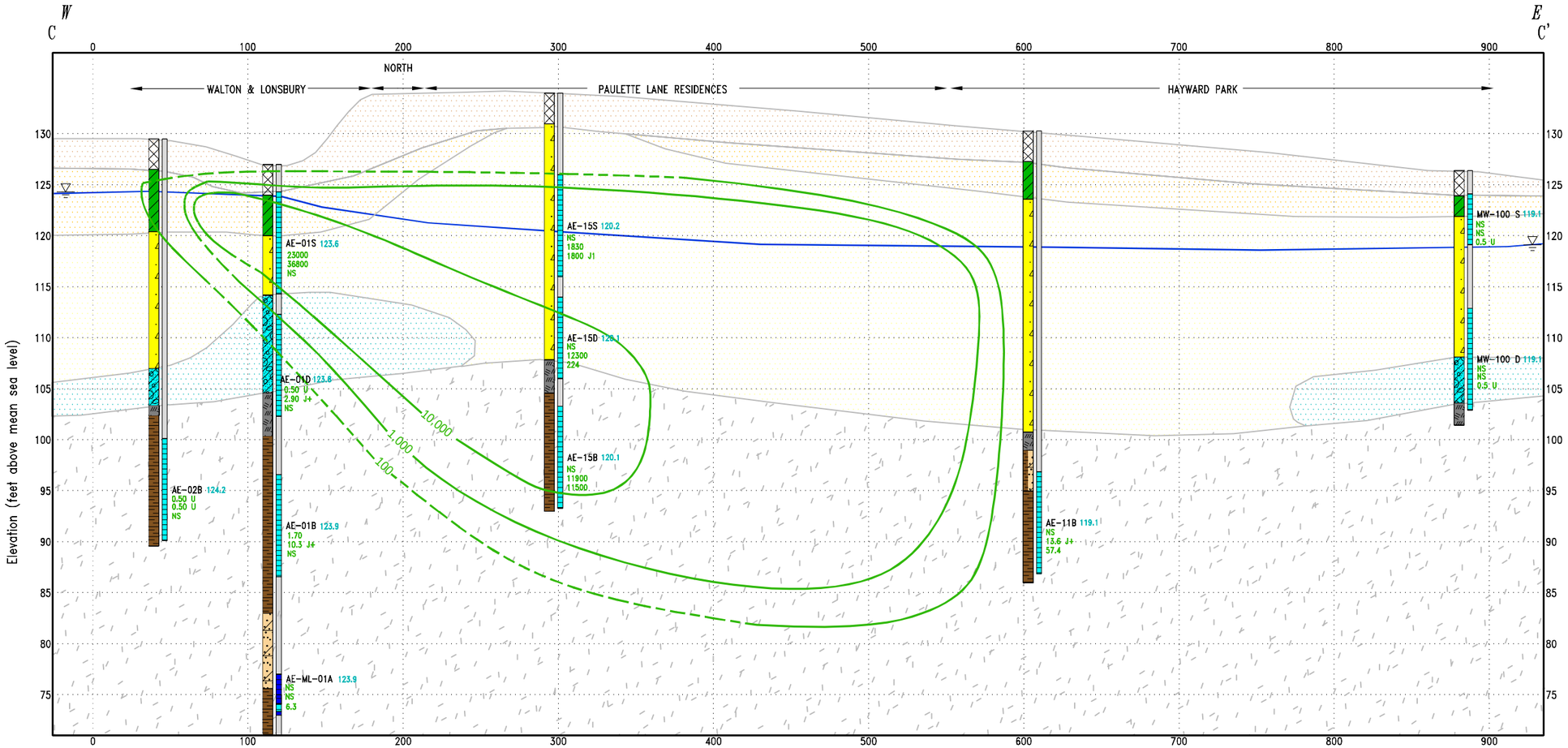
PROJ. NO.: 60308115.09

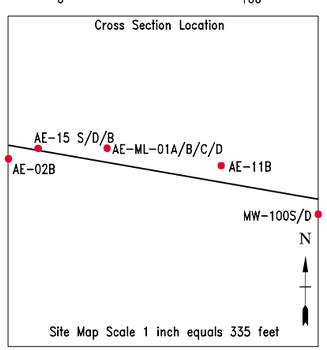
FIGURE 4-32
CROSS SECTION B-B'
HEXAVALENT CHROMIUM CONCENTRATIONS (ppb)

DRAWING NUMBER:

SHEET NUMBER:

REVISION 0





LEGEND:

- PVC Casing
- Well Screen – Overburden Wells / Well Port – Multilevel Wells
- Multi-Level Well Borehole Sand Pack
- Fill
- Alluvial Fs + Si, trace Cl
- Alluvial M-C Sands and Gravels
- Glacial Till
- Weathered Bedrock
- Siltstone
- Sandstone
- Conglomerate
- Siltstone/Sandstone
- Sandstone interbedded with Conglomerate

Water Level Elevation NAD83/NAVD88
Date: 9/24/2015

Groundwater Sample Results
Hexavalent Chromium
Phase 1 8/2014
Phase 2 12/2014
Phase 3 9/2015

All results in parts per billion (ppb)
U – Not detected above the detection limit
J – estimated concentration

PRB – Passive Reactive Barrier

HEXAVALENT CHROMIUM CONCENTRATION (ppb) CONTOUR

158.7/57.7 BEDROCK FRACTURES AZIMUTH/DIP

0 65
Horizontal Scale (feet)

Vertical Scale (feet) 0 10

Vertical Exaggeration: 6.5x

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
0							
1							
2							
3							
4							
5							
6							
7							

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DATE: 03/18/2016

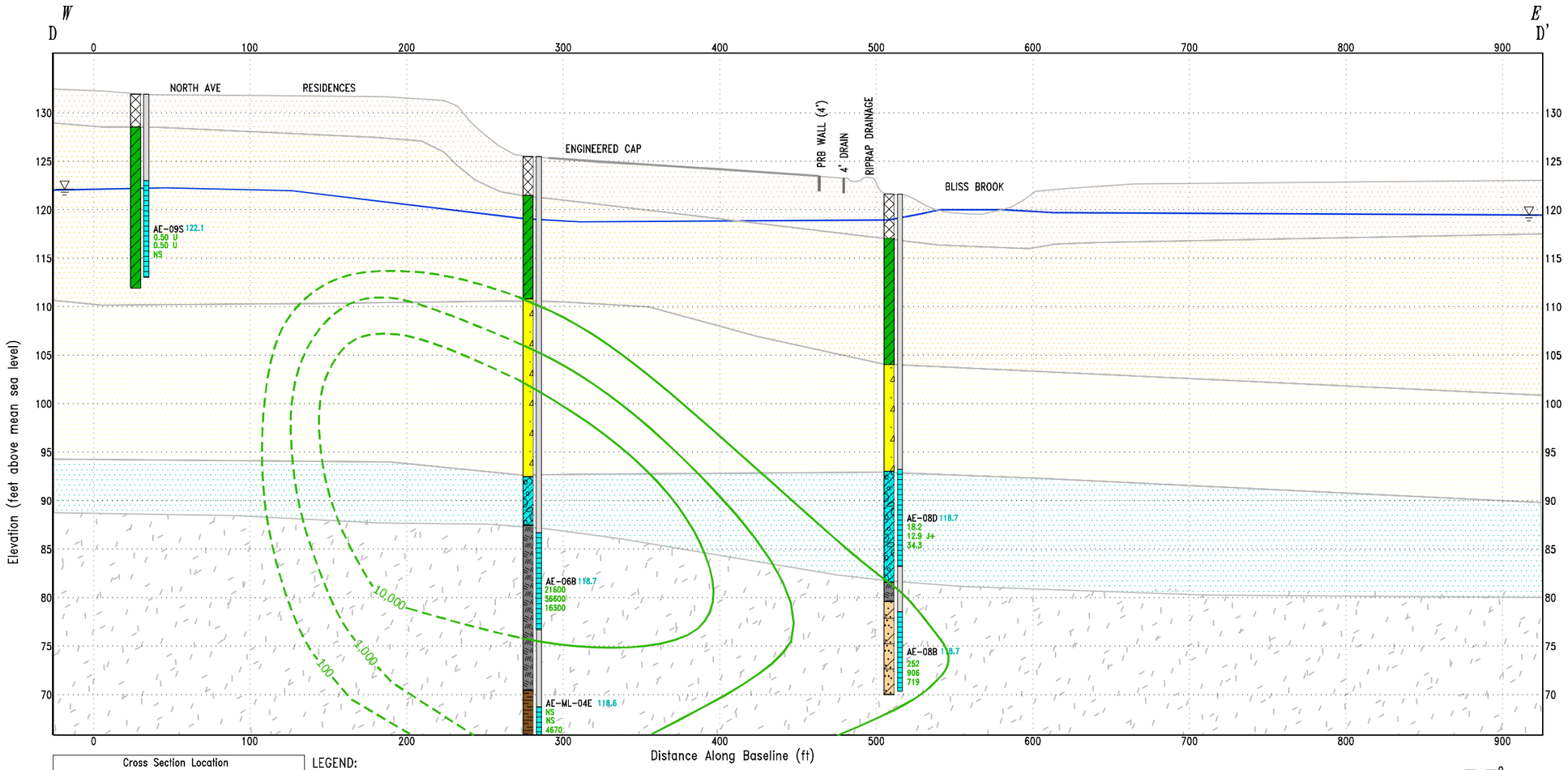
PROJ. NO.: 60308115.09

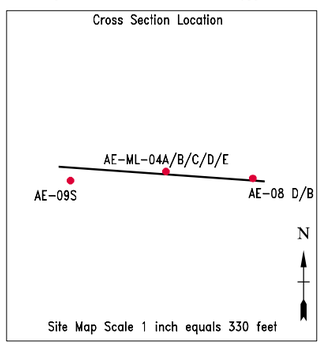
FIGURE 4-33
CROSS SECTION C-C'
HEXAVALENT CHROMIUM CONCENTRATIONS (ppb)

DRAWING NUMBER:

SHEET NUMBER:

REVISION 0





LEGEND:

- PVC Casing
- Well Screen – Overburden Wells / Well Port – Multilevel Wells
- Multi-Level Well Borehole Sand Pack
- Fill
- Alluvial Fs + Si, trace Cl
- Alluvial M-C Sands and Gravels
- Glacial Till
- Weathered Bedrock
- Siltstone
- Sandstone
- Conglomerate
- Siltstone/Sandstone
- Sandstone interbedded with Conglomerate

Water Level Elevation NAD83/NAVD88
Date: 9/24/2015

Groundwater Sample Results
Hexavalent Chromium
Phase 1 8/2014
Phase 2 12/2014
Phase 3 9/2015

All results in parts per billion (ppb)
U – Not detected above the detection limit
J – estimated concentration

PRB – Passive Reactive Barrier

HEXAVALENT CHROMIUM CONCENTRATION (ppb) CONTOUR

158.7/37.7 BEDROCK FRACTURES AZIMUTH/DIP

0 65 Horizontal Scale (feet)

0 10 Vertical Scale (feet)

Vertical Exaggeration: 6.5x

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
7							
6							
5							
4							
3							
2							
1							
0							

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ATTLEBORO, MA

DATE: 03/18/2016

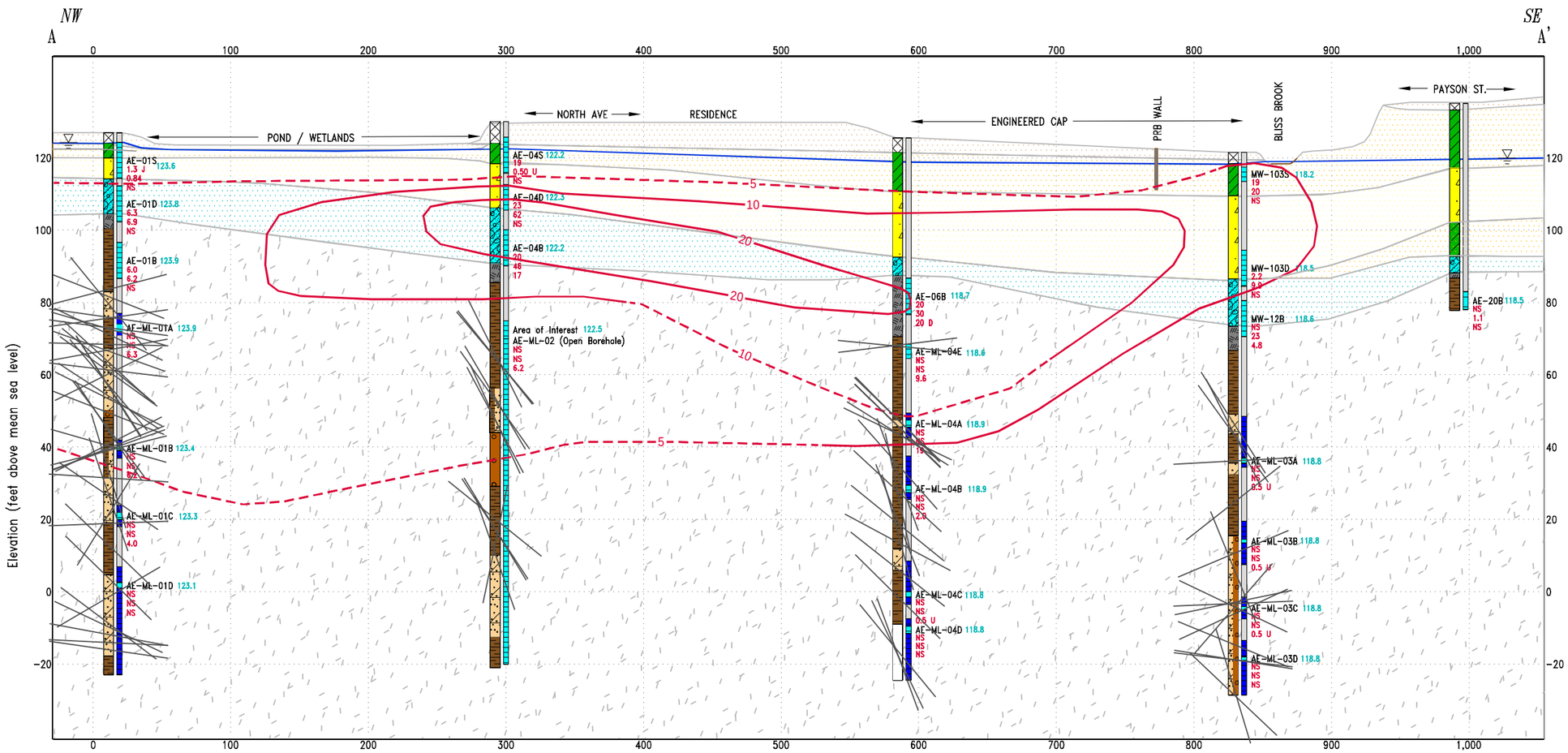
PROJ. NO.: 60308115.09

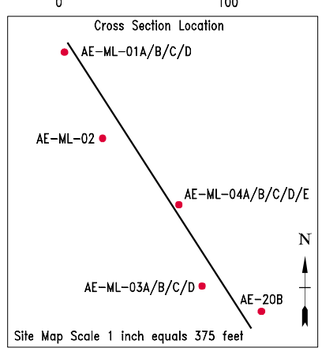
FIGURE 4-34
CROSS SECTION D-D'
HEXAVALENT CHROMIUM CONCENTRATIONS (ppb)

DRAWING NUMBER:

SHEET NUMBER:

REVISION 0





LEGEND:

- PVC Casing
- Well Screen – Overburden Wells / Well Port – Multilevel Wells
- Multi-Level Well Borehole Sand Pack
- Fill
- Alluvial Fs + Si, trace Cl
- Alluvial M-C Sands and Gravels
- Glacial Till
- Weathered Bedrock
- Siltstone
- Sandstone
- Conglomerate
- Siltstone/Sandstone
- Sandstone interbedded with Conglomerate

Water Level Elevation NAD83/NAVD88
Date: 9/24/2015

Groundwater Sample Results
Trichloroethene
Phase 1 8/2014
Phase 2 12/2014
Phase 3 9/2015

All results in parts per billion (ppb)
U – Not detected above the detection limit
J – estimated concentration

PRB – Passive Reactive Barrier

TRICHLOROETHENE CONCENTRATION (ppb) CONTOUR

OPEN BEDROCK FRACTURES (BASED ON DOWNHOLE GEOPHYSICS)

Horizontal Scale (feet): 0 – 73

Vertical Scale (feet): 0 – 28

Vertical Exaggeration: 2.5x

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
7							
6							
5							
4							
3							
2							
1							
0							

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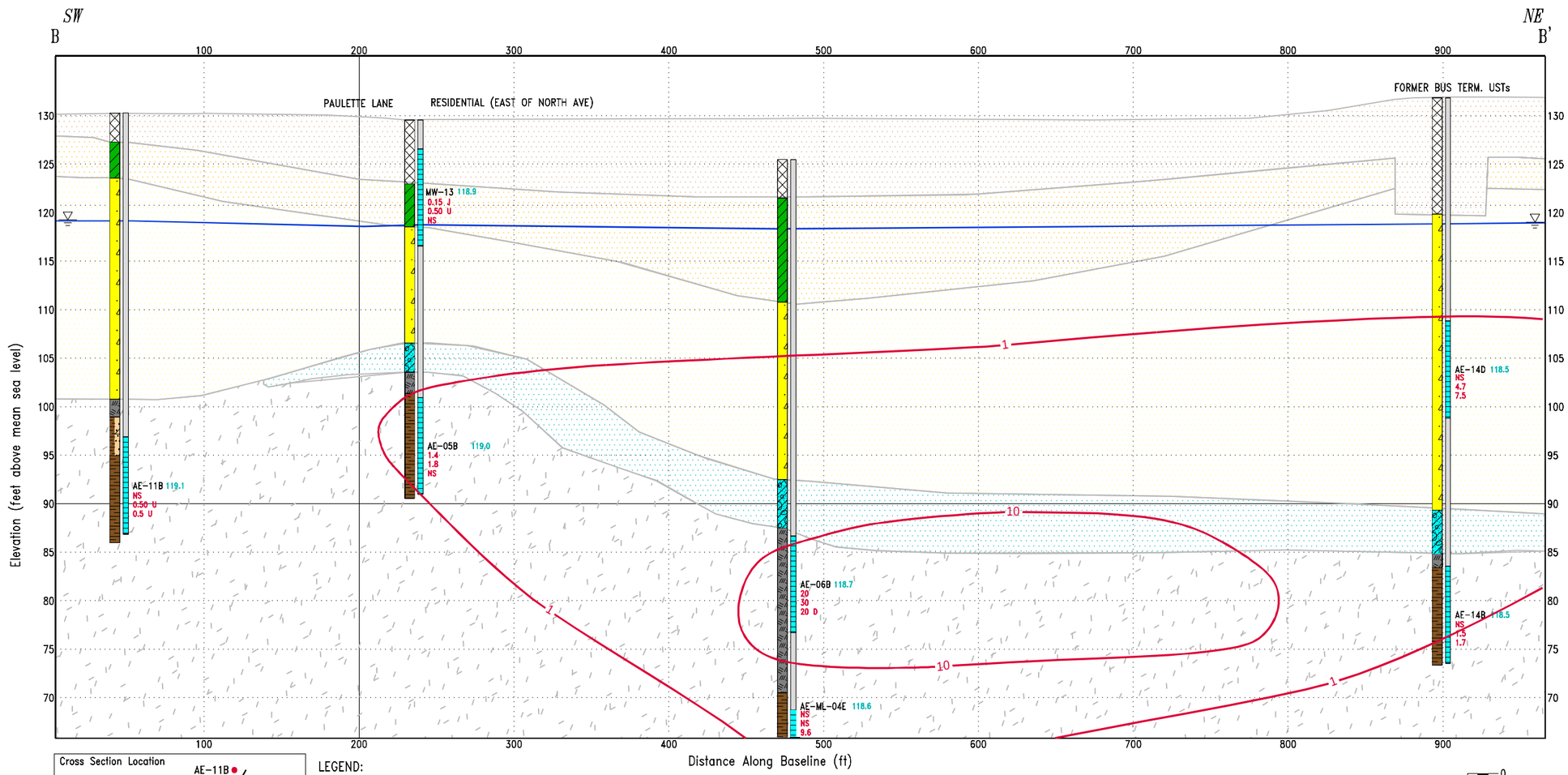
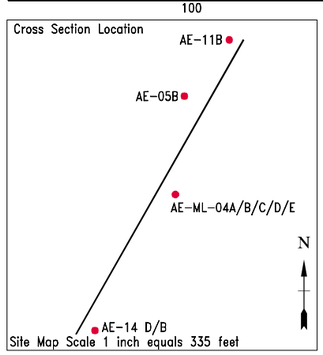
ATTLEBORO, MA

PROJ. NO.: 60308115.09
DATE: 03/18/2016

FIGURE 4-35
CROSS SECTION A-A'
TRICHLOROETHENE CONCENTRATIONS (ppb)

DRAWING NUMBER:
SHEET NUMBER:
REVISION 0





LEGEND:

- PVC Casing
- Well Screen – Overburden Wells / Well Port – Multilevel Wells
- Multi-Level Well Borehole Sand Pack
- Fill
- Alluvial Fs + Si, trace Cl
- Alluvial M-C Sands and Gravels
- Glacial Till
- Weathered Bedrock
- Siltstone
- Sandstone
- Conglomerate
- Siltstone/Sandstone
- Sandstone interbedded with Conglomerate

Water Level Elevation NAD83/NAVD88
Date: 9/24/2015

Groundwater Sample Results
Trichloroethene
Phase 1 8/2014
Phase 2 12/2014
Phase 3 9/2015

All results in parts per billion (ppb)
U – Not detected above the detection limit
J – estimated concentration

PRB – Passive Reactive Barrier

TRICHLOROETHENE CONCENTRATION (ppb) CONTOUR

158.7/37.7 BEDROCK FRACTURES AZIMUTH/DIP

0 65
Horizontal Scale (feet)

Vertical Scale (feet) 0 10

Vertical Exaggeration: 6.5x

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
0							
1							
2							
3							
4							
5							
6							
7							

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ATTLEBORO, MA

DATE: 03/18/2016

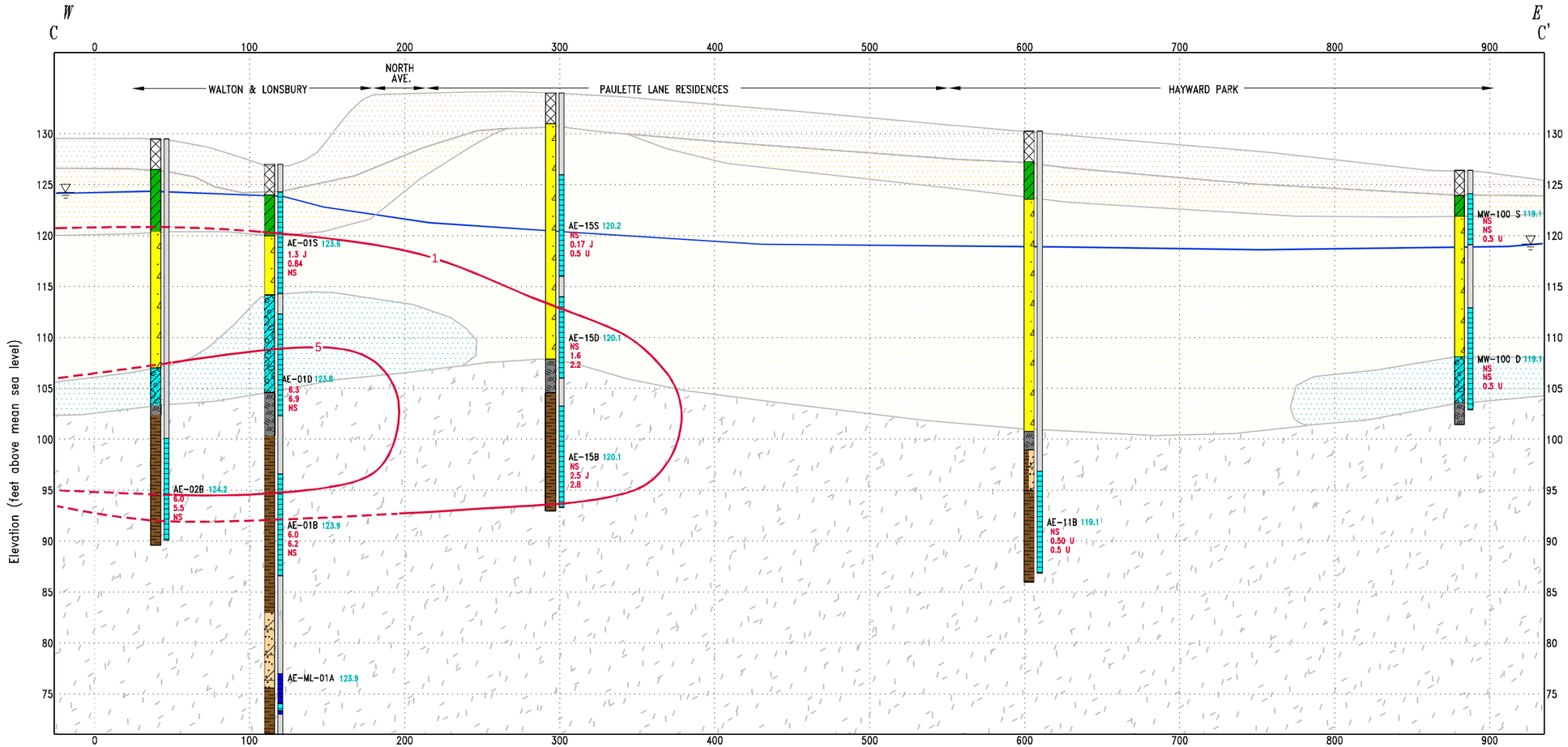
PROJ. NO.: 60308115.09

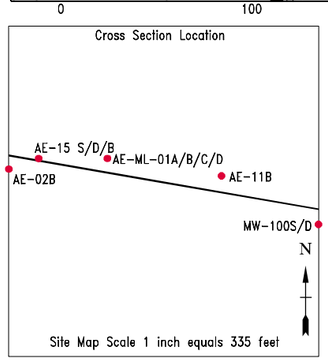
FIGURE 4-36
CROSS SECTION B-B'
TRICHLOROETHENE CONCENTRATIONS (ppb)

DRAWING NUMBER:

SHEET NUMBER:

REVISION 0





LEGEND:

- PVC Casing
- Well Screen – Overburden Wells / Well Port – Multilevel Wells
- Multi-Level Well Borehole Sand Pack
- Fill
- Alluvial Fs + Si, trace Cl
- Alluvial M-C Sands and Gravels
- Glacial Till
- Weathered Bedrock
- Siltstone
- Sandstone
- Conglomerate
- Siltstone/Sandstone
- Sandstone interbedded with Conglomerate

Water Level Elevation NAD83/NAVD88
Date: 9/24/2015

Groundwater Sample Results
Trichloroethene
Phase 1 8/2014
Phase 2 12/2014
Phase 3 9/2015

All results in parts per billion (ppb)
U – Not detected above the detection limit
J – estimated concentration

PRB – Passive Reactive Barrier

TRICHLOROETHENE CONCENTRATION (ppb) CONTOUR

158.7/37.7 BEDROCK FRACTURES AZIMUTH/DIP

Horizontal Scale (feet): 0 – 65

Vertical Scale (feet): 0 – 10

Vertical Exaggeration: 6.5x

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
0							
1							
2							
3							
4							
5							
6							
7							

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AECOM
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ATTLEBORO, MA

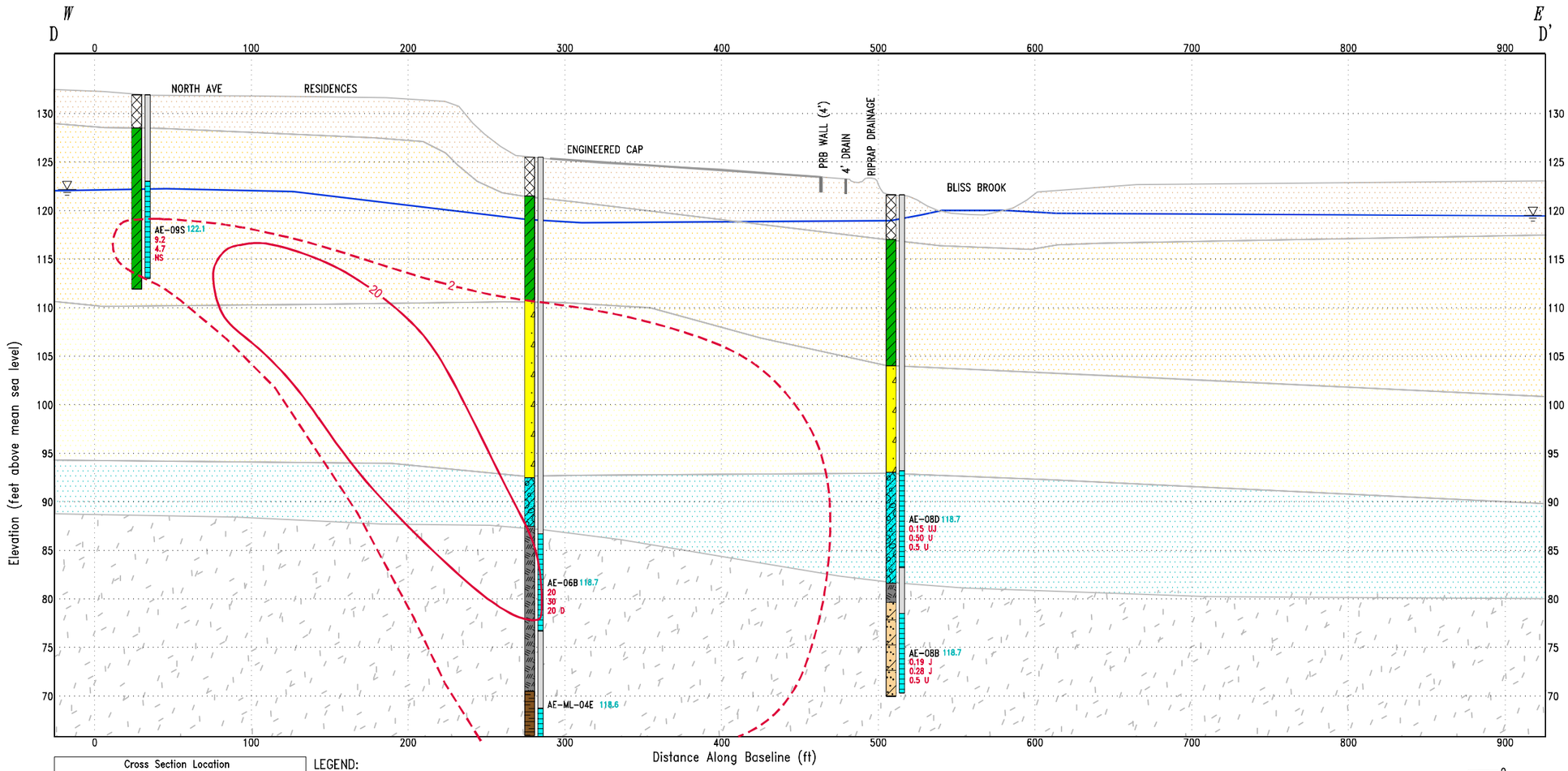
PROJ. NO.: 60308115.09 DATE: 03/18/2016

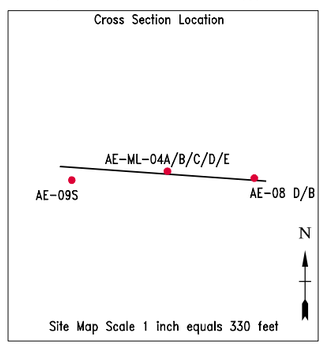
FIGURE 4-37
CROSS SECTION C-C' TRICHLOROETHENE CONCENTRATIONS (ppb)

DRAWING NUMBER:

SHEET NUMBER:

REVISION 0





LEGEND:

- PVC Casing
- Well Screen – Overburden Wells / Well Port – Multilevel Wells
- Multi-Level Well Borehole Sand Pack
- Fill
- Alluvial Fs + Si, trace Cl
- Alluvial M–C Sands and Gravels
- Glacial Till
- Weathered Bedrock
- Siltstone
- Sandstone
- Conglomerate
- Siltstone/Sandstone
- Sandstone interbedded with Conglomerate

Water Level Elevation NAD83/NAVD88
Date: 9/24/2015

Groundwater Sample Results
Trichloroethene
Phase 1 8/2014
Phase 2 12/2014
Phase 3 9/2015

All results in parts per billion (ppb)
U – Not detected above the detection limit
J – estimated concentration (ppb)

PRB – Passive Reactive Barrier

TRICHLOROETHENE CONCENTRATION (ppb) CONTOUR

158.7/37.7 BEDROCK FRACTURES AZIMUTH/DIP

0 65 Horizontal Scale (feet)

0 10 Vertical Scale (feet)

Vertical Exaggeration: 6.5x

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
0							
1							
2							
3							
4							
5							
6							
7							

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78 NORTH AVENUE
ATTLEBORO, MA

DATE: 03/18/2016

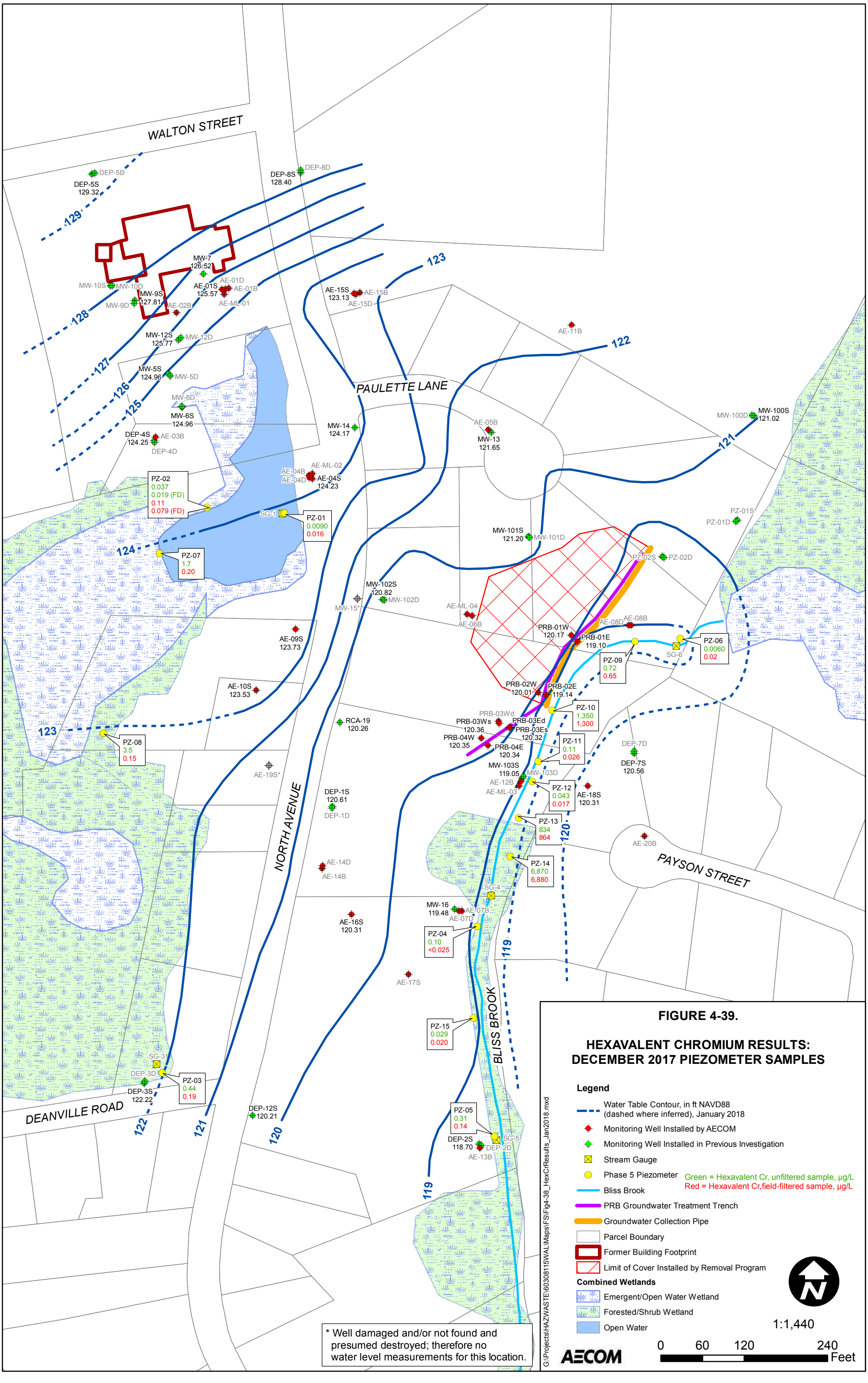
PROJ. NO.: 60308115.09

FIGURE 4-38
CROSS SECTION D-D'
TRICHLOROETHENE CONCENTRATIONS (ppb)

DRAWING NUMBER:

SHEET NUMBER:

REVISION 0


WALTON STREET
PAULETTE LANE
NORTH AVENUE
PAYSON STREET
DEANVILLE ROAD
BLISS BROOK
DEP-5D
DEP-5S
129.32
DEP-8S
128.40
DEP-8D
MW-7
126.52
MW-10S
MW-10D
MW-9S
127.81
MW-9D
AE-02B
AE-01S
125.57
AE-01D
AE-01B
AE-ML-01
AE-15S
123.13
AE-15B
AE-15D
AE-11B
MW-12S
125.77
MW-12D
MW-5S
124.96
MW-5D
MW-6D
MW-6S
124.96
DEP-4S
124.25
AE-03B
DEP-4D
MW-14
124.17
AE-05B
MW-13
121.65
MW-100D
MW-100S
121.02
AE-04B
AE-04D
AE-ML-02
AE-04S
124.23
PZ-02
0.037
0.019 (FD)
0.11
0.079 (FD)
SG-1
PZ-01
0.0090
0.016
PZ-07
1.7
0.20
PZ-01S
PZ-01D
MW-101S
121.20
MW-101D
PZ-02S
PZ-02D
MW-102S
120.82
MW-102D
MW-15*
AE-ML-04
AE-06B
AE-08D
AE-08B
PRB-01W
120.17
PRB-01E
119.10
PZ-06
0.0060
0.02
SG-6
PZ-09
0.72
0.65
AE-09S
123.73
AE-10S
123.53
PRB-02W
120.01
PRB-02E
119.14
PZ-10
1,350
1,300
PRB-03Wd
PRB-03Ws
120.36
PRB-03Ed
PRB-03Es
120.32
PRB-04W
120.35
PRB-04E
120.34
PZ-11
0.11
0.026
RCA-19
120.26
PZ-08
3.5
0.15
AE-19S*
DEP-7D
DEP-7S
120.56
MW-103S
119.05
MW-103D
AE-12B
AE-ML-03
PZ-12
0.043
0.017
AE-18S
120.31
DEP-1S
120.61
DEP-1D
PZ-13
834
864
AE-20B
AE-14D
AE-14B
PZ-14
6,870
6,880
SG-4
MW-16
119.48
AE-07B
AE-07D
AE-16S
120.31
PZ-04
0.10
<0.025
AE-17S
PZ-15
0.029
0.020
SG-3
DEP-3D
PZ-03
0.44
0.19
DEP-3S
122.22
DEP-12S
120.21
PZ-05
0.31
0.14
DEP-2S
118.70
DEP-2D
SG-5
AE-13B
124
123
122
121
120
119
FIGURE 4-39.
HEXAVALENT CHROMIUM RESULTS:
DECEMBER 2017 PIEZOMETER SAMPLES
Legend
Water Table Contour, in ft NAVD88 (dashed where inferred), January 2018
Monitoring Well Installed by AECOM
Monitoring Well Installed in Previous Investigation
Stream Gauge
Phase 5 Piezometer
Green = Hexavalent Cr, unfiltered sample, µg/L
Red = Hexavalent Cr,field-filtered sample, µg/L
Bliss Brook
PRB Groundwater Treatment Trench
Groundwater Collection Pipe
Parcel Boundary
Former Building Footprint
Limit of Cover Installed by Removal Program
Combined Wetlands
Emergent/Open Water Wetland
Forested/Shrub Wetland
Open Water
1:1,440
0 60 120 240 Feet
AECOM
G:\Projects\HAZWASTE\60308115WAL\Maps\FS\Fig4-38_HexCrResults_Jan2018.mxd
* Well damaged and/or not found and presumed destroyed; therefore no water level measurements for this location.

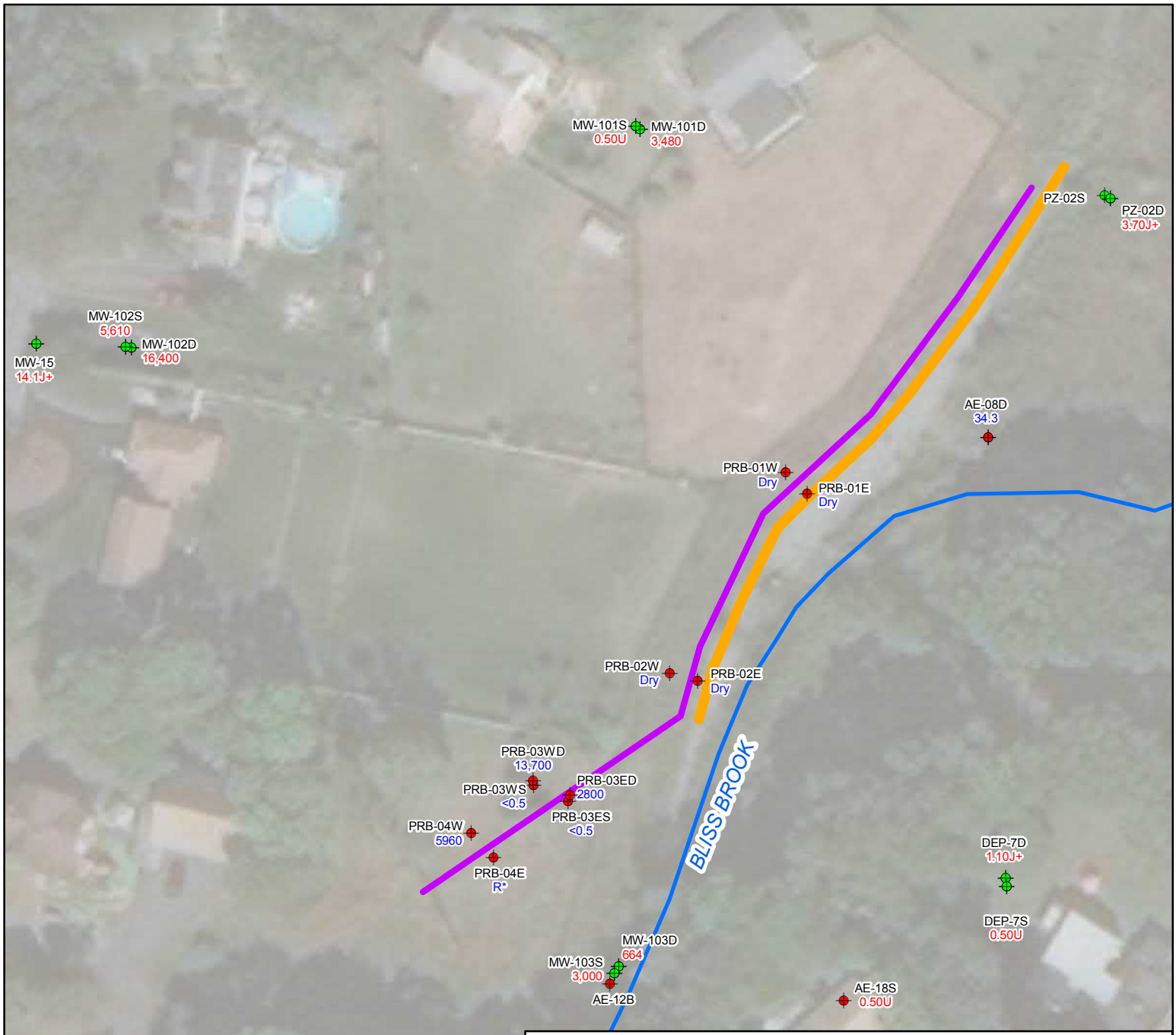


FIGURE 4-40.

PERMEABLE REACTIVE BARRIER AREA

Legend

- Monitoring Well Installed by AECOM
- Monitoring Well Installed in Previous Investigation
- Bliss Brook
- PRB Groundwater Treatment Trench
- Groundwater Collection Pipe

* Unfiltered hexavalent chromium results, label units are µg/L

*R Result rejected due to limitations identified during data validation. Result for corresponding dissolved sample was 110 µg/L.

red text indicates Phase 2

blue text indicates Phase 3

1:720

0 30 60 120 Feet

AECOM

G:\Projects\HAZWASTE\60308115\WAL\Maps\RI\Fig4-39_PermeableBarrier.mxd

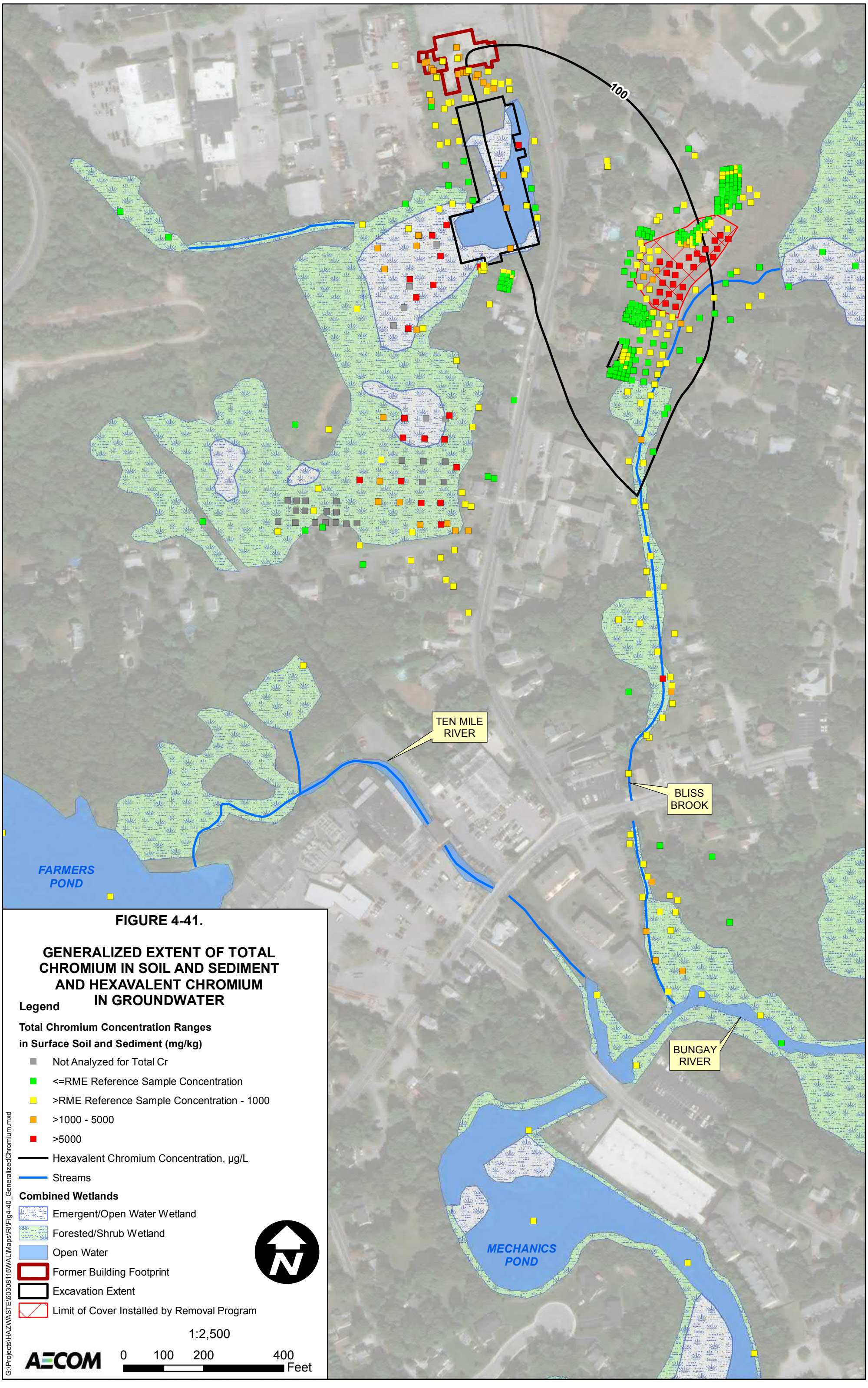


FIGURE 4-41.

GENERALIZED EXTENT OF TOTAL CHROMIUM IN SOIL AND SEDIMENT AND HEXAVALENT CHROMIUM IN GROUNDWATER

Tables

Table 2-1 Previous Investigation Data Usable for Risk Assessments

Report	Description of Data
Weston Solutions, Inc. (Weston), October 2012. *Removal Program Preliminary Assessment/Site Investigation Report for the Walton and Lonsbury Site*. Weston Solutions, Inc. (Weston), April 2012. *Expanded Trip Report for Walton and Lonsbury Site Reassessment, Attleboro, Massachusetts.*	Soil and sediment sampling results from EPA Removal Program PA/SI investigations and EPA Remedial Program site reassessment investigations (2010 and 2011). Most samples were analyzed for total chromium and/or hexavalent chromium only. Some samples were analyzed for a larger suite of metals and cyanide, and selected samples were also analyzed for organic contaminants (VOCs, SVOCs, PCBs). In general, the analytical data are being used for risk assessment. On a location-by-location basis, the data is not being used in the risk assessments if it is clear that the location has been excavated by removal program actions, and therefore results for the location are no longer representative of site conditions.

TABLE 2-2
WELL, PIEZOMETER, AND STAFF GAUGE CONSTRUCTION AND SURVEY DATA
Walton & Lonsbury Superfund Site
Attleboro, Massachusetts

WELL ID	Installation Date	Northing / Easting MA State Plane Coordinate System [1]	Elevation of Protective Casing (TOC)[1]	Elevation of Measuring Point (MP)[1]	Elevation of Ground Surface (GRD)[1]	Elevation of Bottom of Boring	Elevation Competent Bedrock	Elevation of Screen Midpoint	Elevation of Top of Screen	Elevation of Bottom of Screen	Screen Length	Well Diameter / Material	Well Type	Strata	Comments
		(ft. NAD83)	(ft. NAVD88)			(ft. NAVD88)		(ft. NAVD88)			(ft.)	(in.)			
AECOM WELLS INSTALLED FOR REMEDIAL INVESTIGATION / FEASIBILITY STUDY															
AE- 01S	6/4/2014	2809604.976 / 711441.215	131.45	131.21	128.99	115.9	-	121.1	126.1	116.1	10	2 / PVC	SOB	SiFS	
AE- 01D	6/4/2014	2809605.389 / 711445.548	131.56	131.13	129.11	103.6	-	109.4	114.4	104.4	10	2 / PVC	DOB	MCSG	
AE- 01B	6/3/2014	2809606.654 / 711450.722	131.75	131.46	129.29	88.9	100.1	93.9	98.9	88.9	10	2 / PVC	SBR	WRBR	
AE- 02B	6/9/2014	2809571.910 / 711375.606	131.94	131.72	129.52	89.6	102.0	95.1	100.1	90.1	10	2 / PVC	SBR	WRBR	
AE- 03B	6/4/2014	2809392.652 / 711345.761	128.20	128.04	125.63	87.6	97.5	93.8	98.8	88.8	10	2 / PVC	SBR	WRBR	
AE- 04S	6/11/2014	2809333.028 / 711571.186	132.66	132.51	130.13	115.9	-	120.9	125.9	115.9	10	2 / PVC	SOB	SiFS	
AE- 04D	6/11/2014	2809334.578 / 711566.087	132.95	132.71	130.20	105.8	-	109.3	112.8	105.8	7	2 / PVC	DOB	MCSG	
AE- 04B	6/10/2014	2809337.014 / 711566.107	132.92	132.53	130.13	85.1	102.1	95.3	100.3	90.3	10	2 / PVC	SBR	WRBR	
AE- 05B	6/5/2014	2809402.818 / 711823.950	129.56	129.20	129.56	90.6	101.4	96.0	101.0	91.0	10	2 / PVC	SBR	WRBR	
AE- 06B	6/13/2014	2809137.699 / 711793.620	126.59	126.51	126.59	77.6	87.4	82.8	87.8	77.8	10	2 / PVC	SBR	WRBR	
AE- 07D	6/9/2014	2808710.165 / 711782.122	123.09	122.38	123.09	88.1	-	93.1	98.1	88.1	10	2 / PVC	DOB	MCSG	
AE- 07B	6/6/2014	2808710.393 / 711785.964	122.85	122.45	122.85	69.8	79.8	75.0	80.0	70.0	10	2 / PVC	SBR	WRBR	
AE- 08D	6/11/2014	2809121.451 / 712026.542	121.47	121.20	121.47	83.1	-	88.1	93.1	83.1	10	2 / PVC	DOB	MCSG	
AE- 08B	6/10/2014	2809121.332 / 712029.800	121.57	121.38	121.57	64.1	79.6	73.5	78.5	68.5	10	2 / PVC	SBR	WRBR	
AE- 09S	6/17/2014	2809115.925 / 711546.987	131.91	131.64	131.91	111.9	-	118.1	123.1	113.1	10	2 / PVC	SOB	SiFS	
AE- 10S	6/17/2014	2809028.045 / 711489.910	130.67	130.38	130.67	110.7	-	117.9	122.9	112.9	10	2 / PVC	SOB	SiFS	
AE- 11B	11/11/2014	2809553.625 / 711944.181	130.27	129.96	130.27	86.0	99.0	91.9	96.9	86.9	10	2 / PVC	SBR	WRBR	
AE- 12B	11/26/2014	2808897.824 / 711871.091	123.67	123.47	121.51	70.5	82.0	75.5	80.5	70.5	10	2 / PVC	SBR	WRBR	
AE- 13B	11/14/2014	2808369.340 / 711812.169	121.31	120.93	121.31	71.8	82.3	77.4	82.4	72.4	10	2 / PVC	SBR	WRBR	
AE- 14D	11/20/2014	2808775.559 / 711585.534	131.84	131.53	131.84	98.8	-	103.8	108.8	98.8	10	2 / PVC	DOB	MCSG	
AE- 14B	11/21/2014	2808771.410 / 711584.904	131.86	131.30	131.86	73.4	83.9	78.6	83.6	73.6	10	2 / PVC	SBR	WRBR	
AE- 15S	11/18/2014	2809598.908 / 711630.915	133.96	133.63	133.96	116.0	-	121.0	126.0	116.0	10	2 / PVC	SOB	SiFS	
AE- 15D	11/18/2014	2809598.295 / 711633.489	134.02	133.82	134.02	106.0	-	110.0	114.0	106.0	8	2 / PVC	DOB	MCSG	
AE- 15B	11/18/2014	2809600.036 / 711639.162	134.03	133.83	134.03	93.0	104.0	98.3	103.3	93.3	10	2 / PVC	SBR	WRBR	
AE- 16S	11/6/2014	2808705.544 / 711627.343	129.03	128.65	129.03	114.0	-	117.0	122.0	112.0	10	2 / PVC	VI	SiFS	
AE- 17S	11/6/2014	2808619.280 / 711709.401	128.54	128.28	128.54	108.5	-	121.5	126.5	116.5	10	2 / PVC	VI	SiFS	
AE- 18S	11/6/2014	2808890.422 / 711967.372	132.33	131.96	132.33	112.3	-	117.5	122.5	112.5	10	2 / PVC	VI	SiFS	
AE- 19S[2]	11/6/2014	2808920.141 / 711508.412	136.81	136.46	136.81	111.8	-	117.0	122.0	112.0	10	2 / PVC	VI	SiFS	Destroyed sometime after Phase 2 ended.
AE- 20B	11/25/2014	2808818.658 / 712048.727	135.14	134.77	135.14	77.7	86.7	80.4	82.9	77.9	5	2 / PVC	SBR	WRBR	
* AE-ML-01 A	Jul-Sept 2015	2809598.334 / 711444.359	131.35	131.11	128.67	-21.3	102.1	76.2	79.2	73.2	6	0.4 / CMT	DBR	BR	Associated with AE-01S/D/B wells
* AE-ML-01 B	Jul-Sept 2015							41.7	44.2	39.2	5	0.4 / CMT	DBR	BR	DEPTHS SET BY TOP 6" STEEL CASING WHICH IS 0.5 FT AGS
* AE-ML-01 C	Jul-Sept 2015							23.2	26.2	20.2	6	0.4 / CMT	DBR	BR	
* AE-ML-01 D	Jul-Sept 2015							3.2	9.2	-21.3	30	0.4 / CMT	DWL	BR	
* AE- ML-02	Jul-Sept 2015	2809339.437 / 711570.842	132.50	132.17	130.19	-19.8	85.7	74.4	75.4	73.4	5	6 / Open Borehole	DBR	BR	Associated with AE-04S/D/B wells - ML-02 is an open bedrock borehole, depth of interest is 55-56 feet bgs, bottom well 150 bgs. DEPTHS SET REL. 6"STEEL - 0.25' AGS

TABLE 2-2
WELL, PIEZOMETER, AND STAFF GAUGE CONSTRUCTION AND SURVEY DATA
Walton & Lonsbury Superfund Site
Attleboro, Massachusetts

WELL ID		Installation Date	Northing / Easting MA State Plane Coordinate System [1]	Elevation of Protective Casing (TOC)[1]	Elevation of Measuring Point (MP)[1]	Elevation of Ground Surface (GRD)[1]	Elevation of Bottom of Boring	Elevation Competent Bedrock	Elevation of Screen Midpoint	Elevation of Top of Screen	Elevation of Bottom of Screen	Screen Length	Well Diameter / Material	Well Type	Strata	Comments
*AE-ML-03	A	Jul-Sept 2015	2808890.737 / 711867.890	123.82	123.42	121.43	-28.6	66.7	35.2	49.6	35.6	14	0.4 / CMT	DBR	BR	Associated with AE-12B and MW-103S/D
	B	Jul-Sept 2015							14.6	20.6	8.6	12	0.4 / CMT	DBR	BR	DEPTHS SET BY TOP 6" STEEL CASING WHICH IS 1.2 FT AGS
	C	Jul-Sept 2015							-3.4	-0.4	-6.4	6	0.4 / CMT	DBR	BR	
	D	Jul-Sept 2015							-19.8	-15.4	-28.6	15	0.4 / CMT	DWL	BR	
*AE-ML-04	A	Jul-Sept 2015	2809135.887 / 711800.842	125.65	125.34	125.65	-24.4	70.7	45.8	49.3	42.3	7	0.4 / CMT	DBR	BR	Associated with AE-06B
	B	Jul-Sept 2015							29.1	37.3	25.3	12	0.4 / CMT	DBR	BR	DEPTHS SET BY TIP 6" STEEL CASING WHICH IS -0.4 FT BGS
	C	Jul-Sept 2015							-0.4	8.3	-3.8	12	0.4 / CMT	DBR	BR	
	D	Jul-Sept 2015							-9.7	-7.8	-24.4	15	0.4 / CMT	DWL	BR	
	E	Jul-Sept 2015			125.39				66.7	68.7	64.7	4	1.5 / PVC	DBR	BR	1.5" PVC well set adjacent to CMT well. - MP APPROX SAME ELEV. CMT
PRE-EXISTING WELLS IN USE FOR REMEDIAL INVESTIGATION																
RCA- 19		4/2000	2808982.197 / 711610.538	136.04	135.84	136.04	116.0		121.0	126.0	116.0	10	1.25 / PVC	SOB	ND	0.25 ft. below grade, 7' from nearest tree, at 5 o'clock.
MW- 5S		12/89-1/90	2809483.461 / 711363.761	128.94	127.59	126.10	118.1		122.1	126.1	118.1	8	2 / PVC	SOB	ND	Soft bottom. Est. change in ground surface 0.65 lower.
MW- 5D		4/1985	2809480.379 / 711366.455	128.28	127.89	125.90	101.9		104.4	106.9	101.9	5	2 / PVC	DOB	ND	Hard bottom. Est. change in ground surface 1.1 lower
MW- 6S		5/1985	2809435.459 / 711383.623	127.46	127.20	126.00	116.0		118.5	121.0	116.0	5	2 / PVC	SOB	ND	Hard bottom.
MW- 6D		5/1985	2809436.761 / 711383.650	127.54	127.23	126.03	99.0		101.5	104.0	99.0	5	2 / PVC	DOB	ND	Soft bottom.
MW- 7		12/89-1/90	2809627.406 / 711414.229	133.78	133.63	131.43	119.4		124.4	129.4	119.4	10	2 / PVC	SOB	ND	Soft bottom.
MW- 9S		12/89-1/90	2809589.240 / 711315.205	135.33	135.33	131.37	123.4		127.4	131.4	123.4	8	2 / PVC	SOB	ND	Hard bottom. Est. change in ground surface 1.15 lower.
MW- 9D		12/89-1/90	2809585.249 / 711314.775	134.42	134.16	131.82	103.8		106.3	108.8	103.8	5	2 / PVC	DOB	ND	Soft bottom. Est. change in ground surface 0.78 lower.
MW- 10S		12/89-1/90	2809610.870 / 711279.894	133.85	133.67	131.06	120.1		125.1	130.1	120.1	10	2 / PVC	SOB	ND	
MW- 10D		12/89-1/90	2809610.118 / 711282.771	NONE	134.05	131.14	108.1		110.6	113.1	108.1	5	2 / PVC	DOB	ND	Screen is packed with M-C sand? Could not develop out. No PVC TOC MP
MW- 12S		12/89-1/90	2809532.775 / 711378.238	130.33	129.94	128.64	120.6		124.6	128.6	120.6	8	2 / PVC	SOB	ND	Hard bottom. Est. change in ground surface 0.40 lower
MW- 12D		12/89-1/90	2809535.351 / 711381.404	130.85	129.96	128.71	104.7		108.2	111.7	104.7	7	2 / PVC	DOB	ND	Soft Bottom. Est. change in ground surface 0.45 lower.
MW- 13		4/1998	2809399.057 / 711828.549	129.51	129.25	129.51	116.5		121.5	126.5	116.5	10	2 / PVC	SOB	ND	Hard bottom
MW- 14		4/1998	2809406.214 / 711632.327	130.68	130.47	130.68	117.7		122.7	127.7	117.7	10	2 / PVC	SOB	ND	Hard bottom
MW- 15		4/1998			130.86 (est)							10	2 / PVC	SOB	ND	Roadbox destroyed. Well abandoned in Phase 2; not surveyed by AECOM.
MW- 16		4/1998	2808713.638 / 711775.939	122.80	122.70	122.80	109.8		114.8	119.8	109.8	10	2 / PVC	SOB	ND	Hard bottom. TOC slanted.
DEP- 1S		7/2011	2808860.900 / 711599.581	133.49	133.34	133.49	116.5		121.5	126.5	116.5	10	2 / PVC	SOB	ND	
DEP- 1D		7/2011	2808858.488 / 711599.399	133.37	133.21	133.37	108.4		110.9	113.4	108.4	5	2 / PVC	DOB	ND	Well drawdown too great to get full re-development.
DEP- 2S		7/2011	2808374.800 / 711811.099	121.34	121.16	121.34	111.3		113.8	116.3	111.3	5	2 / PVC	SOB	ND	
DEP- 2D		7/2011	2808372.341 / 711813.998	120.86	120.58	120.86	82.9		85.4	87.9	82.9	5	2 / PVC	DOB	ND	
DEP- 3S		7/2011	2808462.724 / 711328.805	124.65	124.45	123.40	116.4		118.9	121.4	116.4	5	2 / PVC	SOB	ND	Hard bottom
DEP- 3D		7/2011	2808465.753 / 711329.517	124.68	124.53	123.05	88.0		90.5	93.0	88.0	5	2 / PVC	DOB	ND	Hard bottom
DEP- 4S		2/2012	2809387.497 / 711343.264	128.57	128.32	125.66	119.7		122.2	124.7	119.7	5	2 / PVC	SOB	ND	
DEP- 4D		2/2012	2809384.460 / 711343.504	128.66	128.45	125.44	105.4		107.9	110.4	105.4	5	2 / PVC	DOB	ND	Reported As 20 bgs but well clearly developed
DEP- 5S		2/2012	2809771.121 / 711253.624	133.36	132.96	133.36	120.4		125.4	130.4	120.4	10	2 / PVC	SOB	ND	Screen is packed with M-C sand? Could not develop out.
DEP- 5D		2/2012	2809772.654 / 711257.951	133.49	133.29	133.49	109.5		112.0	114.5	109.5	5	2 / PVC	DOB	ND	Screen is packed with M-C sand? Could not develop out.

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DEP- 6S[3]	2/2012			131.14							10	2 / PVC	SOB	ND	Not surveyed by AECOM; not used for RI - located too far west
DEP- 6D[3]	2/2012			129.97							5	2 / PVC	DOB	ND	Not surveyed by AECOM; not used for RI - located too far west
DEP- 7S	2/2012	2808937.473 / 712034.345	129.48	129.30	129.48	112.5		117.5	122.5	112.5	10	2 / PVC	SOB	ND	Screen is packed with M-C sand? Could not develop out.
DEP- 7D	2/2012	2808940.902 / 712034.032	129.23	128.90	129.23	87.2		88.7	90.2	87.2	3	2 / PVC	DOB	ND	Screen is packed with M-C sand? Could not develop out.
DEP- 8S	2/2012	2809773.580 / 711554.042	134.48	134.23	134.48	116.5		121.5	126.5	116.5	10	2 / PVC	SOB	ND	Drilled to 18 ft.
DEP- 8D	2/2012	2809776.973 / 711554.227	134.62	134.37	134.62	109.6		112.1	114.6	109.6	5	2 / PVC	DOB	ND	Drilled to 27 ft.
DEP- 12S	2/2012	2808407.217 711469.273	127.42	127.06	127.42	112.4		117.4	122.4	112.4	10	2 / PVC	SOB	ND	
DEP- 12D	2/2012	2808409.686 711469.617	127.43	127.04	127.43	99.4		101.9	104.4	99.4	5	2 / PVC	DOB	ND	
MW- 100S	4/2012	2809423.161 / 712206.505	126.91	126.77	124.60	117.3		119.8	122.3	117.3	5	2 / PVC	SOB	ND	
MW- 100D	4/2012	2809423.892 / 712203.499	126.45	126.36	124.79	101.3		106.3	111.3	101.3	10	2 / PVC	DOB	ND	
MW- 101S	4/2012	2809249.184 / 711881.941	125.76	125.42	125.76	116.8		119.3	121.8	116.8	5	2 / PVC	SOB	ND	Hard bottom
MW- 101D	4/2012	2809247.651 / 711883.893	125.62	125.31	125.62	93.1		98.1	103.1	93.1	10	2 / PVC	DOB	ND	Soft, but cone end cap detected.
MW- 102S	4/2012	2809158.805 / 711671.914	132.33	132.10	132.33	115.3		117.8	120.3	115.3	5	2 / PVC	SOB	ND	Hard bottom
MW- 102D	4/2012	2809158.491 / 711674.873	132.37	132.13	132.37	92.4		97.4	102.4	92.4	10	2 / PVC	DOB	ND	Hard bottom
MW- 103S	4/2012	2808901.344 / 711873.112	122.57	122.37	121.24	113.2		115.2	117.2	113.2	4	2 / PVC	SOB	ND	Change in Protective Pipe height -0.98, hard bottom
MW- 103D	4/2012	2808904.414 / 711874.718	123.01	122.94	121.19	84.2		89.2	94.2	84.2	10	2 / PVC	DOB	ND	Change in Protective Pipe height -0.93, soft bottom
PZ- 01S	4/2012	2809273.529 / 712182.794	124.24	124.16	122.90	109.9		112.4	114.9	109.9	5	1 / PVC	SOB	ND	
PZ- 01D	4/2012	2809271.219 / 712180.814	124.25	124.14	122.94	92.9		97.9	102.9	92.9	10	1 / PVC	DOB	ND	
PZ- 02S	4/2012	2809220.724 / 712074.752	123.64	123.63	121.44	109.4		110.4	111.4	109.4	2	1 / PVC	SOB	ND	
PZ- 02D	4/2012	2809219.637 / 712077.276	123.77	123.82	121.77	101.3		102.3	103.3	101.3	2	1 / PVC	DOB	ND	
AECOM STAFF GAUGES INSTALLED FOR REMEDIAL INVESTIGATION - FOR THOSE THAT WERE REPAIRED OR RE-INSTALLED, THE MOST RECENT (JANUARY 2018) DATA ARE PRESENTED															
SG- 1	11/2017	2809279.402 / 711528.964		125.87											Pre-existing staff gauge was repaired
SG- 2	11/2017	2809281.238 / 711419.420		125.63											Staff gauge was missing in Nov 2017; new one installed
SG- 3	11/2017	2808481.062 / 711349.320		124.13											Pre-existing staff gauge was repaired
SG- 4	11/2017	2808685.366 / 711813.708		121.21											New staff gauge replaces previous SG-04 and is located further downstream
SG- 5	11/2017	2808378.803 / 711833.718		119.31											Pre-existing staff gauge was repaired
SG- 6	11/2017	2809091.861 / 712094.880		120.81											Pre-existing yardstick upgraded to staff gauge
SG- 7	11/2017	2809223.883 711353.668		125.27											New installation
SG- 8	11/2017	2808969.976 711264.633		125.15											New installation
SG- 10	11/2017	2808999.928 711918.978		121.32											New installation
SG- 11	11/2017	2808924.998 711898.897		121.15											New installation
AECOM PIEZOMETERS INSTALLED IN NOVEMBER 2017 (PHASE 5)															
PZ- 1	11/2017	2809281.579 / 711530.666		126.46	122.8	119.0		120.3	121.3	119.3	2	1.25/SS	SOB	ND	
PZ- 2	11/2017	2809290.345 / 711421.051		126.51	122.8	119.0		120.3	121.3	119.3	2	1.25/SS	SOB	ND	

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PZ- 3	11/2017	2808480.116 / 711348.712		124.63	121.2	117.1		118.2	119.2	117.2	2	1.25/SS	SOB	ND	
PZ- 4	11/2017	2808686.027 / 711811.868		121.64	117.9	114.1		115.4	116.4	114.4	2	1.25/SS	SOB	ND	
PZ- 5	11/2017	2808377.230 / 711832.941		120.86	117.5	113.4		114.5	115.5	113.5	2	1.25/SS	SOB	ND	
PZ- 6	11/2017	2809102.944 / 712101.398		121.43	118.0	113.9		115.0	116.0	114.0	2	1.25/SS	SOB	ND	
PZ- 7	11/2017	2809222.378 / 711352.684		125.25	121.6	117.8		119.1	120.1	118.1	2	1.25/SS	SOB	ND	
PZ- 8	11/2017	2808968.912 / 711265.903		126.00	122.3	118.5		119.8	120.8	118.8	2	1.25/SS	SOB	ND	
PZ- 9	11/2017	2809099.808 / 712039.392		121.50	117.8	114.0		115.3	116.3	114.3	2	1.25/SS	SOB	ND	
PZ- 10	11/2017	2809000.349 / 711916.412		121.94	118.3	114.4		115.8	116.8	114.8	2	1.25/SS	SOB	ND	
PZ- 11	11/2017	2808924.834 / 711895.057		121.36	117.7	113.9		115.2	116.2	114.2	2	1.25/SS	SOB	ND	
PZ- 12	11/2017	2808898.651 / 711886.999		121.50	118.0	114.0		115.0	116.0	114.0	2	1.25/SS	SOB	ND	
PZ- 13	11/2017	2808842.880 / 711870.136		121.11	117.6	113.6		114.6	115.6	113.6	2	1.25/SS	SOB	ND	
PZ- 14	11/2017	2808783.109 / 711851.867		121.85	118.3	114.4		115.8	116.8	114.8	2	1.25/SS	SOB	ND	
PZ- 15	11/2017	2808554.595 / 711807.168		121.32	117.6	113.8		115.1	116.1	114.1	2	1.25/SS	SOB	ND	
AECOM PERMEABLE REACTIVE BARRIER WELLS															
PRB- 01E	8/5-6/2015	2809097.605 / 711953.280	121.56	121.33	121.56	117.6		118.3	119.1	117.6	1.5	1.5/PVC	PRB	SOB	PRB Shallow Wall down gradient
PRB- 01W	8/5-6/2015	2809105.930 / 711944.082	121.89	121.57	121.89	117.9		118.6	119.4	117.9	1.5	1.5/PVC	PRB	SOB	PRB Shallow Wall up gradient
PRB- 02E	8/5-6/2015	2809020.085 / 711907.803	121.44	121.16	121.44	117.4		118.2	118.9	117.4	1.5	1.5/PVC	PRB	SOB	PRB Shallow Wall down gradient
PRB- 02W	8/5-6/2015	2809024.114 / 711897.072	121.76	121.48	121.76	117.8		118.5	119.3	117.8	1.5	1.5/PVC	PRB	SOB	PRB Shallow Wall up gradient
PRB- 03ES	8/5-6/2015	2808972.231 / 711853.848	122.55	122.42	122.55	114.5		117.0	119.5	114.5	5	1.5/PVC	PRB	SOB	PRB Deep Wall down gradient Shallow Well
PRB- 03ED	8/5-6/2015	2808974.780 / 711854.489	122.47	122.36	122.47	107.5		109.0	110.5	107.5	3	1.5/PVC	PRB	SOB	PRB Deep Wall down gradient Deep Well
PRB- 03WS	8/5-6/2015	2808979.035 / 711839.602	123.01	122.81	123.01	115.0		117.5	120.0	115.0	5	1.5/PVC	PRB	SOB	PRB Deep Wall up gradient Shallow Well
PRB- 03WD	8/5-6/2015	2808980.711 / 711839.475	122.97	122.82	122.97	108.0		109.5	111.0	108.0	3	1.5/PVC	PRB	SOB	PRB Deep Wall up gradient Deep Well
PRB- 04E	8/5-6/2015	2808951.527 / 711824.299	123.05	122.95	123.05	115.0		117.5	120.0	115.0	5	1.5/PVC	PRB	SOB	PRB Deep Wall down gradient
PRB- 04W	8/5-6/2015	2808959.547 / 711814.373	123.71	123.44	123.71	115.7		118.2	120.7	115.7	5	1.5/PVC	PRB	SOB	PRB Deep Wall up gradient
STERGIS MCP SITE WELLS (MCP site located upgradient of Walton and Lonsbury property)															
Sage -02D[2]	ND	2809731.369 / 710922.481	132.71	132.49	132.68	132.7		ND	ND	ND	ND	2/PVC	DOB	OB	
Sage -08D[2]	ND	2809699.299 / 710716.136	133.81	133.35	133.74	133.7		ND	ND	ND	ND	2/PVC	DOB	OB	
Sage -08S[2]	ND	2809700.149 / 710714.296	133.82	133.52	133.77	133.8		ND	ND	ND	ND	2/PVC	SOB	OB	
Sage -09D[2]	ND	2809622.604 / 710656.55	133.14	132.75	133.04	133.0		ND	ND	ND	ND	2/PVC	DOB	OB	
Sage -09S[2]	ND	2809621.917 / 710654.057	133.23	132.99	133.37	133.4		ND	ND	ND	ND	2/PVC	SOB	OB	
Sage -10D[2]	ND	2809596.579 / 710999.408	131.98	131.69	131.94	131.9		ND	ND	ND	ND	2/PVC	DOB	OB	

TABLE 2-2
WELL, PIEZOMETER, AND STAFF GAUGE CONSTRUCTION AND SURVEY DATA
Walton & Lonsbury Superfund Site
Attleboro, Massachusetts

WELL ID	Installation Date	Northing / Easting MA State Plane Coordinate System [1]	Elevation of Protective Casing (TOC)[1]	Elevation of Measuring Point (MP)[1]	Elevation of Ground Surface (GRD)[1]	Elevation of Bottom of Boring	Elevation Competent Bedrock	Elevation of Screen Midpoint	Elevation of Top of Screen	Elevation of Bottom of Screen	Screen Length	Well Diameter / Material	Well Type	Strata	Comments
Sage -10S[2]	ND	2809596.709 / 710994.888	132.21	131.81	132.17	132.2		ND	ND	ND	ND	2/PVC	SOB	OB	
Sage -11D[2]	ND	2809712.378 / 711116.017	133.32	132.92	133.28	133.3		ND	ND	ND	ND	2/PVC	DOB	OB	
Sage -11S[2]	ND	2809716.886 / 711116.145	133.26	132.96	133.21	133.2		ND	ND	ND	ND	2/PVC	SOB	OB	
AW -16[2]	ND	2809730.1 / 710917.675	132.77	132.65	132.72	132.7		ND	ND	ND	ND	2/PVC	SOB	OB	
AW -16D[2]	ND	2809730.788 / 710920.071	132.69	132.44	132.63	132.6		ND	ND	ND	ND	2/PVC	DOB	OB	
AW -16I[2]	ND	2809732.661 / 710924.479	132.75	132.33	132.71	132.7		ND	ND	ND	ND	2/PVC	OB	OB	

BGS - Below Ground Surface
AGS - Above Ground Surface

SOB - Shallow overburden
DOB - Deep Overburden
SBR - Shallow Bedrock/Weathered Rock
DBR - Deep Bedrock
DWL - Deep Bedrock Water Level Well
ND - Not Determined
OB - Overburden
SiFS - Silt and Fine Sands few to trace medium sand or fine gravel
MCSG - Medium to Coarse Sand and Gravel
WRBR - Weathered Rock Bedrock Interface
BR - Bedrock
VI - Vapor Intrusion
PRB - Passive Reactive Barrier
PVC - Polyvinyl Chloride
SS - Stainless Steel
CMT - Solinst Continuous Multichannel Tubing (CMT) multiwell system

* CMT Multilevel Wells have 6-inch sample ports set at target depths which are not necessarily in the center of the sanded bedrock interval.
ML Screen Length refers to length of bedrock borehole sandpack in which the 6-inch sample port is set. Longer sandpack lengths were chosen based on geophysical data.
AE-ML-02 was left as an open bedrock borehole. Geophysical results showed no significant fracture flow below 60 feet bgs. A large fracture was encountered at approximately 54-55 feet bgs, at the base of the steel casing.

1 Survey Data by Site Design and Engineering, January 2018, unless otherwise noted.
2 Survey Data by Freeman LLC, 16 January 2015 & Alpha Surveying and Engineering, February 2016
3 Survey Data from ESM 2012 Draft LSI Letter Report. These wells are located approximately 800 feet west and slightly north of DEP-3S and 3D (off the scale of RI report figures).

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	ISB-01	ISB-01	ISB-01	ISB-01	ISB-01	ISB-01	ISB-02	P-01-SS-02B	P-01-SS-03B	P-02-SS-01	P-03-SS-05
Sample ID:	ISB-01A	ISB-01B	ISB-01C	ISB-01D	ISB-01E	ISB-01F	ISB-02	P-01-SS-02B	P-01-SS-03B	P-02-SS-01	P-03-SS-05
Sample Date:	8/6/2010	8/6/2010	8/6/2010	8/6/2010	8/6/2010	8/6/2010	8/10/2010	2/2/2012	2/2/2012	2/2/2012	2/1/2012
Sample Depth:	0-1 (ft bgs)	1.25-1.25 (ft bgs)	0-2.58 (ft bgs)	1.1-1.1 (ft bgs)	1.3-1.3 (ft bgs)	0-1.7 (ft bgs)	0-1 (ft bgs)	0.2-1 (ft bgs)	0.2-1 (ft bgs)	0-0.5 (ft bgs)	0-0.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter											
VOCs (ug/kg)											
1,1,1-Trichloroethane	84 U				42 U		82 U				
1,1-Dichloroethane	84 U				42 U		82 U				
2-Butanone	84 U				42 U		82 U				
2-Hexanone	84 U				42 U		82 U				
4-Methyl-2-Pentanone	84 U				42 U		82 U				
Acetone	111.5				63.7		82 U				
Carbon Disulfide	84 U				42 U		82 U				
Chloroethane	84 U				42 U		82 U				
Chloroform	84 U				42 U		82 U				
cis-1,2-Dichloroethene	84 U				42 U		82 U				
Ethylbenzene	84 U				42 U		82 U				
m,p-Xylene	170 U				84 U		160 U				
Methyl acetate											
Methylene Chloride	84 U				42 U		82 U				
Naphthalene	84 U				42 U		82 U				
Tetrachloroethene	84 U				42 U		82 U				
Toluene	84 U				42 U		82 U				
Trichloroethene	84 U				42 U		82 U				
SVOCs (ug/kg)											
2-Methylnaphthalene											
4-Methylphenol											
Acenaphthene			250 U			260 U	250 U				
Acenaphthylene			250 U			260 U	250 U				
Anthracene			250 U			260 U	250 U				
Benzaldehyde											
Benzo(a)anthracene			250 U			260 U	250 U				
Benzo(a)pyrene			250 U			260 U	250 U				
Benzo(b)fluoranthene			250 U			260 U	250 U				
Benzo(g,h,i)perylene			250 U			260 U	250 U				
Benzo(k)fluoranthene			250 U			260 U	250 U				
Bis(2-ethylhexyl)phthalate											
Butylbenzylphthalate											
Caprolactam											
Carbazole											
Chrysene			250 U			260 U	250 U				
Dibenz(a,h)anthracene			250 U			260 U	250 U				
Dibenzofuran											
Dimethylphthalate											
Di-n-butylphthalate											
Fluoranthene			250 U			260 U	250 U				
Fluorene			250 U			260 U	250 U				
Indeno(1,2,3-cd)pyrene			250 U			260 U	250 U				
Naphthalene			250 U			260 U	250 U				
Pentachlorophenol											
Phenanthrene			250 U			260 U	250 U				
Phenol											
Pyrene			250 U			260 U	250 U				

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	ISB-01	ISB-01	ISB-01	ISB-01	ISB-01	ISB-01	ISB-02	P-01-SS-02B	P-01-SS-03B	P-02-SS-01	P-03-SS-05
Sample ID:	ISB-01A	ISB-01B	ISB-01C	ISB-01D	ISB-01E	ISB-01F	ISB-02	P-01-SS-02B	P-01-SS-03B	P-02-SS-01	P-03-SS-05
Sample Date:	8/6/2010	8/6/2010	8/6/2010	8/6/2010	8/6/2010	8/6/2010	8/10/2010	2/2/2012	2/2/2012	2/2/2012	2/1/2012
Sample Depth:	0-1 (ft bgs)	1.25-1.25 (ft bgs)	0-2.58 (ft bgs)	1.1-1.1 (ft bgs)	1.3-1.3 (ft bgs)	0-1.7 (ft bgs)	0-1 (ft bgs)	0.2-1 (ft bgs)	0.2-1 (ft bgs)	0-0.5 (ft bgs)	0-0.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter											
Pesticides (ug/kg)											
4,4'-DDD											
4,4'-DDE											
4,4'-DDT											
Aldrin											
alpha-BHC											
alpha-Chlordane											
beta-BHC											
delta-BHC											
Dieldrin											
Endosulfan II											
Endosulfan sulfate											
Endrin											
Endrin aldehyde											
Endrin ketone											
gamma-Chlordane											
Heptachlor											
Heptachlor epoxide											
Methoxychlor											
PCBs (ug/kg)											
Aroclor-1260											
Inorganics (mg/kg)											
Aluminum			560			610	9700	6790	7000	9690	7400
Antimony			520			1500 J3	9.6 U				
Arsenic			3.0			6.6 J3	2.9				
Barium			110			27	180				
Beryllium			0.78 U			0.78 U	0.77 U				
Cadmium			2.0 U			2.0 U	1.9 U				
Calcium			250			220	5700	3370	6180	1310	640
Chromium			1100			2000	1100	119	67.7	16.8	55.6
Chromium, Hexavalent		330		240							
Cobalt			2.0 U			2.0 U	6.3				
Copper			11			23	24				
Cyanide											
Iron			3500			10000	16000	12900	37500	17000	11200
Lead			510			1100	890	154	217	220	12.2
Magnesium			62			54	3200	1900	1290	2500	1670
Manganese			17			55	430				
Mercury											
Nickel			2.0 U			18	12				
Potassium			9.8 U			400	870				
Selenium			2.0 U			2.0 U	3.8 U				
Silver			0.98 U			0.98 U	0.96 U				
Sodium			9.8 U			67	210				
Thallium			2.0 U			2.0 U	2.1				
Vanadium			6.4			12	19				
Zinc			4.1			7.0	42				
Other											
pH in Soil (S.U.)											

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-04-SS-03	P-04-SS-06	P-04-SS-09	P-05-SS-01	P-05-SS-04	P-05-SS-05	P-05-SS-06	P-06-SS-02	P-06-SS-03	P-06-SS-07	P-06-SS-08	P-07-SS-02	P-07-SS-02
Sample ID:	P-04-SS-03	P-04-SS-06	P-04-SS-09	P-05-SS-01	P-05-SS-04	P-05-SS-05	P-05-SS-06	P-06-SS-02	P-06-SS-03	P-06-SS-07	P-06-SS-08	P-07-SS-02	P-30-SS-02
Sample Date:	1/31/2012	1/31/2012	1/31/2012	2/1/2012	2/1/2012	2/1/2012	2/1/2012	1/31/2012	1/31/2012	1/31/2012	1/31/2012	1/31/2012	1/31/2012
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.7 (ft bgs)	0-0.7 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate
Parameter													
VOCs (ug/kg)													
1,1,1-Trichloroethane													
1,1-Dichloroethane													
2-Butanone													
2-Hexanone													
4-Methyl-2-Pentanone													
Acetone													
Carbon Disulfide													
Chloroethane													
Chloroform													
cis-1,2-Dichloroethene													
Ethylbenzene													
m,p-Xylene													
Methyl acetate													
Methylene Chloride													
Naphthalene													
Tetrachloroethene													
Toluene													
Trichloroethene													
SVOCs (ug/kg)													
2-Methylnaphthalene													
4-Methylphenol													
Acenaphthene													
Acenaphthylene													
Anthracene													
Benzaldehyde													
Benzo(a)anthracene													
Benzo(a)pyrene													
Benzo(b)fluoranthene													
Benzo(g,h,i)perylene													
Benzo(k)fluoranthene													
Bis(2-ethylhexyl)phthalate													
Butylbenzylphthalate													
Caprolactam													
Carbazole													
Chrysene													
Dibenz(a,h)anthracene													
Dibenzofuran													
Dimethylphthalate													
Di-n-butylphthalate													
Fluoranthene													
Fluorene													
Indeno(1,2,3-cd)pyrene													
Naphthalene													
Pentachlorophenol													
Phenanthrene													
Phenol													
Pyrene													

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-04-SS-03	P-04-SS-06	P-04-SS-09	P-05-SS-01	P-05-SS-04	P-05-SS-05	P-05-SS-06	P-06-SS-02	P-06-SS-03	P-06-SS-07	P-06-SS-08	P-07-SS-02	P-07-SS-02
Sample ID:	P-04-SS-03	P-04-SS-06	P-04-SS-09	P-05-SS-01	P-05-SS-04	P-05-SS-05	P-05-SS-06	P-06-SS-02	P-06-SS-03	P-06-SS-07	P-06-SS-08	P-07-SS-02	P-30-SS-02
Sample Date:	1/31/2012	1/31/2012	1/31/2012	2/1/2012	2/1/2012	2/1/2012	2/1/2012	1/31/2012	1/31/2012	1/31/2012	1/31/2012	1/31/2012	1/31/2012
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.7 (ft bgs)	0-0.7 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate
Parameter													
Pesticides (ug/kg)													
4,4'-DDD													
4,4'-DDE													
4,4'-DDT													
Aldrin													
alpha-BHC													
alpha-Chlordane													
beta-BHC													
delta-BHC													
Dieldrin													
Endosulfan II													
Endosulfan sulfate													
Endrin													
Endrin aldehyde													
Endrin ketone													
gamma-Chlordane													
Heptachlor													
Heptachlor epoxide													
Methoxychlor													
PCBs (ug/kg)													
Aroclor-1260													
Inorganics (mg/kg)													
Aluminum	5920	11000	9900	7340	7360	6740	6830	8990	5160	5630	5820	8560	9150
Antimony													
Arsenic													
Barium													
Beryllium													
Cadmium													
Calcium	3720	1830	1580	1710	1500	3090	1320	2790	4010	1100	1240	1420	1560
Chromium	112	253	15.5	261	258	104	234	147	187	12.5	10.3	617	536
Chromium, Hexavalent													
Cobalt													
Copper													
Cyanide													
Iron	9020	20300	12400	14800	11700	12300	13500	11000	12400	8620	7730	10600	12300
Lead	338	530	192	75.3	47.8	124	72.7	149	112	23.4	31.4	68.0	64.5
Magnesium	1490	1540	1580	1770	2580	3300	2000	1760	1910	2200	1430	1940	2190
Manganese													
Mercury													
Nickel													
Potassium													
Selenium													
Silver													
Sodium													
Thallium													
Vanadium													
Zinc													
Other													
pH in Soil (S.U.)													

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-08-SS-02	P-09-SS-02	P-09-SS-07	P-10-SS-03	P-11-SS-03	P-12-SS-01A	P-12-SS-06A	P-12-SS-06B	P-13-SS-03A	P-13-SS-05A	P-14-SS-01	P-14-SS-01	P-14-SS-02	P-15-SS-03
Sample ID:	P-08-SS-02	P-09-SS-02	P-09-SS-07	P-10-SS-03	P-11-SS-03	P-12-SS-01A	P-12-SS-06A	P-12-SS-06B	P-13-SS-03A	P-13-SS-05A	P-14-SS-01	P-32-SS-01	P-14-SS-02	P-15-SS-03
Sample Date:	2/1/2012	1/31/2012	1/31/2012	1/31/2012	1/31/2012	2/2/2012	2/2/2012	2/2/2012	2/2/2012	2/2/2012	2/1/2012	2/1/2012	2/1/2012	2/1/2012
Sample Depth:	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-0.7 (ft bgs)	0-0.2 (ft bgs)	0-0.2 (ft bgs)	0.2-0.8 (ft bgs)	0-0.3 (ft bgs)	0-0.2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample
Parameter														
VOCs (ug/kg)														
1,1,1-Trichloroethane														
1,1-Dichloroethane														
2-Butanone														
2-Hexanone														
4-Methyl-2-Pentanone														
Acetone														
Carbon Disulfide														
Chloroethane														
Chloroform														
cis-1,2-Dichloroethene														
Ethylbenzene														
m,p-Xylene														
Methyl acetate														
Methylene Chloride														
Naphthalene														
Tetrachloroethene														
Toluene														
Trichloroethene														
SVOCs (ug/kg)														
2-Methylnaphthalene														
4-Methylphenol														
Acenaphthene														
Acenaphthylene														
Anthracene														
Benzaldehyde														
Benzo(a)anthracene														
Benzo(a)pyrene														
Benzo(b)fluoranthene														
Benzo(g,h,i)perylene														
Benzo(k)fluoranthene														
Bis(2-ethylhexyl)phthalate														
Butylbenzylphthalate														
Caprolactam														
Carbazole														
Chrysene														
Dibenz(a,h)anthracene														
Dibenzofuran														
Dimethylphthalate														
Di-n-butylphthalate														
Fluoranthene														
Fluorene														
Indeno(1,2,3-cd)pyrene														
Naphthalene														
Pentachlorophenol														
Phenanthrene														
Phenol														
Pyrene														

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-08-SS-02	P-09-SS-02	P-09-SS-07	P-10-SS-03	P-11-SS-03	P-12-SS-01A	P-12-SS-06A	P-12-SS-06B	P-13-SS-03A	P-13-SS-05A	P-14-SS-01	P-14-SS-01	P-14-SS-02	P-15-SS-03
Sample ID:	P-08-SS-02	P-09-SS-02	P-09-SS-07	P-10-SS-03	P-11-SS-03	P-12-SS-01A	P-12-SS-06A	P-12-SS-06B	P-13-SS-03A	P-13-SS-05A	P-14-SS-01	P-32-SS-01	P-14-SS-02	P-15-SS-03
Sample Date:	2/1/2012	1/31/2012	1/31/2012	1/31/2012	1/31/2012	2/2/2012	2/2/2012	2/2/2012	2/2/2012	2/2/2012	2/1/2012	2/1/2012	2/1/2012	2/1/2012
Sample Depth:	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-0.7 (ft bgs)	0-0.2 (ft bgs)	0-0.2 (ft bgs)	0.2-0.8 (ft bgs)	0-0.3 (ft bgs)	0-0.2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample
Parameter														
Pesticides (ug/kg)														
4,4'-DDD														
4,4'-DDE														
4,4'-DDT														
Aldrin														
alpha-BHC														
alpha-Chlordane														
beta-BHC														
delta-BHC														
Dieldrin														
Endosulfan II														
Endosulfan sulfate														
Endrin														
Endrin aldehyde														
Endrin ketone														
gamma-Chlordane														
Heptachlor														
Heptachlor epoxide														
Methoxychlor														
PCBs (ug/kg)														
Aroclor-1260														
Inorganics (mg/kg)														
Aluminum	8120	6710	8530	7670	7120	8540	9460	10900	7800	11300	15200	12200	13000	13300
Antimony														
Arsenic														
Barium														
Beryllium														
Cadmium														
Calcium	1410	906	2030	816	842	5100	1500	561 J	2070	821	424 J	446 J	664 J	1590
Chromium	10.9	171	569	39.7	13.0	19.1	9.4	10.6	34.9	11.3	14.1	14.4	17.1	13.4
Chromium, Hexavalent														
Cobalt														
Copper														
Cyanide														
Iron	12900	13200	14100	17500	12400	9310	11700	12500	12400	14700	15600	13500	16300	16000
Lead	114	235	90.8	171	110	224	12.3	15.4	75.9	30.7	30.4	37.3	108	61.4
Magnesium	1930	2230	1740	2380	1970	1330	1890	1790	1060 J	1900	1780	1360	1800	2120
Manganese														
Mercury														
Nickel														
Potassium														
Selenium														
Silver														
Sodium														
Thallium														
Vanadium														
Zinc														
Other														
pH in Soil (S.U.)														

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-16-SS-02	P-16-SS-03	P-16-SS-04	P-17-SS-07AB	P-17-SS-07AB	P-18-SS-04	P-18-SS-07	P-18-SS-08	P-18-SS-09	P-19-SS-03	P-20-SS-01	P-20-SS-04A	P-20-SS-04A	P-21-SS-03	P-21-SS-04
Sample ID:	P-16-SS-02	P-16-SS-03	P-16-SS-04	P-17-SS-07A	P-17-SS-07B	P-18-SS-04	P-18-SS-07	P-18-SS-08	P-18-SS-09	P-19-SS-03	P-20-SS-01	P-20-SS-04A	P-31-SS-04A	P-21-SS-03	P-21-SS-04
Sample Date:	2/1/2012	2/1/2012	2/1/2012	2/2/2012	2/2/2012	2/1/2012	2/1/2012	2/2/2012	2/2/2012	2/1/2012	2/1/2012	2/2/2012	2/2/2012	2/1/2012	2/1/2012
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.25 (ft bgs)	1-1.5 (ft bgs)	0.5-1.2 (ft bgs)	0-0.5 (ft bgs)	0-0.25 (ft bgs)	0-0.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.2 (ft bgs)	0-0.2 (ft bgs)	0-0.7 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample
Parameter															
VOCs (ug/kg)															
1,1,1-Trichloroethane															
1,1-Dichloroethane															
2-Butanone															
2-Hexanone															
4-Methyl-2-Pentanone															
Acetone															
Carbon Disulfide															
Chloroethane															
Chloroform															
cis-1,2-Dichloroethene															
Ethylbenzene															
m,p-Xylene															
Methyl acetate															
Methylene Chloride															
Naphthalene															
Tetrachloroethene															
Toluene															
Trichloroethene															
SVOCs (ug/kg)															
2-Methylnaphthalene															
4-Methylphenol															
Acenaphthene															
Acenaphthylene															
Anthracene															
Benzaldehyde															
Benzo(a)anthracene															
Benzo(a)pyrene															
Benzo(b)fluoranthene															
Benzo(g,h,i)perylene															
Benzo(k)fluoranthene															
Bis(2-ethylhexyl)phthalate															
Butylbenzylphthalate															
Caprolactam															
Carbazole															
Chrysene															
Dibenz(a,h)anthracene															
Dibenzofuran															
Dimethylphthalate															
Di-n-butylphthalate															
Fluoranthene															
Fluorene															
Indeno(1,2,3-cd)pyrene															
Naphthalene															
Pentachlorophenol															
Phenanthrene															
Phenol															
Pyrene															

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-16-SS-02	P-16-SS-03	P-16-SS-04	P-17-SS-07AB	P-17-SS-07AB	P-18-SS-04	P-18-SS-07	P-18-SS-08	P-18-SS-09	P-19-SS-03	P-20-SS-01	P-20-SS-04A	P-20-SS-04A	P-21-SS-03	P-21-SS-04
Sample ID:	P-16-SS-02	P-16-SS-03	P-16-SS-04	P-17-SS-07A	P-17-SS-07B	P-18-SS-04	P-18-SS-07	P-18-SS-08	P-18-SS-09	P-19-SS-03	P-20-SS-01	P-20-SS-04A	P-31-SS-04A	P-21-SS-03	P-21-SS-04
Sample Date:	2/1/2012	2/1/2012	2/1/2012	2/2/2012	2/2/2012	2/1/2012	2/1/2012	2/2/2012	2/2/2012	2/1/2012	2/1/2012	2/2/2012	2/2/2012	2/1/2012	2/1/2012
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.25 (ft bgs)	1-1.5 (ft bgs)	0.5-1.2 (ft bgs)	0-0.5 (ft bgs)	0-0.25 (ft bgs)	0-0.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.2 (ft bgs)	0-0.2 (ft bgs)	0-0.7 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample
Parameter															
Pesticides (ug/kg)															
4,4'-DDD															
4,4'-DDE															
4,4'-DDT															
Aldrin															
alpha-BHC															
alpha-Chlordane															
beta-BHC															
delta-BHC															
Dieldrin															
Endosulfan II															
Endosulfan sulfate															
Endrin															
Endrin aldehyde															
Endrin ketone															
gamma-Chlordane															
Heptachlor															
Heptachlor epoxide															
Methoxychlor															
PCBs (ug/kg)															
Aroclor-1260															
Inorganics (mg/kg)															
Aluminum	10200	11700	11400	7840	7870	8010	6870	8110	8600	7550	9260	7750	7410	8690	8730
Antimony															
Arsenic															
Barium															
Beryllium															
Cadmium															
Calcium	747	934	1270	4930	1160	2070	6630	12600	2780	5270	3470	5040	4660	832	1410
Chromium	11.7	12.0	13.3	857	72.2	11.0	2020	1000	270	45.0	20.8	64.5	67.8	327	799
Chromium, Hexavalent															
Cobalt															
Copper															
Cyanide															
Iron	11200	12800	12600	15900	16100	12500	20500	26500	16300	38500	10500	9950	11500	13100	15200
Lead	82.8	59.9	66.8	59.8	89.8	29.4	96.0	74.8	104	359	326	311	304	300	236
Magnesium	1380	1180	1580	1970	1950	2350	2290	2370	2150	1850	1040	1070	1040	1620	1610
Manganese															
Mercury															
Nickel															
Potassium															
Selenium															
Silver															
Sodium															
Thallium															
Vanadium															
Zinc															
Other															
pH in Soil (S.U.)															

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-21-SS-06	P-22-SS-01AB	P-22-SS-01AB	P-22-SS-07	P-22-SS-08	P-22-SS-09A	P-22-SS-10A	P-23-SS-02	P-23-SS-06	P-24-SS-04	P-78-SB-01	P-78-SB-01	P-78-SB-01	P-78-SB-01	P-78-SB-02	P-78-SB-02
Sample ID:	P-21-SS-06	P-22-SS-01A	P-22-SS-01B	P-22-SS-07	P-22-SS-08	P-22-SS-09A	P-22-SS-10A	P-23-SS-02	P-23-SS-06	P-24-SS-04	P-78-SB-01A	P-78-SB-70A	P-78-SB-01B	P-78-SB-01C	P-78-SB-02A	P-78-SB-02B
Sample Date:	2/3/2012	2/1/2012	2/1/2012	2/1/2012	2/1/2012	2/2/2012	2/2/2012	2/1/2012	2/1/2012	2/1/2012	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010
Sample Depth:	0-0.5 (ft bgs)	0-0.7 (ft bgs)	0.7-1 (ft bgs)	0-0.5 (ft bgs)	0-0.8 (ft bgs)	0-0.2 (ft bgs)	0-0.2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.7 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane											5.5 U	5.9 U	6.8 U	5.3 U	4.9 U	5.9 U
1,1-Dichloroethane											5.5 U	5.9 U	6.8 U	5.3 U	4.9 U	5.9 U
2-Butanone											11 U	12 U	14 U	11 U	20	23
2-Hexanone											11 U	12 U	14 U	11 U	9.9 U	12 U
4-Methyl-2-Pentanone											11 U	12 U	14 U	11 U	9.9 U	12 U
Acetone											220	360	85	22	220	200
Carbon Disulfide											5.5 U	5.9 U	6.8 U	5.3 U	4.9 U	5.9 U
Chloroethane											5.5 U	5.9 U	6.8 U	5.3 U	4.9 U	5.9 U
Chloroform											5.5 U	5.9 U	6.8 U	5.3 U	4.9 U	5.9 U
cis-1,2-Dichloroethene											5.5 U	5.9 U	6.8 U	5.3 U	4.9 U	5.9 U
Ethylbenzene											5.5 U	5.9 U	6.8 U	5.3 U	4.9 U	5.9 U
m,p-Xylene											5.5 U	5.9 U	6.8 U	5.3 U	4.9 U	5.9 U
Methyl acetate											5.9	25	6.8 U	5.3 U	12	12
Methylene Chloride											3.6 J	41	6.8 U	3.4 J	4.7 J	5.6 J
Naphthalene																
Tetrachloroethene											5.5 U	5.9 U	6.8 U	5.3 U	4.9 U	5.9 U
Toluene											5.5 U	5.9 U	6.8 U	5.3 U	4.9 U	5.9 U
Trichloroethene											5.5 U	5.9 U	6.8 U	5.3 U	4.9 U	5.9 U
SVOCs (ug/kg)																
2-Methylnaphthalene											260 U	240 U	230 U	220 U	200 U	210 U
4-Methylphenol											260 U	240 U	230 U	220 U	200 U	210 U
Acenaphthene											260 U	240 U	230 U	220 U	200 U	210 U
Acenaphthylene											260 U	240 U	230 U	220 U	200 U	210 U
Anthracene											260 U	240 U	230 U	220 U	87 J	210 U
Benzaldehyde											260 U	240 U	230 U	220 U	200 U	210 U
Benzo(a)anthracene											190 J	250	230 U	220 U	220	210 U
Benzo(a)pyrene											240 J	280	230 U	220 U	210	83 J
Benzo(b)fluoranthene											240 J	310	230 U	220 U	210	210 U
Benzo(g,h,i)perylene											210 J	200 J	230 U	220 U	180 J	210 U
Benzo(k)fluoranthene											220 J	270	230 U	220 U	210	210 U
Bis(2-ethylhexyl)phthalate											360	240 U	230 U	220 U	200 U	210 U
Butylbenzylphthalate											260 U	240 U	230 U	220 U	200 U	210 U
Caprolactam											260 U	240 U	230 U	220 U	200 U	210 U
Carbazole											260 U	240 U	230 U	220 U	200 U	210 U
Chrysene											240 J	300	230 U	220 U	250	96 J
Dibenz(a,h)anthracene											110 J	240 U	230 U	220 U	200 U	210 U
Dibenzofuran											260 U	240 U	230 U	220 U	200 U	210 U
Dimethylphthalate											260 U	240 U	230 U	220 U	200 U	210 U
Di-n-butylphthalate											260 U	240 U	230 U	220 U	200 U	210 U
Fluoranthene											390	610	230 U	220 U	660	220
Fluorene											260 U	240 U	230 U	220 U	200 U	210 U
Indeno(1,2,3-cd)pyrene											190 J	180 J	230 U	220 U	160 J	210 U
Naphthalene											260 U	240 U	230 U	220 U	200 U	210 U
Pentachlorophenol											500 U	460 U	440 U	430 U	400 U	410 U
Phenanthrene											180 J	450	230 U	220 U	450	130 J
Phenol											260 U	240 U	230 U	220 U	200 U	210 U
Pyrene											350	480	230 U	220 U	400	150 J

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-21-SS-06	P-22-SS-01AB	P-22-SS-01AB	P-22-SS-07	P-22-SS-08	P-22-SS-09A	P-22-SS-10A	P-23-SS-02	P-23-SS-06	P-24-SS-04	P-78-SB-01	P-78-SB-01	P-78-SB-01	P-78-SB-01	P-78-SB-02	P-78-SB-02
Sample ID:	P-21-SS-06	P-22-SS-01A	P-22-SS-01B	P-22-SS-07	P-22-SS-08	P-22-SS-09A	P-22-SS-10A	P-23-SS-02	P-23-SS-06	P-24-SS-04	P-78-SB-01A	P-78-SB-70A	P-78-SB-01B	P-78-SB-01C	P-78-SB-02A	P-78-SB-02B
Sample Date:	2/3/2012	2/1/2012	2/1/2012	2/1/2012	2/1/2012	2/2/2012	2/2/2012	2/1/2012	2/1/2012	2/1/2012	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010
Sample Depth:	0-0.5 (ft bgs)	0-0.7 (ft bgs)	0.7-1 (ft bgs)	0-0.5 (ft bgs)	0-0.8 (ft bgs)	0-0.2 (ft bgs)	0-0.2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.7 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum	10200	9030	9630	8970	10600	10200	9350	6790	8870	9600	12400	10200	13200	11300	10400	11700
Antimony											7.8 U	0.70 J	6.5 U	5.6 U	0.53 J	6.4 U
Arsenic											8.8	6.1	2.1	1.5	3.1	2.9
Barium											32.2	28.2	39.8	36.6	24.7	29.9
Beryllium											0.39 J	0.34 J	0.46 J	0.35 J	0.43 J	0.48 J
Cadmium											0.43 J	0.36 J	0.33 J	0.24 J	0.40 J	0.38 J
Calcium	1220	1650	844	1890	708	1340	2440	1590	1740	3590	622 J	549	460 J	550	932	1300
Chromium	14.2	10.4	9.7	271	10	135	153	1180	833	23.5	416	340	34.7	52.5	676	223
Chromium, Hexavalent											7	83	1.1 U	4.6	1.9 U	8.7
Cobalt											3.3 J	2.8 J	3.6 J	4.7	4.3 J	4.5 J
Copper											40.6	28.9	8.2	6.2	30.9	13.5
Cyanide											0.86 U	0.66 U	0.69 U	0.63 U	0.62 U	0.61 U
Iron	13700	9260	10000	16700	14200	22600	15100	16100	15300	16900	13600	10700	11300	8950	13300	13400
Lead	157	76.4	38.9	267	51.5	196	554	330	232	106	86.8	66.6	16.2	8.2	23.1	21.9
Magnesium	1510	1190	1400	1680	2210	2250	1790	2120	2520	2580	1370	1060	1030	1770	1670	1940
Manganese											124	103	125	133	202	235
Mercury											0.16 J	0.10 J	0.040 J	0.13 U	0.010 J	0.030 J
Nickel											7.2	5.8	6.5	8.7	5.6	6.7
Potassium											295 J	248 J	184 J	271 J	270 J	289 J
Selenium											4.6 U	0.65 J	0.57 J	3.3 U	3.4 U	3.7 U
Silver											1.3 U	1.1 U	1.1 U	0.94 U	0.97 U	1.1 U
Sodium											406 J	255 J	321 J	286 J	318 J	255 J
Thallium											3.3 U	2.7 U	2.7 U	2.3 U	2.4 U	2.7 U
Vanadium											27.7	20.4	17.6	14.7	23.2	24.6
Zinc											53.4	43.5	45.1	46.1	55.7	52.4
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-78-SB-02	P-78-SB-03	P-78-SB-03	P-78-SB-03	P-78-SB-04	P-78-SB-04	P-78-SB-04	P-78-SB-05	P-78-SB-05	P-78-SB-05	P-78-SB-09	P-78-SB-09	P-78-SB-09	P-78-SB-10	P-78-SB-10	P-78-SB-10
Sample ID:	P-78-SB-02C	P-78-SB-03A	P-78-SB-03B	P-78-SB-03C	P-78-SB-04A	P-78-SB-04B	P-78-SB-04C	P-78-SB-05A	P-78-SB-05B	P-78-SB-05C	P-78-SB-09A	P-78-SB-09B	P-78-SB-09C	P-78-SB-10A	P-78-SB-10B	P-78-SB-10C
Sample Date:	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane	3.7 U	7.4	8.9	20	4.1 U	4.2 U	3.6 U	6.1 U	4.3 U	4.9 U	33	22	78	6.3 U	5.9 U	4.9 U
1,1-Dichloroethane	3.7 U	3.9 U	3.0 U	3.8 U	4.1 U	4.2 U	3.6 U	6.1 U	4.3 U	4.9 U	10	25	65	6.3 U	5.9 U	4.9 U
2-Butanone	7.3 U	7.8 U	6.1 U	11	8.2 U	8.4 U	7.3 U	12 U	8.6 U	9.8 U	12 U	11 U	11 U	13 U	12 U	9.9 U
2-Hexanone	7.3 U	7.8 U	6.1 U	7.6 U	8.2 U	8.4 U	7.3 U	12 U	8.6 U	9.8 U	12 U	11 U	11 U	13 U	12 U	9.9 U
4-Methyl-2-Pentanone	7.3 U	7.8 U	6.1 U	7.6 U	8.2 U	8.4 U	7.3 U	12 U	8.6 U	9.8 U	12 U	11 U	11 U	13 U	12 U	9.9 U
Acetone	61	100	49	140	120	86	240	12 U	120	98	180	11 U	11 U	300	90	42
Carbon Disulfide	3.7 U	3.9 U	3.0 U	3.8 U	4.1 U	4.2 U	3.6 U	6.1 U	4.3 U	4.9 U	5.9 U	5.6 U	5.3 U	6.3 U	5.9 U	4.9 U
Chloroethane	3.7 U	3.9 U	3.0 U	3.8 U	4.1 U	4.2 U	3.6 U	6.1 U	4.3 U	4.9 U	5.9 U	5.6 U	9.7	6.3 U	5.9 U	4.9 U
Chloroform	3.7 U	3.9 U	3.0 U	3.8 U	4.1 U	4.2 U	3.6 U	6.1 U	4.3 U	4.9 U	5.9 U	5.6 U	5.3 U	6.3 U	5.9 U	4.9 U
cis-1,2-Dichloroethene	3.7 U	3.9 U	3.0 U	3.8 U	4.1 U	4.2 U	3.6 U	6.1 U	4.3 U	4.9 U	5.9 U	5.6 U	5.3 U	6.3 U	5.9 U	4.9 U
Ethylbenzene	3.7 U	3.9 U	3.0 U	3.8 U	4.1 U	4.2 U	3.6 U	6.1 U	4.3 U	4.9 U	5.9 U	5.6 U	5.3 U	6.3 U	5.9 U	4.9 U
m,p-Xylene	3.7 U	3.9 U	3.0 U	3.8 U	4.1 U	4.2 U	3.6 U	6.1 U	4.3 U	4.9 U	5.9 U	5.6 U	5.3 U	6.3 U	5.9 U	4.9 U
Methyl acetate	6.6	5.8	3.0 U	23	3.7 J	3.9 J	16	6.1 U	29	93	130	49	51	35	5.9 U	6.4
Methylene Chloride	3.1 J	2.8 J	2.0 J	2.7 J	4.1 U	4.2 U	3.6 U	110	4.3 U	3.3 J	5.9 U	5.6 U	5.3 U	6.3 U	5.9 U	4.9 U
Naphthalene																
Tetrachloroethene	3.7 U	2.8 J	3.0 U	6.1	4.1 U	4.2 U	3.6 U	6.1 U	4.3 U	4.9 U	5.9 U	5.6 U	5.3 U	6.3 U	5.9 U	4.9 U
Toluene	3.7 U	3.9 U	3.0 U	3.8 U	4.1 U	4.2 U	3.6 U	6.1 U	4.3 U	4.9 U	5.9 U	5.6 U	5.3 U	6.3 U	5.9 U	4.9 U
Trichloroethene	3.7 U	3.9 U	3.0 U	3.8 U	4.1 U	4.2 U	3.6 U	6.1 U	4.3 U	4.9 U	5.9 U	7.5	5.3 U	6.3 U	5.9 U	4.9 U
SVOCs (ug/kg)																
2-Methylnaphthalene	180 U	180 U	200 U	190 U	120 J	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
4-Methylphenol	180 U	180 U	200 U	190 U	200 U	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Acenaphthene	180 U	180 U	200 U	190 U	520	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Acenaphthylene	180 U	180 U	200 U	190 U	200 U	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Anthracene	180 U	180 U	200 U	190 U	950	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Benzaldehyde	180 U	180 U	200 U	190 U	200 U	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Benzo(a)anthracene	180 U	260	200 U	84 J	1400	190 U	110 J	210 U	200 U	230 U	210 U	90 J	220 U	250 U	220 U	220 U
Benzo(a)pyrene	180 U	250	200 U	94 J	1200	190 U	100 J	210 U	200 U	230 U	210 U	100 J	220 U	250 U	220 U	220 U
Benzo(b)fluoranthene	180 U	220	200 U	87 J	1100	190 U	200 U	210 U	200 U	230 U	210 U	96 J	220 U	250 U	220 U	220 U
Benzo(g,h,i)perylene	180 U	190	200 U	77 J	820	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Benzo(k)fluoranthene	180 U	240	200 U	89 J	1100	190 U	93 J	210 U	200 U	230 U	210 U	100 J	220 U	250 U	220 U	220 U
Bis(2-ethylhexyl)phthalate	180 U	180 U	200 U	190 U	140 J	190 U	200 U	210 U	200 U	120 J	210 U	250	1300	290	220 U	220 U
Butylbenzylphthalate	180 U	180 U	200 U	190 U	200 U	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Caprolactam	180 U	180 U	200 U	190 U	200 U	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Carbazole	180 U	180 U	200 U	190 U	650	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Chrysene	180 U	280	200 U	93 J	1500	190 U	120 J	210 U	200 U	230 U	210 U	130 J	220 U	100 J	220 U	220 U
Dibenz(a,h)anthracene	180 U	73 J	200 U	190 U	320	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Dibenzofuran	180 U	180 U	200 U	190 U	500	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Dimethylphthalate	180 U	180 U	200 U	190 U	200 U	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Di-n-butylphthalate	180 U	180 U	200 U	190 U	200 U	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Fluoranthene	180 U	640	200 U	160 J	3900	190 U	310	210 U	200 U	230 U	210 U	260	220 U	190 J	220 U	220 U
Fluorene	180 U	180 U	200 U	190 U	680	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Indeno(1,2,3-cd)pyrene	180 U	180 J	200 U	74 J	780	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Naphthalene	180 U	180 U	200 U	190 U	170 J	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Pentachlorophenol	360 U	360 U	380 U	370 U	390 U	370 U	380 U	400 U	390 U	440 U	410 U	430 U	420 U	490 U	430 U	420 U
Phenanthrene	180 U	390	200 U	89 J	5200	190 U	290	210 U	200 U	230 U	210 U	93 J	220 U	110 J	220 U	220 U
Phenol	180 U	180 U	200 U	190 U	200 U	190 U	200 U	210 U	200 U	230 U	210 U	220 U	220 U	250 U	220 U	220 U
Pyrene	180 U	460	200 U	140 J	3000	190 U	210	210 U	200 U	230 U	210 U	170 J	220 U	170 J	220 U	220 U

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-78-SB-02	P-78-SB-03	P-78-SB-03	P-78-SB-03	P-78-SB-04	P-78-SB-04	P-78-SB-04	P-78-SB-05	P-78-SB-05	P-78-SB-05	P-78-SB-09	P-78-SB-09	P-78-SB-09	P-78-SB-10	P-78-SB-10	P-78-SB-10
Sample ID:	P-78-SB-02C	P-78-SB-03A	P-78-SB-03B	P-78-SB-03C	P-78-SB-04A	P-78-SB-04B	P-78-SB-04C	P-78-SB-05A	P-78-SB-05B	P-78-SB-05C	P-78-SB-09A	P-78-SB-09B	P-78-SB-09C	P-78-SB-10A	P-78-SB-10B	P-78-SB-10C
Sample Date:	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum	10600	9200	10400	10100	10500	11300	11000	10600	11400	12600	11400	7560	6830	7990	8660	7320
Antimony	5.7 U	0.33 J	5.1 U	0.39 J	1.0 J	0.46 J	0.41 J	6.1 U	0.61 J	0.48 J	0.58 J	0.98 J	6.1 U	6.6 U	5.5 U	5.8 U
Arsenic	1.8	3.3	2.4	2.7	3.0	3.0	3.3	1.9	4.4	5.3	4.5	3.4	1.3	4.9	3.2	0.92 J
Barium	44.7	43.3	31.9	40.4	34.6	31.2	49.2	31.4	56.2	56.1	50.3	39.8	32.6	25.9	29.0	40.7
Beryllium	0.42 J	0.48	0.44	0.47 J	0.43	0.47 J	0.47	0.48 J	0.83	0.90	0.77	0.28 J	0.29 J	0.29 J	0.37 J	0.33 J
Cadmium	0.32 J	0.55	0.49	0.49	0.60	0.53	0.48	0.35 J	0.70	0.82	0.60	0.57	0.23 J	0.44 J	0.41 J	0.26 J
Calcium	615	625	538	898	635	636	635	650	2460	2670	1290	620	335 J	351 J	296 J	315 J
Chromium	104	45.7	11.2	21.5	123	34.6	43.5	11.3	25.9	62.2	95.9	180	80.2	133	45.8	16.6
Chromium, Hexavalent	5.8	1			1.3	0.75	0.89 U			3.8	0.98 U	10	1.8	5.7 U	1 U	
Cobalt	3.3 J	5.4	4.0 J	5.2	10.9	7.4	6.5	4.1 J	10.9	13.5	9.8	6.7	3.7 J	2.9 J	3.9 J	3.0 J
Copper	6.5	20.6	11.8	13.0	21.2	10.2	12.9	7.0	99.1	50.8	76.8	19.2	4.5	26.7	11.0	1.6 J
Cyanide	0.58 U	0.60 U	0.59 U	0.58 U	0.59 U	0.59 U	0.58 U	0.62 U	0.59 U	0.59 U	0.61 U	0.66 U	0.14 J	0.77 U	0.65 U	0.62 U
Iron	11900	12400	14000	13100	13500	14400	13200	11700	18100	20000	16200	9420	7790	13100	12500	9800
Lead	8.0	46.1	14.1	23.4	147	27.9	44.9	10.1	29.4	44.3	64.9	103	12.3	61.0	20.8	5.2
Magnesium	1100	1410	1540	1630	1670	1710	1500	1150	4350	5260	3970	694	516	772	805	1140
Manganese	159	231	201	222	223	200	203	143	531	602	345	147	67.0	169	253	135
Mercury	0.010 J	0.040 J	0.020 J	0.060 J	0.030 J	0.020 J	0.030 J	0.030 J	0.12 U	0.12 U	0.010 J	0.040 J	0.010 J	0.12 J	0.010 J	0.12 U
Nickel	6.7	7.8	6.4	8.9	8.8	8.3	8.9	6.4	23.9	33.2	25.2	6.8	3.4 J	7.0	7.3	5.3
Potassium	185 J	260 J	187 J	285 J	321 J	322 J	319 J	415 J	1110	1160	868	168 J	129 J	167 J	132 J	108 J
Selenium	3.3 U	3.2 U	3.0 U	3.3 U	3.0 U	3.5 U	3.0 U	3.6 U	3.4 U	3.0 U	3.0 U	0.59 J	3.6 U	3.8 U	3.2 U	3.4 U
Silver	0.94 U	0.91 U	0.85 U	0.95 U	0.86 U	0.99 U	0.86 U	1.0 U	0.96 U	0.86 U	0.86 U	1.1 U	1.0 U	1.1 U	0.91 U	0.97 U
Sodium	262 J	276 J	255 J	252 J	313 J	241 J	265 J	281 J	376 J	287 J	271 J	305 J	237 J	349 J	266 J	255 J
Thallium	2.4 U	2.3 U	2.1 U	2.4 U	2.1 U	2.5 U	2.2 U	2.5 U	2.4 U	2.2 U	2.1 U	2.6 U	2.5 U	2.7 U	2.3 U	2.4 U
Vanadium	17.5	18.7	19.2	17.9	19.8	20.2	18.5	17.8	27.7	28.8	23.7	14.2	11.0	26.7	18.3	12.9
Zinc	46.9	50.0	40.0	41.4	47.1	34.7	37.8	28.4	61.6	63.2	53.0	35.2	24.9	34.9	30.3	23.7
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-78-SB-14	P-78-SB-14	P-78-SB-14	P-78-SB-15	P-78-SB-15	P-78-SB-15	P-78-SB-15	P-78-SB-19	P-78-SB-19	P-78-SB-19	P-78-SB-20	P-78-SB-20	P-78-SB-20	P-78-SB-24	P-78-SB-24	P-78-SB-24
Sample ID:	P-78-SB-14A	P-78-SB-14B	P-78-SB-14C	P-78-SB-15A	P-78-SB-15B	P-78-SB-15C	P-78-SB-72C	P-78-SB-19A	P-78-SB-19B	P-78-SB-19C	P-78-SB-20A	P-78-SB-20B	P-78-SB-20C	P-78-SB-24A	P-78-SB-24B	P-78-SB-24C
Sample Date:	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane	5.9 U	3.2 J	4.8 U	5.1 U	4.5 U	6.1 U	4.2 U	4.3 U	4.1 U	5.5	6.4 U	5.9 U	5.0 U	7.1 U	4.2 U	9.5
1,1-Dichloroethane	5.9 U	4.3 U	5.0	5.1 U	4.5 U	6.1 U	4.2 U	4.3 U	4.1 U	5.1	6.4 U	5.9 U	5.0 U	7.1 U	4.2 U	7.2 U
2-Butanone	12 U	8.6 U	9.6 U	10 U	8.9 U	12 U	8.3 U	14	13	8.0 U	13 U	12 U	10 U	14 U	8.4 U	14 U
2-Hexanone	12 U	8.6 U	9.6 U	10 U	8.9 U	12 U	8.3 U	8.6 U	8.1 U	8.0 U	13 U	12 U	10 U	14 U	8.4 U	14 U
4-Methyl-2-Pentanone	12 U	8.6 U	9.6 U	10 U	8.9 U	12 U	8.3 U	8.6 U	8.1 U	8.0 U	13 U	12 U	10 U	14 U	8.4 U	14 U
Acetone	47	31	130	160	120	12 U	20	240	270	190	58	140	10 U	45	49	180
Carbon Disulfide	5.9 U	4.3 U	4.8 U	5.1 U	4.5 U	6.1 U	4.2 U	4.3 U	4.1 U	4.0 U	6.4 U	5.9 U	5.0 U	7.1 U	4.2 U	7.2 U
Chloroethane	5.9 U	4.3 U	4.8 U	5.1 U	4.5 U	6.1 U	4.2 U	4.3 U	4.1 U	4.0 U	6.4 U	5.9 U	5.0 U	7.1 U	4.2 U	7.2 U
Chloroform	5.9 U	4.3 U	4.8 U	5.1 U	4.5 U	6.1 U	4.2 U	4.3 U	4.1 U	4.0 U	6.4 U	5.9 U	5.0 U	7.1 U	4.2 U	7.2 U
cis-1,2-Dichloroethene	5.6 J	5.2	43	5.1 U	4.5 U	6.1 U	4.2 U	4.3 U	4.1 U	4.2	6.4 U	5.9 U	5.0 U	7.1 U	4.2 U	7.2 U
Ethylbenzene	5.9 U	4.3 U	4.8 U	5.1 U	4.5 U	6.1 U	4.2 U	4.3 U	4.1 U	4.0 U	6.4 U	5.9 U	5.0 U	7.1 U	4.2 U	7.2 U
m,p-Xylene	5.9 U	4.3 U	4.8 U	5.1 U	4.5 U	6.1 U	4.2 U	4.3 U	4.1 U	4.0 U	6.4 U	5.9 U	5.0 U	7.1 U	4.2 U	7.2 U
Methyl acetate	5.9 U	4.3 U	9.9	33	4.5 U	6.1 U	4.2 U	4.3 U	4.1 U	4.0 U	32	5.9 U	5.0 U	7.1 U	4.2 U	7.2 U
Methylene Chloride	32	16	12	20	6.4	6.1 U	2.8 J	12	11	12	20	7.0	5.0 U	7.1 U	4.2 U	7.2 U
Naphthalene																
Tetrachloroethene	5.9 U	4.3 U	3.0 J	5.1 U	4.5 U	6.1 U	4.2 U	4.3 U	4.1 U	4.0 U	6.4 U	5.9 U	5.0 U	7.1 U	4.2 U	7.2 U
Toluene	5.9 U	4.3 U	4.8 U	5.1 U	4.5 U	6.1 U	4.2 U	4.3 U	4.1 U	4.0 U	6.4 U	5.9 U	5.0 U	7.1 U	4.2 U	7.2 U
Trichloroethene	48	110	850	5.1 U	4.5 U	6.1 U	4.2 U	53	27	46	6.4 U	5.9 U	5.0 U	7.1 U	3.8 J	11
SVOCs (ug/kg)																
2-Methylnaphthalene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
4-Methylphenol	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Acenaphthene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Acenaphthylene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Anthracene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Benzaldehyde	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Benzo(a)anthracene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Benzo(a)pyrene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Benzo(b)fluoranthene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Benzo(g,h,i)perylene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Benzo(k)fluoranthene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Bis(2-ethylhexyl)phthalate	110 J	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Butylbenzylphthalate	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Caprolactam	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Carbazole	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Chrysene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Dibenz(a,h)anthracene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Dibenzofuran	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Dimethylphthalate	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Di-n-butylphthalate	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Fluoranthene	250 U	210 U	200 U	160 J	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Fluorene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Indeno(1,2,3-cd)pyrene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Naphthalene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Pentachlorophenol	490 U	410 U	390 U	540 U	420 U	420 U	410 U	440 U	400 U	420 U	430 U	400 U	410 U	480 U	420 U	410 U
Phenanthrene	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Phenol	250 U	210 U	200 U	280 U	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U
Pyrene	250 U	210 U	200 U	110 J	220 U	210 U	210 U	230 U	200 U	220 U	220 U	210 U	210 U	250 U	210 U	210 U

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-78-SB-14	P-78-SB-14	P-78-SB-14	P-78-SB-15	P-78-SB-15	P-78-SB-15	P-78-SB-15	P-78-SB-19	P-78-SB-19	P-78-SB-19	P-78-SB-20	P-78-SB-20	P-78-SB-20	P-78-SB-24	P-78-SB-24	P-78-SB-24
Sample ID:	P-78-SB-14A	P-78-SB-14B	P-78-SB-14C	P-78-SB-15A	P-78-SB-15B	P-78-SB-15C	P-78-SB-72C	P-78-SB-19A	P-78-SB-19B	P-78-SB-19C	P-78-SB-20A	P-78-SB-20B	P-78-SB-20C	P-78-SB-24A	P-78-SB-24B	P-78-SB-24C
Sample Date:	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum	6560	5130	4400	8810	5360	4750	4840	5430	6220	5190	7120	6660	4210	6880	4850	14900
Antimony	6.8 U	6.5 U	5.3 U	6.0 U	5.4 U	5.3 U	5.9 U	7.6 U	0.53 J	6.4 U	5.0 U	6.4 U	6.3 U	8.5 U	6.3 U	6.3 U
Arsenic	1.4	2.3	1.1	1.0	0.64 J	0.65 J	0.52 J	2.5	3.5	2.7	1.5	1.1 J	1.3	1.5	1.1	1.7
Barium	29.3	19.4 J	18.7	26.9	20.2	15.9 J	17.8 J	14.2 J	14.3 J	17.8 J	15.8 J	21.2 J	14.4 J	19.7 J	12.8 J	47.9
Beryllium	0.19 J	0.27 J	0.27 J	0.31 J	0.19 J	0.19 J	0.18 J	0.37 J	0.56 J	0.40 J	0.30 J	0.26 J	0.20 J	0.14 J	0.11 J	0.31 J
Cadmium	0.15 J	0.31 J	0.25 J	0.30 J	0.16 J	0.18 J	0.14 J	0.63 U	0.57 U	0.53 U	0.42 U	0.54 U	0.53 U	0.22 J	0.53 U	0.53 U
Calcium	347 J	402 J	479	877	387 J	449	365 J	196 J	252 J	277 J	300 J	391 J	378 J	382 J	278 J	721
Chromium	74.7	56.9	54.6	22.4	8.1	6.5	6.4	14.5	56.0	23.0	14.6	9.7	7.3	12.0	5.5	20.5
Chromium, Hexavalent	1.2 U	3.6	3.1						3.2							
Cobalt	6.0	7.8	9.3	13.2	3.4 J	3.3 J	2.9 J	3.9 J	14.1	18.4	4.1 J	3.9 J	2.4 J	3.8 J	3.1 J	5.7
Copper	3.0	1.9 J	2.6	4.8	2.1 J	2.2 J	1.9 J	3.3	1.6 J	3.8	5.3	4.9	5.0	3.5 J	1.8 J	5.8
Cyanide	0.26 J	0.61 U	0.59 U	0.71 U	0.15 J	0.61 U	0.58 U	0.65 U	0.61 U	0.12 J	0.61 U	0.58 U	0.58 U	0.71 U	0.61 U	0.63 U
Iron	5090	11800	8590	9020	6080	7280	5610	19800	30600	19800	10600	9220	5180	7000	5530	8110
Lead	36.9	12.2	24.2	14.3	4.6	3.0	3.4	9.5	4.5	5.0	7.5	4.9	3.8	13.8	4.2	8.5
Magnesium	483 J	1360	1250	1710	1350	1610	1390	594 J	820	964	1710	1760	1050	571 J	485 J	1430
Manganese	32.2	124	103	276	167	232	133	266	781	918	161	160	86.5	68.1	49.3	147
Mercury	0.030 J	0.12 U	0.12 U	0.070 J	0.010 J	0.12 U	0.12 U	0.010 J	0.12 U	0.12 U	0.020 J	0.12 U	0.12 U	0.040 J	0.12 U	0.13 U
Nickel	2.8 J	4.7	5.3	7.0	6.6	6.3	6.3	3.0 J	5.0	4.8	8.2	8.2	4.3	2.4 J	2.4 J	7.1
Potassium	184 J	282 J	210 J	250 J	207 J	207 J	218 J	81.9 J	129 J	211 J	145 J	220 J	153 J	176 J	99.4 J	629
Selenium	3.9 U	3.8 U	3.1 U	3.5 U	3.1 U	3.1 U	3.4 U	1.3 J	1.8 J	0.85 J	0.93 J	0.84 J	3.7 U	1.3 J	3.7 U	0.67 J
Silver	0.13 J	1.1 U	0.89 U	1.0 U	0.90 U	0.88 U	0.98 U	1.3 U	1.1 U	1.1 U	0.84 U	1.1 U	1.1 U	1.4 U	1.1 U	1.1 U
Sodium	184 J	198 J	213 J	439 J	279 J	199 J	350 J	362 J	288 J	266 J	189 J	361 J	226 J	683 J	481 J	380 J
Thallium	2.8 U	2.7 U	2.2 U	2.5 U	2.2 U	2.2 U	2.4 U	3.2 U	2.9 U	2.7 U	2.1 U	2.7 U	2.6 U	3.6 U	2.6 U	2.6 U
Vanadium	9.8	19.5	13.6	12.1	6.8	6.2	6.3	17.7	21.6	17.7	13.7	11.8	12.4	12.7	7.8	18.5
Zinc	14.4	23.1	23.9	39.3	20.6	22.9	18.7	19.7	20.2	21.2	30.2	41.2	21.0	23.7	15.1	28.0
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-78-SB-25	P-78-SB-25	P-78-SB-25	P-78-SB-29	P-78-SB-29	P-78-SB-29	PASI_SB-01	PASI_SB-01	PASI_SB-01	PASI_SB-02	PASI_SB-02	PASI_SB-02	PASI_SB-03	PASI_SB-03	PASI_SB-03	PASI_SB-04
Sample ID:	P-78-SB-25A	P-78-SB-25B	P-78-SB-25C	P-78-SB-29A	P-78-SB-29B	P-78-SB-29C	SB-01A	SB-01B	SS-01	SB-02A	SB-02B	SS-02	SB-03A	SB-03B	SS-03	SB-04A
Sample Date:	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	8/5/2010	8/5/2010	8/5/2010	8/5/2010	8/5/2010	8/5/2010	8/5/2010	8/5/2010	8/5/2010	8/6/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	2-3 (ft bgs)	6-7 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	4-5 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	6-7 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane	3.8 U	3.6 U	3.5 U	5.5 U	18	15	50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
1,1-Dichloroethane	3.8 U	3.6 U	3.5 U	5.5 U	5.9	5.0	50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
2-Butanone	7.6 U	7.1 U	7.0 U	11 U	7.2 U	6.6 U	50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
2-Hexanone	7.6 U	7.1 U	7.0 U	11 U	7.2 U	6.6 U	50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
4-Methyl-2-Pentanone	7.6 U	7.1 U	7.0 U	11 U	7.2 U	6.6 U	50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
Acetone	30	18	24	200	34	70	50 U	68 U	62 U	66 U	72 U	56 U	165.0 J	142.5 J	61 U	145.8 J
Carbon Disulfide	3.8 U	3.6 U	3.5 U	5.5 U	3.6 U	3.3 U	50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
Chloroethane	3.8 U	3.6 U	3.5 U	5.5 U	3.6 U	3.3 U	50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
Chloroform	3.8 U	3.6 U	3.5 U	5.5 U	3.6 U	3.3 U	50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
cis-1,2-Dichloroethene	3.8 U	3.6 U	3.5 U	5.5 U	4.7	4.6	50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
Ethylbenzene	3.8 U	3.6 U	3.5 U	5.5 U	3.6 U	3.3 U	50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
m,p-Xylene	3.8 U	3.6 U	3.5 U	5.5 U	3.6 U	3.3 U	100 U	140 U	120 U	130 U	140 U	110 U	140 U	140 U	120 U	160 U
Methyl acetate	3.8 U	3.6 U	3.5 U	20	10	20										
Methylene Chloride	3.3 J	3.6 U	2.4 J	5.5 U	2.3 J	2.3 J	50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
Naphthalene							50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
Tetrachloroethene	3.8 U	3.6 U	3.5 U	5.5 U	3.6 U	3.3 U	50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
Toluene	3.8 U	3.6 U	3.5 U	5.5 U	3.6 U	3.3 U	50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
Trichloroethene	3.8 U	3.6 U	3.5 U	8.0	18	18	50 U	68 U	62 U	66 U	72 U	56 U	72 U	70 U	61 U	81 U
SVOCs (ug/kg)																
2-Methylnaphthalene	250 U	210 U	210 U	260 U	210 U	200 U										
4-Methylphenol	250 U	210 U	210 U	260 U	210 U	200 U										
Acenaphthene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	380 U	250 U	260 U
Acenaphthylene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	380 U	250 U	260 U
Anthracene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	380 U	250 U	260 U
Benzaldehyde	250 U	210 U	210 U	260 U	210 U	200 U										
Benzo(a)anthracene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	380 U	250 U	260 U
Benzo(a)pyrene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	380 U	250 U	260 U
Benzo(b)fluoranthene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	380 U	250 U	260 U
Benzo(g,h,i)perylene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	380 U	250 U	260 U
Benzo(k)fluoranthene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	380 U	250 U	260 U
Bis(2-ethylhexyl)phthalate	250 U	92 J	83 J	260 U	210 U	83 J										
Butylbenzylphthalate	250 U	210 U	210 U	260 U	210 U	200 U										
Caprolactam	250 U	210 U	210 U	260 U	210 U	200 U										
Carbazole	250 U	210 U	210 U	260 U	210 U	200 U										
Chrysene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	380 U	250 U	260 U
Dibenz(a,h)anthracene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	380 U	250 U	260 U
Dibenzofuran	250 U	210 U	210 U	260 U	210 U	200 U										
Dimethylphthalate	250 U	210 U	210 U	260 U	210 U	200 U										
Di-n-butylphthalate	250 U	210 U	210 U	260 U	210 U	200 U										
Fluoranthene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	420	250 U	260 U
Fluorene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	530	250 U	260 U
Indeno(1,2,3-cd)pyrene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	380 U	250 U	260 U
Naphthalene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	430	250 U	260 U
Pentachlorophenol	480 U	420 U	400 U	500 U	400 U	390 U										
Phenanthrene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	1200	250 U	260 U
Phenol	250 U	210 U	210 U	260 U	210 U	200 U										
Pyrene	250 U	210 U	210 U	260 U	210 U	200 U	230 U	270 U	240 U	280 U	280 U	250 U	260 U	420	250 U	260 U

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-78-SB-25	P-78-SB-25	P-78-SB-25	P-78-SB-29	P-78-SB-29	P-78-SB-29	PASI_SB-01	PASI_SB-01	PASI_SB-01	PASI_SB-02	PASI_SB-02	PASI_SB-02	PASI_SB-03	PASI_SB-03	PASI_SB-03	PASI_SB-04
Sample ID:	P-78-SB-25A	P-78-SB-25B	P-78-SB-25C	P-78-SB-29A	P-78-SB-29B	P-78-SB-29C	SB-01A	SB-01B	SS-01	SB-02A	SB-02B	SS-02	SB-03A	SB-03B	SS-03	SB-04A
Sample Date:	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	8/5/2010	8/5/2010	8/5/2010	8/5/2010	8/5/2010	8/5/2010	8/5/2010	8/5/2010	8/5/2010	8/6/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	2-3 (ft bgs)	6-7 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	4-5 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	6-7 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum	3940	4490	3470	4910	7140	3540	9800	9900	6500	10000	9700	7500	8000	8700	8300	14000
Antimony	6.0 U	5.6 U	6.1 U	7.1 U	7.0 U	5.3 U	10 U	2.0 U	10 U	10 U	9.8 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U
Arsenic	0.64 J	0.63 J	0.47 J	1.1 J	2.1	1.1	3.0	2.0 U	5.8	3.4	2.0 U	2.1	2.7	2.0 U	7.6	3.8
Barium	10.5 J	11.7 J	9.1 J	12.2 J	26.2	15.2 J	45	32	110	54	54	32	37	61	25	61
Beryllium	0.10 J	0.11 J	0.13 J	0.11 J	0.37 J	0.15 J	0.83 U	0.78 U	0.82 U	0.82 U	0.78 U	0.78 U	0.78 U	0.80 U	0.78 U	0.80 U
Cadmium	0.50 U	0.47 U	0.51 U	0.59 U	0.31 J	0.44 U	2.1 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Calcium	218 J	350 J	328 J	163 J	362 J	196 J	920	570	14000	680	760	900	1300	1500	1500	3200
Chromium	5.0	4.7	4.1	12.9	13.7	6.6	720	140	4400	1400	1100	3100	290	300	83	140
Chromium, Hexavalent							5.3	7.9	190	50	39	100	44	6.1	9	6.5
Cobalt	1.4 J	2.3 J	1.8 J	1.4 J	3.7 J	2.0 J	6.4	9.6	14 J1	27	18	14	20	51	8.4	5.5
Copper	3.4	2.4	2.3 J	7.3	5.0	2.4	31	4.0 U	180	200	62	80	39	81	22	20
Cyanide	0.61 U	0.59 U	0.12 J	0.72 U	0.59 U	0.57 U										
Iron	3410	5140	4790	4070	10900	5250	17000	16000	23000	17000	12000	15000	15000	11000	17000	15000
Lead	3.6	2.7	2.9	15.7	5.9	3.2	53	7.7	2900	350	210	910	340	420	66	78
Magnesium	557	1240	945	689	1690	875	2300	3600	2100	1700	1700	2700	2800	2100	3300	2200
Manganese	43.5	91.9	86.9	48.1	148	96.7	250	300	340 J1	150	140	230	280	200	390	250
Mercury	0.020 J	0.12 U	0.11 U	0.030 J	0.12 U	0.11 U										
Nickel	4.4	6.7	3.8 J	2.9 J	7.1	3.9	7.7	12	17	9.5	8.3	12	19	10	14	9.8
Potassium	71.0 J	129 J	102 J	85.1 J	241 J	119 J	460	910	610	480	620	570	640	710	740	590
Selenium	3.5 U	0.46 J	3.6 U	4.1 U	1.1 J	3.1 U	4.2 U	4.0 U	4.1 U	4.1 U	3.9 U	4.0 U	3.9 U	4.0 U	3.9 U	4.0 U
Silver	1.6	0.93 U	0.29 J	1.2 U	1.2 U	0.88 U	1.0 U	0.98 U	1.0 U	1.0 U	0.98 U	0.98 U	0.98 U	1.0 U	0.98 U	1.0 U
Sodium	103 J	152 J	126 J	167 J	379 J	116 J	49	50	86	43	59	57	50	71	71	69
Thallium	2.5 U	2.3 U	2.5 U	2.9 U	2.9 U	2.2 U	4.2 U	4.0 U	4.1 U	4.1 U	3.9 U	4.0 U	3.9 U	4.0 U	3.9 U	4.0 U
Vanadium	5.9	6.0	5.8	12.6	19.7	8.2	18	15	25	18	15	17	16	16	18	23
Zinc	12.6	17.2	14.6	20.7	28.9	15.8	66	51	250	780	100	190	52	60	39	41
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PASI_SB-04	PASI_SB-04	PASI_SB-05	PASI_SB-05	PASI_SB-05	PASI_SB-05	PASI_SB-06	PASI_SB-06	PASI_SB-06	PASI_SB-07	PASI_SB-07	PASI_SB-07	PASI_SB-07	PASI_SB-08	PASI_SB-08	PASI_SB-08
Sample ID:	SB-04B	SS-04	SB-05A	SB-05B	SS-05	SS-50	SB-06A	SB-06B	SS-06	SB-07A	SB-07B	SS-07	SS-51	SB-08A	SB-08B	SS-08
Sample Date:	8/6/2010	8/5/2010	8/6/2010	8/6/2010	8/5/2010	8/5/2010	8/9/2010	8/9/2010	8/5/2010	8/6/2010	8/6/2010	8/6/2010	8/6/2010	8/6/2010	8/6/2010	8/6/2010
Sample Depth:	4-5 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	4-5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	7-8 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	5-6 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	6-7 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	82 U	62 U	62 U	72 U	78 U	83 U	110 U
1,1-Dichloroethane	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	82 U	62 U	62 U	72 U	78 U	83 U	110 U
2-Butanone	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	82 U	62 U	62 U	72 U	78 U	83 U	110 U
2-Hexanone	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	82 U	62 U	62 U	72 U	78 U	83 U	110 U
4-Methyl-2-Pentanone	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	82 U	62 U	62 U	72 U	78 U	83 U	110 U
Acetone	73 U	169.9 J	44 U	76 U	100 U	92 U	65 U	78 U	118.4	82 U	62 U	111.7	110.4	78 U	83 U	186.6
Carbon Disulfide	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	82 U	62 U	62 U	72 U	78 U	83 U	110 U
Chloroethane	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	82 U	62 U	62 U	72 U	78 U	83 U	110 U
Chloroform	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	82 U	62 U	62 U	72 U	78 U	83 U	110 U
cis-1,2-Dichloroethene	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	82 U	62 U	62 U	72 U	78 U	83 U	110 U
Ethylbenzene	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	82 U	62 U	62 U	72 U	78 U	83 U	110 U
m,p-Xylene	150 U	140 U	88 U	150 U	210 U	180 U	130 U	160 U	160 U	160 U	120 U	120 U	140 U	160 U	170 U	220 U
Methyl acetate																
Methylene Chloride	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	82 U	62 U	62 U	72 U	78 U	83 U	110 U
Naphthalene	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	301.0	62 U	62 U	72 U	78 U	83 U	110 U
Tetrachloroethene	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	82 U	62 U	62 U	72 U	78 U	83 U	110 U
Toluene	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	82 U	62 U	62 U	72 U	78 U	83 U	110 U
Trichloroethene	73 U	69 U	44 U	76 U	100 U	92 U	65 U	78 U	80 U	82 U	62 U	62 U	72 U	78 U	83 U	110 U
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene	260 U	270 U	270 U	240 U	2200	1800	370	260 U	2400	7600	250 U	730	910	1300	250 U	270 U
Acenaphthylene	260 U	270 U	270 U	240 U	250 U	280 U	270 U	260 U	260 U	390	250 U	280 U	260 U	230 U	250 U	270 U
Anthracene	260 U	270 U	270 U	240 U	6200	4100	650	260 U	3500	19000	280	1700	2000	3000	250 U	270 U
Benzaldehyde																
Benzo(a)anthracene	260 U	290	270 U	240 U	9200	6600	1900	260 U	11000	41000	680	6200	6200	6800	250 U	430
Benzo(a)pyrene	260 U	270	270 U	240 U	7100	5000	1700	260 U	9700	34000	560	5200	5400	5500	250 U	390
Benzo(b)fluoranthene	260 U	320	270 U	240 U	6500	5000	1900	260 U	9100	36000	620	6100	6000	6000	250 U	450
Benzo(g,h,i)perylene	260 U	270 U	270 U	240 U	4200	2900	1200	260 U	5900	21000	370	3800	3900	3500	250 U	264 L
Benzo(k)fluoranthene	260 U	270 U	270 U	240 U	6100	4000	1400	260 U	9200	27000	570	4400	5100	4500	250 U	370
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene	260 U	330	270 U	240 U	8400	6100	2100	260 U	12000	39000	630	6400	6600	6400	250 U	470
Dibenz(a,h)anthracene	260 U	270 U	270 U	240 U	1000	280 U	270 U	260 U	260 U	10000	250 U	690	710	830	250 U	270 U
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene	260 U	580	270 U	240 U	33000	19000	4500	260 U	30000	100000	1600	17000	17000	19000	250 U	700
Fluorene	260 U	270 U	270 U	240 U	3200	2000	270	260 U	1700	8500	250 U	700	760	1300	250 U	270 U
Indeno(1,2,3-cd)pyrene	260 U	270 U	270 U	240 U	4000	2800	1100	260 U	5800	20000	250 U	3600	3600	3400	250 U	270
Naphthalene	260 U	270 U	270 U	240 U	330	280 U	270	260 U	1300	4700	250 U	280 U	390	460	250 U	270 U
Pentachlorophenol																
Phenanthrene	260 U	280	270 U	240 U	31000	14000	3500	260 U	25000	91000	1300	10000	12000	17000	250 U	260 L
Phenol																
Pyrene	260 U	460	270 U	240 U	22000	13000	3400	260 U	24000	76000	1300	11000	13000	14000	250 U	630

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PASI_SB-04	PASI_SB-04	PASI_SB-05	PASI_SB-05	PASI_SB-05	PASI_SB-05	PASI_SB-06	PASI_SB-06	PASI_SB-06	PASI_SB-07	PASI_SB-07	PASI_SB-07	PASI_SB-07	PASI_SB-08	PASI_SB-08	PASI_SB-08
Sample ID:	SB-04B	SS-04	SB-05A	SB-05B	SS-05	SS-50	SB-06A	SB-06B	SS-06	SB-07A	SB-07B	SS-07	SS-51	SB-08A	SB-08B	SS-08
Sample Date:	8/6/2010	8/5/2010	8/6/2010	8/6/2010	8/5/2010	8/5/2010	8/9/2010	8/9/2010	8/5/2010	8/6/2010	8/6/2010	8/6/2010	8/6/2010	8/6/2010	8/6/2010	8/6/2010
Sample Depth:	4-5 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	4-5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	7-8 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	5-6 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	6-7 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum	2000	12000	11000	6400	15000	13000	5700	13000	10000	7400	8700	11000	11000	5600	4900	13000
Antimony	10 U	9.8 U	1.9 U	10 U	2.0 U	2.0 U	38 U	9.8 U	20 U	20 U	19 U	42	48	20 U	10 U	9.8 U
Arsenic	2.0 U	3.3	2.6	2.0 U	3.3	2.7	3.4	2.5	3.2	2.3	2.3	2.2	2.6	2.0 U	2.0	3.0
Barium	18	230	32	19	42	34	50	27	32	36	25	37	39	19	17	68
Beryllium	0.80 U	0.78 U	0.77 U	0.80 U	0.82 U	0.78 U	0.77 U	0.78 U	0.78 U	0.80 U	0.77 U	0.80 U	0.78 U	0.78 U	0.80 U	0.78 U
Cadmium	2.0 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Calcium	380	920	430	760	600	570	2800	1700	900	2900	1000	670	700	800	990	980
Chromium	790	950	29	640	94	63	3000	1500	1100	3200	1600	4000	4300	3200	1100	1200
Chromium, Hexavalent	11	56	4.4 U	24	4.5 U	4.4 U	93	370	4.4 U	11	12	70	50	110	88	4.6 U
Cobalt	2.0 U	15	4.1	6.3	6.6	5.4	2700	14	5.3	4.6	5.5	5.4	5.9	4.1	3.9	6.3
Copper	23	86	5.2	17	35	25	2100	34	440	170	31	540	610	52	28	300
Cyanide																
Iron	4900	16000	16000	12000	15000	14000	24000	24000	14000	15000	19000	14000	15000	10000	11000	15000
Lead	61	1900	11	5.3	54	35	3100	1900	190	160	39	200	220	41	7.1	63
Magnesium	270	2200	1800	1900	1800	1900	1800	5400	1900	1900	3600	1500	1600	2300	2600	1900
Manganese	48	260	260	440	220	200	210	680	200	210	310	170	170	190	310	280
Mercury																
Nickel	2.5	50	6.7	8.4	9.1	8.7	36	13	8.4	9.3	11	9.5	9.7	7.8	9.5	9.8
Potassium	260	460	290	580	400	370	550	920	420	490	690	450	440	520	760	530
Selenium	4.0 U	3.9 U	1.9 U	2.0 U	4.1 U	3.9 U	3.8 U	3.9 U	2.0 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Silver	1.0 U	1.2	0.96 U	1.0 U	1.0 U	0.98 U	42	0.98 U	0.98 U	1.0 U	0.96 U	1.0 U	0.98 U	0.98 U	1.0 U	0.98 U
Sodium	35	43	32	34	38	35	63	130	38	49	50	37	40	33	49	44
Thallium	4.0 U	3.9 U	1.9 U	2.0 U	4.1 U	3.9 U	3.7	2.7	2.0 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vanadium	3.2	23	17	18	26	21	15	23	21	21	20	24	27	14	15	23
Zinc	8.3	71	32	22	40	35	380 J1	77	88	85	56	96	95	36	27	270
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PASI_SB-09	PASI_SB-09	PASI_SB-09	PASI_SB-10	PASI_SB-10	PASI_SB-10	PASI_SB-11	PASI_SB-11	PASI_SB-12	PASI_SB-12	PASI_SB-12	PASI_SB-13	PASI_SB-14	PASI_SB-15	PASI_SB-15	PASI_SB-16
Sample ID:	SB-09A	SB-09B	SS-09	SB-10A	SB-10B	SS-10	SB-11A	SS-11	SB-12A	SS-12	SS-52	SS-13	SS-14	SB-15A	SS-15	SB-16A
Sample Date:	8/9/2010	8/9/2010	8/6/2010	8/9/2010	8/9/2010	8/6/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010
Sample Depth:	2-3 (ft bgs)	4-5 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	3-4 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
1,1-Dichloroethane	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
2-Butanone	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
2-Hexanone	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
4-Methyl-2-Pentanone	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
Acetone	100 U	110 U	329.3	74 U	76 U	120	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
Carbon Disulfide	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
Chloroethane	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
Chloroform	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
cis-1,2-Dichloroethene	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
Ethylbenzene	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
m,p-Xylene	200 U	220 U	320 U	150 U	150 U	130 U	180 U	280 U	180 U	260 U	200 U	170 U	160 U	150 U	250 U	160 U
Methyl acetate																
Methylene Chloride	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
Naphthalene	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
Tetrachloroethene	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
Toluene	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
Trichloroethene	100 U	110 U	160 U	74 U	76 U	66 U	91 U	140 U	92 U	130 U	100 U	87 U	82 U	77 U	130 U	78 U
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	260 U	240 U	290 U	340 U	300 U	280 U	250 U	280 U	270 U
Acenaphthylene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	260 U	240 U	290 U	340 U	300 U	280 U	250 U	280 U	270 U
Anthracene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	260 U	240 U	290 U	340 U	300 U	280 U	250 U	280 U	270 U
Benzaldehyde																
Benzo(a)anthracene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	720	240 U	290 U	340 U	630	390	250 U	440	270 U
Benzo(a)pyrene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	690	240 U	290 U	340 U	640	370	250 U	410	270 U
Benzo(b)fluoranthene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	750	240 U	290 U	340 U	930	540	250 U	520	270 U
Benzo(g,h,i)perylene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	510	240 U	290 U	340 U	570	300	250 U	300	270 U
Benzo(k)fluoranthene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	800	240 U	290 U	340 U	790	340	250 U	460	270 U
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	910	240 U	290 U	340 U	840	490	250 U	530	270 U
Dibenz(a,h)anthracene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	260 U	240 U	290 U	340 U	300 U	280 U	250 U	280 U	270 U
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	2300	240 U	290 U	340 U	1700	1100	250 U	1200	270 U
Fluorene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	260 U	240 U	290 U	340 U	300 U	280 U	250 U	280 U	270 U
Indeno(1,2,3-cd)pyrene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	470	240 U	290 U	340 U	500	280 U	250 U	280 U	270 U
Naphthalene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	260 U	240 U	290 U	340 U	300 U	280 U	250 U	280 U	270 U
Pentachlorophenol																
Phenanthrene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	1800	240 U	290 U	340 U	860	650	250 U	780	270 U
Phenol																
Pyrene	280 U	360 U	250 U	250 U	260 U	250 U	270 U	1700	240 U	290 U	340 U	1300	790	250 U	900	270 U

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PASI_SB-09	PASI_SB-09	PASI_SB-09	PASI_SB-10	PASI_SB-10	PASI_SB-10	PASI_SB-11	PASI_SB-11	PASI_SB-12	PASI_SB-12	PASI_SB-12	PASI_SB-13	PASI_SB-14	PASI_SB-15	PASI_SB-15	PASI_SB-16
Sample ID:	SB-09A	SB-09B	SS-09	SB-10A	SB-10B	SS-10	SB-11A	SS-11	SB-12A	SS-12	SS-52	SS-13	SS-14	SB-15A	SS-15	SB-16A
Sample Date:	8/9/2010	8/9/2010	8/6/2010	8/9/2010	8/9/2010	8/6/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010
Sample Depth:	2-3 (ft bgs)	4-5 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	3-4 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum	12000	7700	9600	9500	9500	7200	10000	15000	8900	14000	14000	13000	15000	8900	12000	12000
Antimony	9.6 U	2.0 U	10 U	1.9 U	2.0 U	9.8 U	2.0 U	9.6 U	1.9 U	2.0 U	2.0 U	38 U	39 U	1.9 U	19 U	9.8 U
Arsenic	2.2	2.0 U	3.0	3.2	3.7	2.6	2.0 U	2.3	1.9 U	2.0 U	2.2	1.9 U	2.7	1.9 U	2.3	2.0 U
Barium	38	33	54	35	30	65	34	39	26	33	36	29	36	24	36	33
Beryllium	0.77 U	0.80 U	0.80 U	0.77 U	0.80 U	0.78 U	0.78 U	0.77 U	0.77 U	0.78 U	0.80 U	0.77 U	0.78 U	0.77 U	0.77 U	0.78 U
Cadmium	1.9 U	2.0 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U	1.9 U	1.9 U	2.0 U	2.0 U	1.9 U	2.0 U	1.9 U	1.9 U	2.0 U
Calcium	760	930	1400	2300	2200	1300	750	1100	530	1100	1100	710	660	510	860	720
Chromium	500	140	650	180	76	1500	71	1300	17	43	49	2500	4500	95	2000	590
Chromium, Hexavalent	4.5 U	4.7 U	57	31	5.1	61	4.4 U	25	9.9	4.4 U	4.6 U		4.5 U	4.4 U	4.7 U	4.6 U
Cobalt	4.3	2.7	11	9.2	7.7	26	3.7	2.7	4.3	2.1	2.0	2.0	2.8	2.7	3.0	3.0
Copper	16	10	67	30	19	90	8.8	120	4.4	11	14	180	150	3.8	99	14
Cyanide																
Iron	15000	11000	16000	19000	17000	16000	12000	12000	12000	10000	10000	10000	14000	9500	12000	13000
Lead	21	34	450	290	120	1300	14	65	5.4	20	21	56	67	5.0	55	20
Magnesium	1900	1100	2800	3800	3700	2700	2100	1700	1900	1800	1600	1500	1600	2000	1500	2100
Manganese	220	120	350	460	530	320	190	160	200	120	110	130	160	140	180	150
Mercury																
Nickel	7.8	5.4	19	14	13	24	8.2	6.6	7.1	5.2	5.6	5.5	7.6	7.1	6.0	7.8
Potassium	540	5650	700	1000	970	610	410	470	430	430	480	470	510	400	360	590
Selenium	3.8 U	4.0 U	2.0 U	3.8 U	4.0 U	2.0 U	3.9 U	3.8 U	3.8 U	3.9 U	4.0 U	3.8 U	3.9 U	3.8 U	3.8 U	3.9 U
Silver	0.96 U	1.0 U	1.0 U	0.96 U	1.0 U	0.98 U	0.98 U	0.96 U	0.96 U	0.98 U	1.0 U	0.96 U	0.98 U	0.96 U	0.96 U	0.98 U
Sodium	64	69	76	100	96	60	40	52	35	53	55	43	52	40	46	51
Thallium	1.9 U	2.0 U	2.0 U	2.1	2.4	2.0 U	2.0 U	1.9 U	1.9 U	2.0 U	2.0 U	1.9 U	2.0 U	1.9 U	1.9 U	2.0 U
Vanadium	20	15	22	22	20	18	20	26	15	24	25	22	26	13	22	22
Zinc	37	27	62	61	43	94	32	53	29	25	27	51	72	27	51	29
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PASI_SB-16	PASI_SB-17	PASI_SB-17	PASI_SB-18	PASI_SB-18	PASI_SB-20	PASI_SB-20	PASI_SB-20	R-01-SB-01	R-01-SB-01	R-01-SB-01	R-01-SB-01	R-01-SB-02	R-01-SB-02	R-01-SB-02	R-01-SB-03
Sample ID:	SS-16	SB-17A	SS-17	SB-18A	SS-18	SB-20A	SB-20B	SS-20	P-51-SB-01A	P-51-SB-01B	P-51-SB-01C	P-51-SB-55C	P-51-SB-02A	P-51-SB-02B	P-51-SB-02C	P-51-SB-03A
Sample Date:	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/10/2010	8/10/2010	8/9/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010
Sample Depth:	0-1 (ft bgs)	2-3 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	8-9 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
1,1-Dichloroethane	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
2-Butanone	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
2-Hexanone	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
4-Methyl-2-Pentanone	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
Acetone	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
Carbon Disulfide	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
Chloroethane	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
Chloroform	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
cis-1,2-Dichloroethene	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
Ethylbenzene	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
m,p-Xylene	200 U	190 U	220 U	120 U	210 U	170 U	150 U	140 U								
Methyl acetate																
Methylene Chloride	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
Naphthalene	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
Tetrachloroethene	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
Toluene	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
Trichloroethene	100 U	93 U	110 U	58 U	100 U	87 U	73 U	72 U								
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene	260 U	260 U	250 U	270 U	280 U	240 U	220 U	260 U								
Acenaphthylene	260 U	260 U	250 U	270 U	280 U	240 U	220 U	260 U								
Anthracene	260 U	260 U	250 U	270 U	280 U	240 U	220 U	340								
Benzaldehyde																
Benzo(a)anthracene	410	260 U	250 U	270 U	280 U	240 U	220 U	1100								
Benzo(a)pyrene	350	260 U	250 U	270 U	280 U	240 U	220 U	1100								
Benzo(b)fluoranthene	320	260 U	250 U	270 U	280 U	240 U	220 U	1100								
Benzo(g,h,i)perylene	260 U	260 U	250 U	270 U	280 U	240 U	220 U	810								
Benzo(k)fluoranthene	390	260 U	250 U	270 U	280 U	240 U	220 U	1300								
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene	430	260 U	250 U	270 U	280 U	240 U	220 U	1400								
Dibenz(a,h)anthracene	260 U	260 U	250 U	270 U	280 U	240 U	220 U	260 U								
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene	1000	260 U	360	270 U	410	240 U	220 U	3500								
Fluorene	260 U	260 U	250 U	270 U	280 U	240 U	220 U	260 U								
Indeno(1,2,3-cd)pyrene	260 U	260 U	250 U	270 U	280 U	240 U	220 U	750								
Naphthalene	260 U	260 U	250 U	270 U	280 U	240 U	220 U	260 U								
Pentachlorophenol																
Phenanthrene	770	260 U	250 U	270 U	280 U	240 U	220 U	2600								
Phenol																
Pyrene	770	260 U	310	270 U	340	240 U	220 U	2400								

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PASI_SB-16	PASI_SB-17	PASI_SB-17	PASI_SB-18	PASI_SB-18	PASI_SB-20	PASI_SB-20	PASI_SB-20	R-01-SB-01	R-01-SB-01	R-01-SB-01	R-01-SB-01	R-01-SB-02	R-01-SB-02	R-01-SB-02	R-01-SB-03
Sample ID:	SS-16	SB-17A	SS-17	SB-18A	SS-18	SB-20A	SB-20B	SS-20	P-51-SB-01A	P-51-SB-01B	P-51-SB-01C	P-51-SB-55C	P-51-SB-02A	P-51-SB-02B	P-51-SB-02C	P-51-SB-03A
Sample Date:	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/9/2010	8/10/2010	8/10/2010	8/9/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010
Sample Depth:	0-1 (ft bgs)	2-3 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	0-1 (ft bgs)	2-3 (ft bgs)	8-9 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum	13000	14000	12000	9300	13000	9100	11000	11000								
Antimony	2.0 U	2.0 U	2.0 U	1.9 U	1.9 U	1.9 U	39 U	40 U								
Arsenic	2.6	2.1	2.5	2.0	3.7	1.9 U	3.7	3.9								
Barium	55	43	46	32	59	26	54	33								
Beryllium	0.80 U	0.78 U	0.80 U	0.75 U	0.77 U	0.77 U	0.78 U	0.80 U								
Cadmium	2.0 U	2.0 U	2.0 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U								
Calcium	980	610	520	1200	620	750	1800	650								
Chromium	520	22	60	44	160	69	3000	3100	7.5	7.5	12.5	6.4	8	5.9	7.4	4.8
Chromium, Hexavalent		4.4 U	4.7 U	4.4 U		4.5 U	470	4.3 U								
Cobalt	2.8	2.7	2.4	3.9	3.0	3.9	8.0	3.0								
Copper	28	4.9	16	8.3	30	6.2	29	180								
Cyanide																
Iron	12000	13000	12000	11000	13000	12000	26000	13000								
Lead	68	8.0	31	7.6	67	8.8	13	80	45	10.2	6.4	5.4	44.7	10	7.9	14.6
Magnesium	1400	1800	1200	2500	1500	1800	4800	1900								
Manganese	190	150	170	160	200	160	830	160								
Mercury																
Nickel	6.7	7.2	6.0	8.2	7.5	7.8	14	7.8								
Potassium	370	390	310	650	380	420	1600	630								
Selenium	4.0 U	4.0 U	4.0 U	3.8 U	3.8 U	3.8 U	3.9 U	4.0 U								
Silver	1.0 U	0.98 U	1.0 U	0.94 U	0.96 U	0.96 U	0.98 U	1.0 U								
Sodium	48	49	39	60	43	38	160	41								
Thallium	2.0 U	2.0 U	2.0 U	1.9 U	1.9 U	1.9 U	3.5	2.0 U								
Vanadium	23	23	21	22	22	18	36	21								
Zinc	54	33	40	28	49	31	42	51								
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-03	R-01-SB-03	R-01-SB-04	R-01-SB-04	R-01-SB-04	R-01-SB-05	R-01-SB-05	R-01-SB-05	R-01-SB-05	R-01-SB-06	R-01-SB-06	R-01-SB-06	R-01-SB-07	R-01-SB-07	R-01-SB-07	R-01-SB-08
Sample ID:	P-51-SB-03B	P-51-SB-03C	P-51-SB-04A	P-51-SB-04B	P-51-SB-04C	P-51-SB-05A	P-51-SB-05B	P-51-SB-05C	P-51-SB-54C	P-51-SB-06A	P-51-SB-06B	P-51-SB-06C	P-51-SB-07A	P-51-SB-07B	P-51-SB-07C	P-51-SB-08A
Sample Date:	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-03	R-01-SB-03	R-01-SB-04	R-01-SB-04	R-01-SB-04	R-01-SB-05	R-01-SB-05	R-01-SB-05	R-01-SB-05	R-01-SB-06	R-01-SB-06	R-01-SB-06	R-01-SB-07	R-01-SB-07	R-01-SB-07	R-01-SB-08
Sample ID:	P-51-SB-03B	P-51-SB-03C	P-51-SB-04A	P-51-SB-04B	P-51-SB-04C	P-51-SB-05A	P-51-SB-05B	P-51-SB-05C	P-51-SB-54C	P-51-SB-06A	P-51-SB-06B	P-51-SB-06C	P-51-SB-07A	P-51-SB-07B	P-51-SB-07C	P-51-SB-08A
Sample Date:	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	7.1	6.2	6.5	7.1	5.5	10.7	8.1	5	5.1	3.2	6.2	7.7	7.2	9.1	7.2	8.6
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	5.5	4.5	55.7	11	8.1	178	55	19.4	11.2	26.1	29.3	10	46.3	10.9	8.1	58.8
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-08	R-01-SB-08	R-01-SB-09	R-01-SB-09	R-01-SB-09	R-01-SB-10	R-01-SB-10	R-01-SB-10	R-01-SB-101	R-01-SB-101	R-01-SB-101	R-01-SB-101	R-01-SB-102	R-01-SB-102	R-01-SB-102	R-01-SB-103
Sample ID:	P-51-SB-08B	P-51-SB-08C	P-51-SB-09A	P-51-SB-09B	P-51-SB-09C	P-51-SB-10A	P-51-SB-10B	P-51-SB-10C	SB-101A	SB-101B	SB-225B	SB-101C	SB-102A	SB-102B	SB-102C	SB-103A
Sample Date:	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-08	R-01-SB-08	R-01-SB-09	R-01-SB-09	R-01-SB-09	R-01-SB-10	R-01-SB-10	R-01-SB-10	R-01-SB-101	R-01-SB-101	R-01-SB-101	R-01-SB-101	R-01-SB-102	R-01-SB-102	R-01-SB-102	R-01-SB-103
Sample ID:	P-51-SB-08B	P-51-SB-08C	P-51-SB-09A	P-51-SB-09B	P-51-SB-09C	P-51-SB-10A	P-51-SB-10B	P-51-SB-10C	SB-101A	SB-101B	SB-225B	SB-101C	SB-102A	SB-102B	SB-102C	SB-103A
Sample Date:	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	9.2	10.1	8.5	9.3	10.1	11.4	9.3	7.8	3.5	4.2	4.7	4	3.5	5.9	0.85 U	16.4
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	40.3	19.4	71.2	39	22.1	92.3	18.8	10.1	49.3	14	19.5	6.3	25.5	22.2	0.85 U	91.7
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-103	R-01-SB-103	R-01-SB-104	R-01-SB-104	R-01-SB-104	R-01-SB-105	R-01-SB-105	R-01-SB-105	R-01-SB-106	R-01-SB-106	R-01-SB-106	R-01-SB-107	R-01-SB-107	R-01-SB-107	R-01-SB-107	R-01-SB-108
Sample ID:	SB-103B	SB-103C	SB-104A	SB-104B	SB-104C	SB-105A	SB-105B	SB-105C	SB-106A	SB-106B	SB-106C	SB-107A	SB-107B	SB-107C	SB-226C	SB-108A
Sample Date:	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-103	R-01-SB-103	R-01-SB-104	R-01-SB-104	R-01-SB-104	R-01-SB-105	R-01-SB-105	R-01-SB-105	R-01-SB-106	R-01-SB-106	R-01-SB-106	R-01-SB-107	R-01-SB-107	R-01-SB-107	R-01-SB-107	R-01-SB-108
Sample ID:	SB-103B	SB-103C	SB-104A	SB-104B	SB-104C	SB-105A	SB-105B	SB-105C	SB-106A	SB-106B	SB-106C	SB-107A	SB-107B	SB-107C	SB-226C	SB-108A
Sample Date:	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	6.3	3.4	7.9	4	5.3	4.6	7.5	38.1	14.3	4.4	14.1	14	15.7	20.2	28.7	19.5
Chromium, Hexavalent								1.3						0.9 U	0.4	
Cobalt																
Copper																
Cyanide																
Iron																
Lead	20.3	5.1	83.9	11.6	5.2	31.5	7.9	8.1	120	36.3	19.2	62.1	122	48.1	34.9	876
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-108	R-01-SB-108	R-01-SB-109	R-01-SB-109	R-01-SB-109	R-01-SB-11	R-01-SB-11	R-01-SB-11	R-01-SB-110	R-01-SB-110	R-01-SB-110	R-01-SB-111	R-01-SB-111	R-01-SB-111	R-01-SB-113	R-01-SB-113
Sample ID:	SB-108B	SB-108C	SB-109A	SB-109B	SB-109C	P-51-SB-11A	P-51-SB-11B	P-51-SB-11C	SB-110A	SB-110B	SB-110C	SB-111A	SB-111B	SB-111C	SB-113A	SB-113B
Sample Date:	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/4/2010	11/4/2010	11/4/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/9/2010	11/8/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-108	R-01-SB-108	R-01-SB-109	R-01-SB-109	R-01-SB-109	R-01-SB-11	R-01-SB-11	R-01-SB-11	R-01-SB-110	R-01-SB-110	R-01-SB-110	R-01-SB-111	R-01-SB-111	R-01-SB-111	R-01-SB-113	R-01-SB-113
Sample ID:	SB-108B	SB-108C	SB-109A	SB-109B	SB-109C	P-51-SB-11A	P-51-SB-11B	P-51-SB-11C	SB-110A	SB-110B	SB-110C	SB-111A	SB-111B	SB-111C	SB-113A	SB-113B
Sample Date:	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/4/2010	11/4/2010	11/4/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/9/2010	11/8/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	18.2	14.1	75.9	20.9	6.2	10.5	6.4	7.2	5.7	8.7	43.1	13.9	2.9	7.8	21.3	
Chromium, Hexavalent			0.9 U								7.1					1.9
Cobalt																
Copper																
Cyanide																
Iron																
Lead	639	74.4	32.2	38.3	14	53.2	10.5	4.7	42.6	10.5	3.7	136	12.6	11	61.7	
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-113	R-01-SB-113	R-01-SB-113	R-01-SB-114	R-01-SB-114	R-01-SB-114	R-01-SB-116	R-01-SB-116	R-01-SB-116	R-01-SB-117	R-01-SB-117	R-01-SB-117	R-01-SB-12	R-01-SB-12	R-01-SB-12	R-01-SB-13
Sample ID:	SB-113B	SB-113C	SB-227C	SB-114A	SB-114B	SB-114C	SB-116A	SB-116B	SB-116C	SB-117A	SB-117B	SB-117C	P-51-SB-12A	P-51-SB-12B	P-51-SB-12C	P-51-SB-13A
Sample Date:	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-113	R-01-SB-113	R-01-SB-113	R-01-SB-114	R-01-SB-114	R-01-SB-114	R-01-SB-116	R-01-SB-116	R-01-SB-116	R-01-SB-117	R-01-SB-117	R-01-SB-117	R-01-SB-12	R-01-SB-12	R-01-SB-12	R-01-SB-13
Sample ID:	SB-113B	SB-113C	SB-227C	SB-114A	SB-114B	SB-114C	SB-116A	SB-116B	SB-116C	SB-117A	SB-117B	SB-117C	P-51-SB-12A	P-51-SB-12B	P-51-SB-12C	P-51-SB-13A
Sample Date:	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	57.6	77.4	116	14.8	9.6	9.3	18.1	11.7	4.1	5.3	24.8	7.1	18.2	6.9	5.2	7.3
Chromium, Hexavalent		1.8	0.9 U													
Cobalt																
Copper																
Cyanide																
Iron																
Lead	49.9	11.5	19.4	88.6	78.9	17.9	36.7	35.7	7	7.6	41.1	9.7	14.5	9.1	4.9	63.4
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-13	R-01-SB-13	R-01-SB-13	R-01-SB-14	R-01-SB-14	R-01-SB-14	R-01-SB-15	R-01-SB-15	R-01-SB-15	R-01-SB-16	R-01-SB-16	R-01-SB-16	R-01-SB-17	R-01-SB-17	R-01-SB-17	R-01-SB-18
Sample ID:	P-51-SB-53A	P-51-SB-13B	P-51-SB-13C	P-51-SB-14A	P-51-SB-14B	P-51-SB-14C	P-51-SB-15A	P-51-SB-15B	P-51-SB-15C	P-51-SB-16A	P-51-SB-16B	P-51-SB-16C	P-51-SB-17A	P-51-SB-17B	P-51-SB-17C	P-51-SB-18A
Sample Date:	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-13	R-01-SB-13	R-01-SB-13	R-01-SB-14	R-01-SB-14	R-01-SB-14	R-01-SB-15	R-01-SB-15	R-01-SB-15	R-01-SB-16	R-01-SB-16	R-01-SB-16	R-01-SB-17	R-01-SB-17	R-01-SB-17	R-01-SB-18
Sample ID:	P-51-SB-53A	P-51-SB-13B	P-51-SB-13C	P-51-SB-14A	P-51-SB-14B	P-51-SB-14C	P-51-SB-15A	P-51-SB-15B	P-51-SB-15C	P-51-SB-16A	P-51-SB-16B	P-51-SB-16C	P-51-SB-17A	P-51-SB-17B	P-51-SB-17C	P-51-SB-18A
Sample Date:	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	10.2	6.7	6.8	53.7	13.7	5	38.9	12.1	8.3	13.2	10.5	11.9	11.5	8.2	8.2	9.2
Chromium, Hexavalent				2.4 U			0.9 U									
Cobalt																
Copper																
Cyanide																
Iron																
Lead	101	29.7	12.8	164	16.9	7.5	198	23.3	13.1	78.1	16	8.9	79.3	16.3	14.1	84.1
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-18	R-01-SB-18	R-01-SB-19	R-01-SB-19	R-01-SB-19	R-01-SB-20	R-01-SB-20	R-01-SB-20	R-01-SB-21	R-01-SB-21	R-01-SB-21	R-01-SB-21	R-01-SB-22	R-01-SB-22	R-01-SB-22	R-01-SB-23
Sample ID:	P-51-SB-18B	P-51-SB-18C	P-51-SB-19A	P-51-SB-19B	P-51-SB-19C	P-51-SB-20A	P-51-SB-20B	P-51-SB-20C	P-51-SB-21A	P-51-SB-21B	P-51-SB-21C	P-51-SB-52C	P-51-SB-22A	P-51-SB-22B	P-51-SB-22C	P-51-SB-23A
Sample Date:	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-18	R-01-SB-18	R-01-SB-19	R-01-SB-19	R-01-SB-19	R-01-SB-20	R-01-SB-20	R-01-SB-20	R-01-SB-21	R-01-SB-21	R-01-SB-21	R-01-SB-21	R-01-SB-22	R-01-SB-22	R-01-SB-22	R-01-SB-23
Sample ID:	P-51-SB-18B	P-51-SB-18C	P-51-SB-19A	P-51-SB-19B	P-51-SB-19C	P-51-SB-20A	P-51-SB-20B	P-51-SB-20C	P-51-SB-21A	P-51-SB-21B	P-51-SB-21C	P-51-SB-52C	P-51-SB-22A	P-51-SB-22B	P-51-SB-22C	P-51-SB-23A
Sample Date:	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	6.9	4.3	10.1	8.5	7.7	12.9	12.2	8	19.3	10.5	7.4	7.8	71.4	35.3	16.6	77.4
Chromium, Hexavalent													0.97 U	0.91 U		0.94 U
Cobalt																
Copper																
Cyanide																
Iron																
Lead	20.2	5.2	128	16.5	12.5	162	26	9.6	73.6	45.6	28.2	21	119	59	33.8	106
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-23	R-01-SB-23	R-01-SB-24	R-01-SB-24	R-01-SB-24	R-01-SB-25	R-01-SB-25	R-01-SB-25	R-01-SB-26	R-01-SB-26	R-01-SB-26	R-01-SB-27	R-01-SB-27	R-01-SB-27	R-01-SB-28	R-01-SB-28
Sample ID:	P-51-SB-23B	P-51-SB-23C	P-51-SB-24A	P-51-SB-24B	P-51-SB-24C	P-51-SB-25A	P-51-SB-25B	P-51-SB-25C	P-51-SB-26A	P-51-SB-26B	P-51-SB-26C	P-51-SB-27A	P-51-SB-27B	P-51-SB-27C	P-51-SB-28A	P-51-SB-28B
Sample Date:	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-23	R-01-SB-23	R-01-SB-24	R-01-SB-24	R-01-SB-24	R-01-SB-25	R-01-SB-25	R-01-SB-25	R-01-SB-26	R-01-SB-26	R-01-SB-26	R-01-SB-27	R-01-SB-27	R-01-SB-27	R-01-SB-28	R-01-SB-28
Sample ID:	P-51-SB-23B	P-51-SB-23C	P-51-SB-24A	P-51-SB-24B	P-51-SB-24C	P-51-SB-25A	P-51-SB-25B	P-51-SB-25C	P-51-SB-26A	P-51-SB-26B	P-51-SB-26C	P-51-SB-27A	P-51-SB-27B	P-51-SB-27C	P-51-SB-28A	P-51-SB-28B
Sample Date:	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	21.2	14	23.4	14.2	18	8.4	9.8	8.1	8.4	15	7.4	9.7	11.2	9.3	10.4	8.6
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	76.5	35.5	231	116	51.9	188	140	51	120	41.3	11.4	112	53.1	26.8	96.1	44.1
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-28	R-01-SB-29	R-01-SB-29	R-01-SB-29	R-01-SB-30	R-01-SB-30	R-01-SB-30	R-01-SB-36	R-01-SB-36	R-01-SB-36	R-01-SB-37	R-01-SB-37	R-01-SB-37	R-01-SB-38	R-01-SB-38	R-01-SB-38
Sample ID:	P-51-SB-28C	P-51-SB-29A	P-51-SB-29B	P-51-SB-29C	P-51-SB-30A	P-51-SB-30B	P-51-SB-30C	P-51-SB-36A	P-51-SB-36B	P-51-SB-36C	P-51-SB-37A	P-51-SB-37B	P-51-SB-37C	P-51-SB-38A	P-51-SB-38B	P-51-SB-38C
Sample Date:	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-01-SB-28	R-01-SB-29	R-01-SB-29	R-01-SB-29	R-01-SB-30	R-01-SB-30	R-01-SB-30	R-01-SB-36	R-01-SB-36	R-01-SB-36	R-01-SB-37	R-01-SB-37	R-01-SB-37	R-01-SB-38	R-01-SB-38	R-01-SB-38
Sample ID:	P-51-SB-28C	P-51-SB-29A	P-51-SB-29B	P-51-SB-29C	P-51-SB-30A	P-51-SB-30B	P-51-SB-30C	P-51-SB-36A	P-51-SB-36B	P-51-SB-36C	P-51-SB-37A	P-51-SB-37B	P-51-SB-37C	P-51-SB-38A	P-51-SB-38B	P-51-SB-38C
Sample Date:	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	10.7	9.3	7.2	8.3	12.7	12	11.6	10.9	8.6	8.7	6.6	9.5	11.3	9.1	8.1	9
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	13.7	114	47.4	29.7	136	92.8	30.8	187	42.3	27.7	52.8	33.3	8.7	97.8	47.6	16
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-01	R-02-SB-01	R-02-SB-01	R-02-SB-01	R-02-SB-02	R-02-SB-02	R-02-SB-02	R-02-SB-03	R-02-SB-03	R-02-SB-03	R-02-SB-04	R-02-SB-04	R-02-SB-04	R-02-SB-05	R-02-SB-05	R-02-SB-05
Sample ID:	P-65-SB-01A	P-65-SB-01B	P-65-SB-30B	P-65-SB-01C	P-65-SB-02A	P-65-SB-02B	P-65-SB-02C	P-65-SB-03A	P-65-SB-03B	P-65-SB-03C	P-65-SB-04A	P-65-SB-04B	P-65-SB-04C	P-65-SB-05A	P-65-SB-05B	P-65-SB-05C
Sample Date:	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-01	R-02-SB-01	R-02-SB-01	R-02-SB-01	R-02-SB-02	R-02-SB-02	R-02-SB-02	R-02-SB-03	R-02-SB-03	R-02-SB-03	R-02-SB-04	R-02-SB-04	R-02-SB-04	R-02-SB-05	R-02-SB-05	R-02-SB-05
Sample ID:	P-65-SB-01A	P-65-SB-01B	P-65-SB-30B	P-65-SB-01C	P-65-SB-02A	P-65-SB-02B	P-65-SB-02C	P-65-SB-03A	P-65-SB-03B	P-65-SB-03C	P-65-SB-04A	P-65-SB-04B	P-65-SB-04C	P-65-SB-05A	P-65-SB-05B	P-65-SB-05C
Sample Date:	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	10	7.6	7.5	6.4	8.8	7.2	4.9	9.4	8.6	6.1	17.1	8.2	5.7	8	6.5	5.7
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	52.8	39.7	39.3	9.9	65.3	26.3	8.3	64.1	28.8	7.9	99.6	36.6	8.5	51.2	14.1	7.3
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-05	R-02-SB-06	R-02-SB-06	R-02-SB-06	R-02-SB-07	R-02-SB-07	R-02-SB-07	R-02-SB-08	R-02-SB-08	R-02-SB-08	R-02-SB-08	R-02-SB-09	R-02-SB-09	R-02-SB-09	R-02-SB-10	R-02-SB-10
Sample ID:	P-65-SB-31C	P-65-SB-06A	P-65-SB-06B	P-65-SB-06C	P-65-SB-07A	P-65-SB-07B	P-65-SB-07C	P-65-SB-08A	P-65-SB-32A	P-65-SB-08B	P-65-SB-08C	P-65-SB-09A	P-65-SB-09B	P-65-SB-09C	P-65-SB-10A	P-65-SB-10B
Sample Date:	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-05	R-02-SB-06	R-02-SB-06	R-02-SB-06	R-02-SB-07	R-02-SB-07	R-02-SB-07	R-02-SB-08	R-02-SB-08	R-02-SB-08	R-02-SB-08	R-02-SB-09	R-02-SB-09	R-02-SB-09	R-02-SB-10	R-02-SB-10
Sample ID:	P-65-SB-31C	P-65-SB-06A	P-65-SB-06B	P-65-SB-06C	P-65-SB-07A	P-65-SB-07B	P-65-SB-07C	P-65-SB-08A	P-65-SB-32A	P-65-SB-08B	P-65-SB-08C	P-65-SB-09A	P-65-SB-09B	P-65-SB-09C	P-65-SB-10A	P-65-SB-10B
Sample Date:	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	5	11.2	7.5	6.2	8.4	7.2	5.1	7.4	7.9	7.5	5.4	11.6	6.5	6.3	8.7	7.1
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	5.7	155	71.3	33	45.6	20.4	25	87.3	123	32.7	15.3	136	25.1	8.8	94.9	61.1
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-10	R-02-SB-11	R-02-SB-11	R-02-SB-11	R-02-SB-112	R-02-SB-112	R-02-SB-112	R-02-SB-115	R-02-SB-115	R-02-SB-115	R-02-SB-118	R-02-SB-118	R-02-SB-118	R-02-SB-119	R-02-SB-119	R-02-SB-119
Sample ID:	P-65-SB-10C	P-65-SB-11A	P-65-SB-11B	P-65-SB-11C	SB-112A	SB-112B	SB-112C	SB-115A	SB-115B	SB-115C	SB-118A	SB-118B	SB-118C	SB-119A	SB-119B	SB-228B
Sample Date:	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-10	R-02-SB-11	R-02-SB-11	R-02-SB-11	R-02-SB-112	R-02-SB-112	R-02-SB-112	R-02-SB-115	R-02-SB-115	R-02-SB-115	R-02-SB-118	R-02-SB-118	R-02-SB-118	R-02-SB-119	R-02-SB-119	R-02-SB-119
Sample ID:	P-65-SB-10C	P-65-SB-11A	P-65-SB-11B	P-65-SB-11C	SB-112A	SB-112B	SB-112C	SB-115A	SB-115B	SB-115C	SB-118A	SB-118B	SB-118C	SB-119A	SB-119B	SB-228B
Sample Date:	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	10	8.4	6.8	7	22.3	10.8	7.7	250	62.9	96.1	53.7	16.5	61.8	41.1	7.9	6.3
Chromium, Hexavalent								4.6	2.5	3.5	1 U		16	6.1 U		
Cobalt																
Copper																
Cyanide																
Iron																
Lead	23.1	89	29.7	9.8	115	34.2	13.4	81.3	8	7.4	30.1	15.3	7.4	80.2	14.7	10.4
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-119	R-02-SB-12	R-02-SB-12	R-02-SB-12	R-02-SB-120	R-02-SB-120	R-02-SB-120	R-02-SB-121	R-02-SB-121	R-02-SB-121	R-02-SB-122	R-02-SB-122	R-02-SB-123	R-02-SB-126	R-02-SB-126	R-02-SB-126
Sample ID:	SB-119C	P-65-SB-12A	P-65-SB-12B	P-65-SB-12C	SB-120A	SB-120B	SB-120C	SB-121A	SB-121B	SB-121C	SB-122A	SB-122B	SB-123A	SB-126A	SB-126B	SB-126C
Sample Date:	11/9/2010	11/5/2010	11/5/2010	11/5/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-119	R-02-SB-12	R-02-SB-12	R-02-SB-12	R-02-SB-120	R-02-SB-120	R-02-SB-120	R-02-SB-121	R-02-SB-121	R-02-SB-121	R-02-SB-122	R-02-SB-122	R-02-SB-123	R-02-SB-126	R-02-SB-126	R-02-SB-126
Sample ID:	SB-119C	P-65-SB-12A	P-65-SB-12B	P-65-SB-12C	SB-120A	SB-120B	SB-120C	SB-121A	SB-121B	SB-121C	SB-122A	SB-122B	SB-123A	SB-126A	SB-126B	SB-126C
Sample Date:	11/9/2010	11/5/2010	11/5/2010	11/5/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	5.3	9.9	16.8	8.6	831	4270	1040	23200	4370	3450	50200	59300	20300	159	255	305
Chromium, Hexavalent					9.2	20	16	29 U	140	8.7 U	160	61	13 U	2.1 U	16	5.7
Cobalt																
Copper																
Cyanide																
Iron																
Lead	6.3	45.9	10.6	11.9	388	510	109	225	32.5	18.7	51.5	87.3	79.7	35.2	9.5	9.4
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-127	R-02-SB-127	R-02-SB-127	R-02-SB-128	R-02-SB-129	R-02-SB-13	R-02-SB-13	R-02-SB-13	R-02-SB-130	R-02-SB-131	R-02-SB-131	R-02-SB-131	R-02-SB-131	R-02-SB-132	R-02-SB-132	R-02-SB-132
Sample ID:	SB-127A	SB-127B	SB-127C	SB-128A	SB-129A	P-65-SB-13A	P-65-SB-13B	P-65-SB-13C	SB-130A	SB-131A	SB-230A-Ph2	SB-131B	SB-131C	SB-132A	SB-132B	SB-132C
Sample Date:	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/5/2010	11/5/2010	11/5/2010	11/9/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-127	R-02-SB-127	R-02-SB-127	R-02-SB-128	R-02-SB-129	R-02-SB-13	R-02-SB-13	R-02-SB-13	R-02-SB-130	R-02-SB-131	R-02-SB-131	R-02-SB-131	R-02-SB-131	R-02-SB-132	R-02-SB-132	R-02-SB-132
Sample ID:	SB-127A	SB-127B	SB-127C	SB-128A	SB-129A	P-65-SB-13A	P-65-SB-13B	P-65-SB-13C	SB-130A	SB-131A	SB-230A-Ph2	SB-131B	SB-131C	SB-132A	SB-132B	SB-132C
Sample Date:	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/5/2010	11/5/2010	11/5/2010	11/9/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	24.1	21.2	70.5	51700	67700	7.6	5.4	4	30100	34.2	44	92.3	368	12500	852	191
Chromium, Hexavalent			2.2 U	380	14				32	2 U	5 U	2.3 U	4.8	45	20	21
Cobalt																
Copper																
Cyanide																
Iron																
Lead	72	26.2	10.2	32.6	23.9	89.8	18.9	7.9	74.8	347	393	240	179	474	10.8	6.2
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-133	R-02-SB-133	R-02-SB-133	R-02-SB-134	R-02-SB-137	R-02-SB-137	R-02-SB-137	R-02-SB-137	R-02-SB-138	R-02-SB-138	R-02-SB-138	R-02-SB-139	R-02-SB-139	R-02-SB-139	R-02-SB-14	R-02-SB-14
Sample ID:	SB-133A	SB-133B	SB-133C	SB-134A	SB-137A	SB-137B	SB-137C	SB-231C	SB-138A	SB-138B	SB-138C	SB-139A	SB-139B	SB-139C	P-65-SB-14A	P-65-SB-14B
Sample Date:	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/5/2010	11/5/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-133	R-02-SB-133	R-02-SB-133	R-02-SB-134	R-02-SB-137	R-02-SB-137	R-02-SB-137	R-02-SB-137	R-02-SB-138	R-02-SB-138	R-02-SB-138	R-02-SB-139	R-02-SB-139	R-02-SB-139	R-02-SB-14	R-02-SB-14
Sample ID:	SB-133A	SB-133B	SB-133C	SB-134A	SB-137A	SB-137B	SB-137C	SB-231C	SB-138A	SB-138B	SB-138C	SB-139A	SB-139B	SB-139C	P-65-SB-14A	P-65-SB-14B
Sample Date:	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/5/2010	11/5/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	32500	276	629	11500	552	462	165	124	955	166	38.1	2910	924	286	8.7	6.5
Chromium, Hexavalent	9.4 U	25	2.7	14 U	2.3 U	8.9	3.1	8.5	8.3 U	2.6	3.8	10 U	7.1	5.2		
Cobalt																
Copper																
Cyanide																
Iron																
Lead	111	5.2	8.6	139	87.1	55.9	7.3	5.1	61.2	3	3.1	61.7	8	4.4	252	26.5
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-14	R-02-SB-142	R-02-SB-142	R-02-SB-142	R-02-SB-143	R-02-SB-143	R-02-SB-143	R-02-SB-143	R-02-SB-146	R-02-SB-146	R-02-SB-146	R-02-SB-147	R-02-SB-147	R-02-SB-147	R-02-SB-15	R-02-SB-15
Sample ID:	P-65-SB-14C	SB-142A	SB-142B	SB-142C	SB-143A	SB-143B	SB-232B	SB-143C	SB-146A	SB-146B	SB-146C	SB-147A	SB-147B	SB-147C	P-65-SB-15A	P-65-SB-15B
Sample Date:	11/5/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/5/2010	11/5/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-14	R-02-SB-142	R-02-SB-142	R-02-SB-142	R-02-SB-143	R-02-SB-143	R-02-SB-143	R-02-SB-143	R-02-SB-146	R-02-SB-146	R-02-SB-146	R-02-SB-147	R-02-SB-147	R-02-SB-147	R-02-SB-15	R-02-SB-15
Sample ID:	P-65-SB-14C	SB-142A	SB-142B	SB-142C	SB-143A	SB-143B	SB-232B	SB-143C	SB-146A	SB-146B	SB-146C	SB-147A	SB-147B	SB-147C	P-65-SB-15A	P-65-SB-15B
Sample Date:	11/5/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/5/2010	11/5/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	3.2	100	187	409	1610	680	822	183	15.6	6.7	5.8	11.9	11.8	153	9.7	8.2
Chromium, Hexavalent		2.1 U	11	7.4	2.6 U	12	17	0.6						2.5		
Cobalt																
Copper																
Cyanide																
Iron																
Lead	7	91.8	9.5	4.9	44.9	8.6	8.7	4.7	315	35.8	32.6	53.9	6.6	7.6	68.2	32.7
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-15	R-02-SB-151	R-02-SB-151	R-02-SB-151	R-02-SB-16	R-02-SB-16	R-02-SB-16	R-02-SB-16	R-02-SB-17	R-02-SB-17	R-02-SB-17	R-02-SB-17	R-02-SB-18	R-02-SB-18	R-02-SB-18	R-02-SB-19
Sample ID:	P-65-SB-15C	SB-151A	SB-151B	SB-151C	P-65-SB-16A	P-65-SB-16B	P-65-SB-16C	P-65-SB-33C	P-65-SB-17A	P-65-SB-17B	P-65-SB-17C	P-65-SB-34C	P-65-SB-18A	P-65-SB-18B	P-65-SB-18C	P-65-SB-19A
Sample Date:	11/5/2010	11/10/2010	11/10/2010	11/10/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-15	R-02-SB-151	R-02-SB-151	R-02-SB-151	R-02-SB-16	R-02-SB-16	R-02-SB-16	R-02-SB-16	R-02-SB-17	R-02-SB-17	R-02-SB-17	R-02-SB-17	R-02-SB-18	R-02-SB-18	R-02-SB-18	R-02-SB-19
Sample ID:	P-65-SB-15C	SB-151A	SB-151B	SB-151C	P-65-SB-16A	P-65-SB-16B	P-65-SB-16C	P-65-SB-33C	P-65-SB-17A	P-65-SB-17B	P-65-SB-17C	P-65-SB-34C	P-65-SB-18A	P-65-SB-18B	P-65-SB-18C	P-65-SB-19A
Sample Date:	11/5/2010	11/10/2010	11/10/2010	11/10/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	5.3	12.9	6.7	6.5	7.2	7.9	5.4	7.6	8.4	7.6	6.3	8.2	8.3	6.3	4.5	7.9
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	7.1	95.5	16.3	7.6	46.5	21.1	7.7	9.5	91.6	23.6	8.7	9.2	80.1	17.1	5.4	45.1
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-19	R-02-SB-19	R-02-SB-20	R-02-SB-20	R-02-SB-20	R-02-SB-21	R-02-SB-21	R-02-SB-21	R-02-SB-22	R-02-SB-22	R-02-SB-22	R-02-SB-23	R-02-SB-23	R-02-SB-23	R-02-SB-23	R-02-SB-24
Sample ID:	P-65-SB-19B	P-65-SB-19C	P-65-SB-20A	P-65-SB-20B	P-65-SB-20C	P-65-SB-21A	P-65-SB-21B	P-65-SB-21C	P-65-SB-22A	P-65-SB-22B	P-65-SB-22C	P-65-SB-23A	P-65-SB-35A	P-65-SB-23B	P-65-SB-23C	P-65-SB-24A
Sample Date:	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-19	R-02-SB-19	R-02-SB-20	R-02-SB-20	R-02-SB-20	R-02-SB-21	R-02-SB-21	R-02-SB-21	R-02-SB-22	R-02-SB-22	R-02-SB-22	R-02-SB-23	R-02-SB-23	R-02-SB-23	R-02-SB-23	R-02-SB-24
Sample ID:	P-65-SB-19B	P-65-SB-19C	P-65-SB-20A	P-65-SB-20B	P-65-SB-20C	P-65-SB-21A	P-65-SB-21B	P-65-SB-21C	P-65-SB-22A	P-65-SB-22B	P-65-SB-22C	P-65-SB-23A	P-65-SB-35A	P-65-SB-23B	P-65-SB-23C	P-65-SB-24A
Sample Date:	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	5.4	5.9	10.8	7.4	5.8	8.3	7.8	8.1	8.7	7.6	6.8	6.6	7.2	4.4	5.1	8.9
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	9.9	6.9	66.1	7.4	7.2	54.6	21	8.5	152	17.7	6.8	102	90.6	9.3	5.1	135
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-24	R-02-SB-24	R-02-SB-25	R-02-SB-25	R-02-SB-25	R-02-SB-26	R-02-SB-26	R-02-SB-26	R-02-SB-27	R-02-SB-27	R-02-SB-27	R-02-SB-28	R-02-SB-28	R-02-SB-28	R-03F-SB-01	R-03F-SB-01
Sample ID:	P-65-SB-24B	P-65-SB-24C	P-65-SB-25A	P-65-SB-25B	P-65-SB-25C	P-65-SB-26A	P-65-SB-26B	P-65-SB-26C	P-65-SB-27A	P-65-SB-27B	P-65-SB-27C	P-65-SB-28A	P-65-SB-28B	P-65-SB-28C	P-37F-SB-01A	P-37F-SB-01B
Sample Date:	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	12/17/2010	12/17/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-02-SB-24	R-02-SB-24	R-02-SB-25	R-02-SB-25	R-02-SB-25	R-02-SB-26	R-02-SB-26	R-02-SB-26	R-02-SB-27	R-02-SB-27	R-02-SB-27	R-02-SB-28	R-02-SB-28	R-02-SB-28	R-03F-SB-01	R-03F-SB-01
Sample ID:	P-65-SB-24B	P-65-SB-24C	P-65-SB-25A	P-65-SB-25B	P-65-SB-25C	P-65-SB-26A	P-65-SB-26B	P-65-SB-26C	P-65-SB-27A	P-65-SB-27B	P-65-SB-27C	P-65-SB-28A	P-65-SB-28B	P-65-SB-28C	P-37F-SB-01A	P-37F-SB-01B
Sample Date:	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/8/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	11/5/2010	12/17/2010	12/17/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum															7210	4610
Antimony															5.1 U	4.9 U
Arsenic															2.1	1.4
Barium															22.0	15.4 J
Beryllium															0.31 J	0.31 J
Cadmium															0.47	0.37 J
Calcium															695	879
Chromium	6.4	3.1	11.1	6.4	4.2	14.8	7.4	5.5	14.3	7.2	18.8	8.5	6.3	9.8	11.4	9.9
Chromium, Hexavalent																
Cobalt															3.4 J	3.5 J
Copper															6.5	5.7
Cyanide															0.59 U	0.55 U
Iron															9700	9390
Lead	14.7	3.8	137	26.6	6	129	62.2	29	102	26	7.5	17.2	8.2	12.3	12.6	5.4
Magnesium															1270	1380
Manganese															161	160
Mercury															0.12 U	0.11 U
Nickel															7.3	7.0
Potassium															192 J	256 J
Selenium															1.7 J	1.4 J
Silver															0.84 U	0.82 U
Sodium															69.2 J	69.8 J
Thallium															2.1 U	2.1 U
Vanadium															13.7	13.2
Zinc															31.3	27.3
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-03F-SB-01	R-03F-SB-02	R-03F-SB-02	R-03-SB-01	R-03-SB-01	R-03-SB-01	R-03-SB-02	R-03-SB-02	R-03-SB-02	R-03-SB-02	R-03-SB-03	R-03-SB-03	R-03-SB-03	R-03-SB-04	R-03-SB-04	R-03-SB-04
Sample ID:	P-37F-SB-01C	P-37F-SB-02A	P-37F-SB-02B	P-037-SB-01A	P-037-SB-01B	P-037-SB-01C	P-037-SB-02A	P-037-SB-02B	P-037-SB-30B	P-037-SB-02C	P-037-SB-03A	P-037-SB-03B	P-037-SB-03C	P-037-SB-04A	P-037-SB-04B	P-037-SB-04C
Sample Date:	12/17/2010	12/17/2010	12/17/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-03F-SB-01	R-03F-SB-02	R-03F-SB-02	R-03-SB-01	R-03-SB-01	R-03-SB-01	R-03-SB-02	R-03-SB-02	R-03-SB-02	R-03-SB-02	R-03-SB-03	R-03-SB-03	R-03-SB-03	R-03-SB-04	R-03-SB-04	R-03-SB-04
Sample ID:	P-37F-SB-01C	P-37F-SB-02A	P-37F-SB-02B	P-037-SB-01A	P-037-SB-01B	P-037-SB-01C	P-037-SB-02A	P-037-SB-02B	P-037-SB-30B	P-037-SB-02C	P-037-SB-03A	P-037-SB-03B	P-037-SB-03C	P-037-SB-04A	P-037-SB-04B	P-037-SB-04C
Sample Date:	12/17/2010	12/17/2010	12/17/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum	7730	9410	6940													
Antimony	4.6 U	5.4 U	5.1 U													
Arsenic	2.0	2.4	2.1													
Barium	25.8	32.0	23.7													
Beryllium	0.34 J	0.40 J	0.37 J													
Cadmium	0.40	0.53	0.47													
Calcium	733	913	886													
Chromium	12.0	21.7	12.2	13.1	7.6	11.9	15.4	7.5	5.6	8.4	14	11.9	11	15	8.9	10
Chromium, Hexavalent																
Cobalt	3.8 J	3.4 J	4.3													
Copper	6.1	8.2	9.1													
Cyanide	0.56 U	0.59 U	0.54 U													
Iron	10900	11800	12000													
Lead	8.9	20.2	11.6	28.5	9.3	13.8	49.7	18.8	16.2	8.9	82.6	50.3	17	21	12.5	10.1
Magnesium	1340	1180	1970													
Manganese	147	145	243													
Mercury	0.010 J	0.070 J	0.020 J													
Nickel	7.3	9.9	7.9													
Potassium	213 J	229 J	249 J													
Selenium	1.6 J	2.0 J	1.7 J													
Silver	0.77 U	0.90 U	0.85 U													
Sodium	75.0 J	64.9 J	71.1 J													
Thallium	1.9 U	2.3 U	2.1 U													
Vanadium	16.6	17.6	14.9													
Zinc	29.4	36.7	30.9													
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-03-SB-05	R-03-SB-05	R-03-SB-05	R-03-SB-06	R-03-SB-06	R-03-SB-06	R-03-SB-07	R-03-SB-07	R-03-SB-07	R-03-SB-08	R-03-SB-08	R-03-SB-08	R-03-SB-09	R-03-SB-09	R-03-SB-09	R-03-SB-10
Sample ID:	P-037-SB-05A	P-037-SB-05B	P-037-SB-05C	P-037-SB-06A	P-037-SB-06B	P-037-SB-06C	P-037-SB-07A	P-037-SB-07B	P-037-SB-07C	P-037-SB-08A	P-037-SB-08B	P-037-SB-08C	P-037-SB-09A	P-037-SB-09B	P-037-SB-09C	P-037-SB-10A
Sample Date:	11/2/2010	11/2/2010	11/2/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-03-SB-05	R-03-SB-05	R-03-SB-05	R-03-SB-06	R-03-SB-06	R-03-SB-06	R-03-SB-07	R-03-SB-07	R-03-SB-07	R-03-SB-08	R-03-SB-08	R-03-SB-08	R-03-SB-09	R-03-SB-09	R-03-SB-09	R-03-SB-10
Sample ID:	P-037-SB-05A	P-037-SB-05B	P-037-SB-05C	P-037-SB-06A	P-037-SB-06B	P-037-SB-06C	P-037-SB-07A	P-037-SB-07B	P-037-SB-07C	P-037-SB-08A	P-037-SB-08B	P-037-SB-08C	P-037-SB-09A	P-037-SB-09B	P-037-SB-09C	P-037-SB-10A
Sample Date:	11/2/2010	11/2/2010	11/2/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	14.6	9.8	10.1	16.6	18.9	18.9	15.8	9.6	15	9.7	11.2	9.3	10.1	9.4	8.2	10.7
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	21.5	13.2	14.8	50.5	36.9	23.5	18.8	10.4	16.7	19.3	11.8	11.3	53.3	19.7	18.2	21
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-03-SB-10	R-03-SB-10	R-03-SB-11	R-03-SB-11	R-03-SB-11	R-03-SB-12	R-03-SB-12	R-03-SB-12	R-03-SB-124	R-03-SB-125	R-03-SB-125	R-03-SB-125	R-03-SB-125	R-03-SB-13	R-03-SB-13	R-03-SB-13
Sample ID:	P-037-SB-10B	P-037-SB-10C	P-037-SB-11A	P-037-SB-11B	P-037-SB-11C	P-037-SB-12A	P-037-SB-12B	P-037-SB-12C	SB-124A	SB-125A	SB-125A	SB-125B	SB-125B	P-037-SB-13A	P-037-SB-13B	P-037-SB-13C
Sample Date:	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/9/2010	11/10/2010	11/11/2010	11/10/2010	11/11/2010	11/3/2010	11/3/2010	11/3/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-03-SB-10	R-03-SB-10	R-03-SB-11	R-03-SB-11	R-03-SB-11	R-03-SB-12	R-03-SB-12	R-03-SB-12	R-03-SB-124	R-03-SB-125	R-03-SB-125	R-03-SB-125	R-03-SB-125	R-03-SB-13	R-03-SB-13	R-03-SB-13
Sample ID:	P-037-SB-10B	P-037-SB-10C	P-037-SB-11A	P-037-SB-11B	P-037-SB-11C	P-037-SB-12A	P-037-SB-12B	P-037-SB-12C	SB-124A	SB-125A	SB-125A	SB-125B	SB-125B	P-037-SB-13A	P-037-SB-13B	P-037-SB-13C
Sample Date:	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/9/2010	11/10/2010	11/11/2010	11/10/2010	11/11/2010	11/3/2010	11/3/2010	11/3/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	7.6	8.5	13.1	12.1	19.8	13	8.1	12.6	8220		30500		5880	7.5	7.2	7.2
Chromium, Hexavalent									16 U	270		16				
Cobalt																
Copper																
Cyanide																
Iron																
Lead	14.1	10.8	26.1	8.9	10.7	19.3	9.6	10	45.2		44.2		50.8	23.2	9.9	11.1
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-03-SB-14	R-03-SB-14	R-03-SB-14	R-03-SB-14	R-03-SB-15	R-03-SB-15	R-03-SB-15	R-03-SB-157	R-03-SB-158	R-03-SB-159	R-03-SB-160	R-03-SB-160	R-03-SB-160	R-03-SB-161	R-03-SB-162	R-03-SB-163
Sample ID:	P-037-SB-14A	P-037-SB-14B	P-037-SB-33B	P-037-SB-14C	P-037-SB-15A	P-037-SB-15B	P-037-SB-15C	SB-157A	SB-158A	SB-159A	SB-160A	SB-160B	SB-160C	SB-161A	SB-162A	SB-163A
Sample Date:	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-03-SB-14	R-03-SB-14	R-03-SB-14	R-03-SB-14	R-03-SB-15	R-03-SB-15	R-03-SB-15	R-03-SB-157	R-03-SB-158	R-03-SB-159	R-03-SB-160	R-03-SB-160	R-03-SB-160	R-03-SB-161	R-03-SB-162	R-03-SB-163
Sample ID:	P-037-SB-14A	P-037-SB-14B	P-037-SB-33B	P-037-SB-14C	P-037-SB-15A	P-037-SB-15B	P-037-SB-15C	SB-157A	SB-158A	SB-159A	SB-160A	SB-160B	SB-160C	SB-161A	SB-162A	SB-163A
Sample Date:	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	5.2	6.9	7.3	7	12.8	8.3	17.8	42400	29300	46300	21300	4260	540	6380	46700	15600
Chromium, Hexavalent								850	120	1900	14 U	26 U	22 U	29	6.5	130
Cobalt																
Copper																
Cyanide																
Iron																
Lead	19	9	10.6	11.8	27.5	9.9	17.1	66	96.4	148	107	53.5	9.8	89.3	89.3	97.9
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-03-SB-163	R-03-SB-163	R-03-SB-163	R-03-SB-164	R-03-SB-164	R-03-SB-164	R-03-SB-165	R-03-SB-166	R-03-SB-167	R-03-SB-17	R-03-SB-17	R-03-SB-17	R-03-SB-18	R-03-SB-18	R-03-SB-18	R-03-SB-19
Sample ID:	SB-163B	SB-163C	SB-234C-Ph2	SB-164A	SB-164B	SB-164C	SB-165A	SB-166A	SB-167A	P-037-SB-17A	P-037-SB-17B	P-037-SB-17C	P-037-SB-18A	P-037-SB-18B	P-037-SB-18C	P-037-SB-19A
Sample Date:	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-03-SB-163	R-03-SB-163	R-03-SB-163	R-03-SB-164	R-03-SB-164	R-03-SB-164	R-03-SB-165	R-03-SB-166	R-03-SB-167	R-03-SB-17	R-03-SB-17	R-03-SB-17	R-03-SB-18	R-03-SB-18	R-03-SB-18	R-03-SB-19
Sample ID:	SB-163B	SB-163C	SB-234C-Ph2	SB-164A	SB-164B	SB-164C	SB-165A	SB-166A	SB-167A	P-037-SB-17A	P-037-SB-17B	P-037-SB-17C	P-037-SB-18A	P-037-SB-18B	P-037-SB-18C	P-037-SB-19A
Sample Date:	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	8930	2570	5020	41921	22400	32800	14300	5820	802	1300	4800	375	22.8	2290	1010	15
Chromium, Hexavalent	110	11 U	23 U	81	180	23	77	37 U	40	13	13	39		24	44	
Cobalt																
Copper																
Cyanide																
Iron																
Lead	31.9	13.3	20.6	207	307	124	187	104	170	161	76.7	13.3	90.4	85.2	19.1	125
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-03-SB-19	R-03-SB-19	R-03-SB-19	R-03-SB-20	R-03-SB-20	R-03-SB-20	R-03-SB-21	R-03-SB-21	R-03-SB-21	R-03-SB-22	R-03-SB-22	R-03-SB-22	R-03-SB-23	R-03-SB-23	R-03-SB-23	R-03-SB-24
Sample ID:	P-037-SB-31A	P-037-SB-19B	P-037-SB-19C	P-037-SB-20A	P-037-SB-20B	P-037-SB-20C	P-037-SB-21A	P-037-SB-21B	P-037-SB-21C	P-037-SB-22A	P-037-SB-22B	P-037-SB-22C	P-037-SB-23A	P-037-SB-23B	P-037-SB-23C	P-037-SB-24A
Sample Date:	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-03-SB-19	R-03-SB-19	R-03-SB-19	R-03-SB-20	R-03-SB-20	R-03-SB-20	R-03-SB-21	R-03-SB-21	R-03-SB-21	R-03-SB-22	R-03-SB-22	R-03-SB-22	R-03-SB-23	R-03-SB-23	R-03-SB-23	R-03-SB-24
Sample ID:	P-037-SB-31A	P-037-SB-19B	P-037-SB-19C	P-037-SB-20A	P-037-SB-20B	P-037-SB-20C	P-037-SB-21A	P-037-SB-21B	P-037-SB-21C	P-037-SB-22A	P-037-SB-22B	P-037-SB-22C	P-037-SB-23A	P-037-SB-23B	P-037-SB-23C	P-037-SB-24A
Sample Date:	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	20.4	18.4	368	11.1	12.6	134	27.8	23.9	1520	16.6	53.7	2440	11.1	16.8	14.9	18.2
Chromium, Hexavalent			21 U			6.3 U	1.8 U		4.4		0.9 U	2.7 U				
Cobalt																
Copper																
Cyanide																
Iron																
Lead	151	31.8	36.7	37.9	7.7	31.9	37.3	8.9	42.6	49.4	13.9	44.3	52.1	29.1	26.6	28.4
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-03-SB-24	R-03-SB-24	R-03-SB-25	R-03-SB-25	R-03-SB-25	R-03-SB-26	R-03-SB-26	R-03-SB-26	R-03-SB-27	R-03-SB-27	R-03-SB-27	R-03-SB-28	R-03-SB-28	R-03-SB-28	R-03-SB-28	R-04-SB-01
Sample ID:	P-037-SB-24B	P-037-SB-24C	P-037-SB-25A	P-037-SB-25B	P-037-SB-25C	P-037-SB-26A	P-037-SB-26B	P-037-SB-26C	P-037-SB-27A	P-037-SB-27B	P-037-SB-27C	P-037-SB-28A	P-037-SB-28B	P-037-SB-32B	P-037-SB-28C	P-029-SB-01A
Sample Date:	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/1/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-03-SB-24	R-03-SB-24	R-03-SB-25	R-03-SB-25	R-03-SB-25	R-03-SB-26	R-03-SB-26	R-03-SB-26	R-03-SB-27	R-03-SB-27	R-03-SB-27	R-03-SB-28	R-03-SB-28	R-03-SB-28	R-03-SB-28	R-04-SB-01
Sample ID:	P-037-SB-24B	P-037-SB-24C	P-037-SB-25A	P-037-SB-25B	P-037-SB-25C	P-037-SB-26A	P-037-SB-26B	P-037-SB-26C	P-037-SB-27A	P-037-SB-27B	P-037-SB-27C	P-037-SB-28A	P-037-SB-28B	P-037-SB-32B	P-037-SB-28C	P-029-SB-01A
Sample Date:	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/1/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	13.7	14.8	28.8	14.8	13.1	419	4620	2720	9.8	638	10900	124	1150	1430	5650	14.8
Chromium, Hexavalent			5 U			23	71	110		1.4 U	8.3 U	2.1 U	8	1	16	
Cobalt																
Copper																
Cyanide																
Iron																
Lead	24.9	24.9	37.8	11.7	11.2	49.3	55	25.6	67.7	84.5	124	42.9	43.8	46.5	107	17.5
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-01	R-04-SB-01	R-04-SB-02	R-04-SB-02	R-04-SB-02	R-04-SB-03	R-04-SB-03	R-04-SB-03	R-04-SB-04	R-04-SB-04	R-04-SB-04	R-04-SB-05	R-04-SB-05	R-04-SB-05	R-04-SB-06	R-04-SB-06
Sample ID:	P-029-SB-01B	P-029-SB-01C	P-029-SB-02A	P-029-SB-02B	P-029-SB-02C	P-029-SB-03A	P-029-SB-03B	P-029-SB-03C	P-029-SB-04A	P-029-SB-04B	P-029-SB-04C	P-029-SB-05A	P-029-SB-05B	P-029-SB-05C	P-029-SB-06A	P-029-SB-06B
Sample Date:	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-01	R-04-SB-01	R-04-SB-02	R-04-SB-02	R-04-SB-02	R-04-SB-03	R-04-SB-03	R-04-SB-03	R-04-SB-04	R-04-SB-04	R-04-SB-04	R-04-SB-05	R-04-SB-05	R-04-SB-05	R-04-SB-06	R-04-SB-06
Sample ID:	P-029-SB-01B	P-029-SB-01C	P-029-SB-02A	P-029-SB-02B	P-029-SB-02C	P-029-SB-03A	P-029-SB-03B	P-029-SB-03C	P-029-SB-04A	P-029-SB-04B	P-029-SB-04C	P-029-SB-05A	P-029-SB-05B	P-029-SB-05C	P-029-SB-06A	P-029-SB-06B
Sample Date:	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	13.9	13	15.5	11.8	13	16.7	20.6	12.8	7.4	18.7	24.9	5.9	9.3	12.6	5.9	5.8
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	16.4	51.1	22.5	12.8	21.1	39.3	108	50.4	6.7	73.2	38.4	6.5	19.4	28.5	6.8	5.8
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-06	R-04-SB-06	R-04-SB-07	R-04-SB-07	R-04-SB-07	R-04-SB-08	R-04-SB-08	R-04-SB-08	R-04-SB-09	R-04-SB-10	R-04-SB-10	R-04-SB-10	R-04-SB-11	R-04-SB-11	R-04-SB-11	R-04-SB-12
Sample ID:	P-029-SB-60B	P-029-SB-06C	P-029-SB-07A	P-029-SB-07B	P-029-SB-07C	P-029-SB-08A	P-029-SB-08B	P-029-SB-08C	P-029-SB-09A	P-029-SB-10A	P-029-SB-10B	P-029-SB-10C	P-029-SB-11A	P-029-SB-11B	P-029-SB-11C	P-029-SB-12A
Sample Date:	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-06	R-04-SB-06	R-04-SB-07	R-04-SB-07	R-04-SB-07	R-04-SB-08	R-04-SB-08	R-04-SB-08	R-04-SB-09	R-04-SB-10	R-04-SB-10	R-04-SB-10	R-04-SB-11	R-04-SB-11	R-04-SB-11	R-04-SB-12
Sample ID:	P-029-SB-60B	P-029-SB-06C	P-029-SB-07A	P-029-SB-07B	P-029-SB-07C	P-029-SB-08A	P-029-SB-08B	P-029-SB-08C	P-029-SB-09A	P-029-SB-10A	P-029-SB-10B	P-029-SB-10C	P-029-SB-11A	P-029-SB-11B	P-029-SB-11C	P-029-SB-12A
Sample Date:	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	5.7	6.2	6.8	9.6	16	16.5	19.2	13.4	17.9	14.8	10.7	8.2	13.2	8.7	10.5	9.5
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	5.7	7.4	8	12.5	23.6	27.8	17.6	7.7	26.5	27.8	25	11.4	32.4	7.9	19.7	14.2
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-12	R-04-SB-12	R-04-SB-13	R-04-SB-13	R-04-SB-13	R-04-SB-13	R-04-SB-14	R-04-SB-14	R-04-SB-14	R-04-SB-15	R-04-SB-15	R-04-SB-15	R-04-SB-16	R-04-SB-16	R-04-SB-16	R-04-SB-168
Sample ID:	P-029-SB-12B	P-029-SB-12C	P-029-SB-13A	P-029-SB-13B	P-029-SB-61B	P-029-SB-13C	P-029-SB-14A	P-029-SB-14B	P-029-SB-14C	P-029-SB-15A	P-029-SB-15B	P-029-SB-15C	P-029-SB-16A	P-029-SB-16B	P-029-SB-16C	SB-168A
Sample Date:	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/11/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-12	R-04-SB-12	R-04-SB-13	R-04-SB-13	R-04-SB-13	R-04-SB-13	R-04-SB-14	R-04-SB-14	R-04-SB-14	R-04-SB-15	R-04-SB-15	R-04-SB-15	R-04-SB-16	R-04-SB-16	R-04-SB-16	R-04-SB-168
Sample ID:	P-029-SB-12B	P-029-SB-12C	P-029-SB-13A	P-029-SB-13B	P-029-SB-61B	P-029-SB-13C	P-029-SB-14A	P-029-SB-14B	P-029-SB-14C	P-029-SB-15A	P-029-SB-15B	P-029-SB-15C	P-029-SB-16A	P-029-SB-16B	P-029-SB-16C	SB-168A
Sample Date:	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/11/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	9.8	23.8	10.5	11.9	11.7	11	12.2	23.5	13.3	9.8	16.3	14	13	21.8	16.2	25.1
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	9.1	20.1	17.4	15.8	17.7	15.4	32.4	80.6	48.3	12.8	36.9	16.3	87.1	164	18.3	69.3
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-169	R-04-SB-169	R-04-SB-169	R-04-SB-17	R-04-SB-17	R-04-SB-17	R-04-SB-170	R-04-SB-171	R-04-SB-171	R-04-SB-172	R-04-SB-173	R-04-SB-173	R-04-SB-173	R-04-SB-18	R-04-SB-18	R-04-SB-18
Sample ID:	SB-169A	SB-169B	SB-169C	P-029-SB-17A	P-029-SB-17B	P-029-SB-17C	SB-170A	SB-171A	SB-171B	SB-172A	SB-173A	SB-173B	SB-173C	P-029-SB-18A	P-029-SB-18B	P-029-SB-18C
Sample Date:	11/11/2010	11/11/2010	11/11/2010	11/1/2010	11/1/2010	11/1/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/1/2010	11/1/2010	11/1/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-169	R-04-SB-169	R-04-SB-169	R-04-SB-17	R-04-SB-17	R-04-SB-17	R-04-SB-170	R-04-SB-171	R-04-SB-171	R-04-SB-172	R-04-SB-173	R-04-SB-173	R-04-SB-173	R-04-SB-18	R-04-SB-18	R-04-SB-18
Sample ID:	SB-169A	SB-169B	SB-169C	P-029-SB-17A	P-029-SB-17B	P-029-SB-17C	SB-170A	SB-171A	SB-171B	SB-172A	SB-173A	SB-173B	SB-173C	P-029-SB-18A	P-029-SB-18B	P-029-SB-18C
Sample Date:	11/11/2010	11/11/2010	11/11/2010	11/1/2010	11/1/2010	11/1/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/11/2010	11/1/2010	11/1/2010	11/1/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	4.8	9.8	7.5	13.9	8.2	7	21.5	27	3.9	39.3	51.6	15.3	15.2	18.3	10.2	7.4
Chromium, Hexavalent								31 U		12 U	26 U					
Cobalt																
Copper																
Cyanide																
Iron																
Lead	9.4	18	17.7	41.3	11.9	5.4	101	124	5	92.2	171	86.6	53.4	28	9.4	5.6
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-19	R-04-SB-19	R-04-SB-19	R-04-SB-20	R-04-SB-20	R-04-SB-20	R-04-SB-21	R-04-SB-21	R-04-SB-21	R-04-SB-22	R-04-SB-22	R-04-SB-22	R-04-SB-22	R-04-SB-23	R-04-SB-23	R-04-SB-23
Sample ID:	P-029-SB-19A	P-029-SB-19B	P-029-SB-19C	P-029-SB-20A	P-029-SB-20B	P-029-SB-20C	P-029-SB-21A	P-029-SB-21B	P-029-SB-21C	P-029-SB-22A	P-029-SB-62A	P-029-SB-22B	P-029-SB-22C	P-029-SB-23A	P-029-SB-23B	P-029-SB-23C
Sample Date:	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-19	R-04-SB-19	R-04-SB-19	R-04-SB-20	R-04-SB-20	R-04-SB-20	R-04-SB-21	R-04-SB-21	R-04-SB-21	R-04-SB-22	R-04-SB-22	R-04-SB-22	R-04-SB-22	R-04-SB-23	R-04-SB-23	R-04-SB-23
Sample ID:	P-029-SB-19A	P-029-SB-19B	P-029-SB-19C	P-029-SB-20A	P-029-SB-20B	P-029-SB-20C	P-029-SB-21A	P-029-SB-21B	P-029-SB-21C	P-029-SB-22A	P-029-SB-62A	P-029-SB-22B	P-029-SB-22C	P-029-SB-23A	P-029-SB-23B	P-029-SB-23C
Sample Date:	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	13.7	11.1	6.3	12.6	5.9	9.5	9	5.3	10.9	10.2	10.1	10.9	6	8.6	5.9	6.6
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	18	22	5.7	14.4	6.3	25.3	11.9	5.6	21.4	18.8	17.8	12.3	13.6	13.1	8.1	41.1
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-24	R-04-SB-24	R-04-SB-24	R-04-SB-25	R-04-SB-25	R-04-SB-25	R-04-SB-25	R-04-SB-26	R-04-SB-26	R-04-SB-26	R-04-SB-27	R-04-SB-28	R-04-SB-29	R-04-SB-29	R-04-SB-29	R-04-SB-30
Sample ID:	P-029-SB-24A	P-029-SB-24B	P-029-SB-24C	P-029-SB-25A	P-029-SB-63A	P-029-SB-25B	P-029-SB-25C	P-029-SB-26A	P-029-SB-26B	P-029-SB-26C	P-029-SB-27A	P-029-SB-28A	P-029-SB-29A	P-029-SB-29B	P-029-SB-29C	P-029-SB-30A
Sample Date:	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-24	R-04-SB-24	R-04-SB-24	R-04-SB-25	R-04-SB-25	R-04-SB-25	R-04-SB-25	R-04-SB-26	R-04-SB-26	R-04-SB-26	R-04-SB-27	R-04-SB-28	R-04-SB-29	R-04-SB-29	R-04-SB-29	R-04-SB-30
Sample ID:	P-029-SB-24A	P-029-SB-24B	P-029-SB-24C	P-029-SB-25A	P-029-SB-63A	P-029-SB-25B	P-029-SB-25C	P-029-SB-26A	P-029-SB-26B	P-029-SB-26C	P-029-SB-27A	P-029-SB-28A	P-029-SB-29A	P-029-SB-29B	P-029-SB-29C	P-029-SB-30A
Sample Date:	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	8.6	9	8.2	8.7	9.6	13.6	11.3	15.4	12.5	22.8	14.7	18.5	15	6.5	5.4	13.5
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	20.4	23.3	14.2	36.4	36.6	59.9	35.1	21.4	23.9	91.2	20.3	18.8	14.7	6.6	5.1	16.1
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-30	R-04-SB-30	R-04-SB-31	R-04-SB-31	R-04-SB-31	R-04-SB-31	R-04-SB-32	R-04-SB-32	R-04-SB-32	R-04-SB-33	R-04-SB-33	R-04-SB-33	R-04-SB-34	R-04-SB-34	R-04-SB-34	R-04-SB-35
Sample ID:	P-029-SB-30B	P-029-SB-30C	P-029-SB-31A	P-029-SB-31B	P-029-SB-64B	P-029-SB-31C	P-029-SB-32A	P-029-SB-32B	P-029-SB-32C	P-029-SB-33A	P-029-SB-33B	P-029-SB-33C	P-029-SB-34A	P-029-SB-34B	P-029-SB-34C	P-029-SB-35A
Sample Date:	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-30	R-04-SB-30	R-04-SB-31	R-04-SB-31	R-04-SB-31	R-04-SB-31	R-04-SB-32	R-04-SB-32	R-04-SB-32	R-04-SB-33	R-04-SB-33	R-04-SB-33	R-04-SB-34	R-04-SB-34	R-04-SB-34	R-04-SB-35
Sample ID:	P-029-SB-30B	P-029-SB-30C	P-029-SB-31A	P-029-SB-31B	P-029-SB-64B	P-029-SB-31C	P-029-SB-32A	P-029-SB-32B	P-029-SB-32C	P-029-SB-33A	P-029-SB-33B	P-029-SB-33C	P-029-SB-34A	P-029-SB-34B	P-029-SB-34C	P-029-SB-35A
Sample Date:	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	8.5	9.6	14.2	7.7	8	11.4	13	8.3	10.1	9	8.5	9.2	9.4	11	10.4	11.7
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	7.4	11.8	25.4	6.8	7.1	12.3	15.8	9.2	8.7	10.6	8	8.2	16.3	20.7	23.3	56.6
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-35	R-04-SB-35	R-04-SB-36	R-04-SB-36	R-04-SB-36	R-04-SB-37	R-04-SB-37	R-04-SB-37	R-04-SB-37	R-04-SB-38	R-04-SB-39	R-04-SB-40	R-04-SB-41	R-04-SB-41	R-04-SB-41	R-04-SB-42
Sample ID:	P-029-SB-35B	P-029-SB-35C	P-029-SB-36A	P-029-SB-36B	P-029-SB-36C	P-029-SB-37A	P-029-SB-66A	P-029-SB-37B	P-029-SB-37C	P-029-SB-38A	P-029-SB-39A	P-029-SB-40A	P-029-SB-41A	P-029-SB-41B	P-029-SB-41C	P-029-SB-42A
Sample Date:	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-35	R-04-SB-35	R-04-SB-36	R-04-SB-36	R-04-SB-36	R-04-SB-37	R-04-SB-37	R-04-SB-37	R-04-SB-37	R-04-SB-38	R-04-SB-39	R-04-SB-40	R-04-SB-41	R-04-SB-41	R-04-SB-41	R-04-SB-42
Sample ID:	P-029-SB-35B	P-029-SB-35C	P-029-SB-36A	P-029-SB-36B	P-029-SB-36C	P-029-SB-37A	P-029-SB-66A	P-029-SB-37B	P-029-SB-37C	P-029-SB-38A	P-029-SB-39A	P-029-SB-40A	P-029-SB-41A	P-029-SB-41B	P-029-SB-41C	P-029-SB-42A
Sample Date:	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	10.7	16.1	16.8	12	6	8.3	13	12.5	13.1	10.4	16.4	16.4	11.4	8.7	7.4	13.6
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	33.3	43.7	54.8	28	6.7	22.6	31.7	37.2	52.6	15.7	17.3	16.3	13	6.2	4.6	15.5
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-42	R-04-SB-42	R-04-SB-43	R-04-SB-43	R-04-SB-43	R-04-SB-43	R-04-SB-44	R-04-SB-44	R-04-SB-44	R-04-SB-45	R-04-SB-45	R-04-SB-45	R-04-SB-46	R-04-SB-46	R-04-SB-46	R-04-SB-47
Sample ID:	P-029-SB-42B	P-029-SB-42C	P-029-SB-43A	P-029-SB-43B	P-029-SB-65B	P-029-SB-43C	P-029-SB-44A	P-029-SB-44B	P-029-SB-44C	P-029-SB-45A	P-029-SB-45B	P-029-SB-45C	P-029-SB-46A	P-029-SB-46B	P-029-SB-46C	P-029-SB-47A
Sample Date:	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-42	R-04-SB-42	R-04-SB-43	R-04-SB-43	R-04-SB-43	R-04-SB-43	R-04-SB-44	R-04-SB-44	R-04-SB-44	R-04-SB-45	R-04-SB-45	R-04-SB-45	R-04-SB-46	R-04-SB-46	R-04-SB-46	R-04-SB-47
Sample ID:	P-029-SB-42B	P-029-SB-42C	P-029-SB-43A	P-029-SB-43B	P-029-SB-65B	P-029-SB-43C	P-029-SB-44A	P-029-SB-44B	P-029-SB-44C	P-029-SB-45A	P-029-SB-45B	P-029-SB-45C	P-029-SB-46A	P-029-SB-46B	P-029-SB-46C	P-029-SB-47A
Sample Date:	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	7.9	11.2	11.8	15.1	9.9	7.1	13.2	7.2	9	7.9	9.2	5.5	10.6	6.6	6.7	11.6
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	13.4	25.1	14	7.7	7.4	6.1	13.8	7.2	4.9	11.3	10.9	9.7	17.6	7.2	6.2	44.9
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-47	R-04-SB-47	R-04-SB-48	R-04-SB-48	R-04-SB-48	R-04-SB-48	R-04-SB-49	R-04-SB-50	R-04-SB-51	R-04-SB-52	R-05 SB-135	R-05-SB-01	R-05-SB-01	R-05-SB-01	R-05-SB-02	R-05-SB-02
Sample ID:	P-029-SB-47B	P-029-SB-47C	P-029-SB-48A	P-029-SB-48B	P-029-SB-48C	P-029-SB-67C	P-029-SB-49A	P-029-SB-50A	P-029-SB-51A	P-029-SB-52A	SB-135A	P-027-SB-01A	P-027-SB-01B	P-027-SB-01C	P-027-SB-02A	P-027-SB-02B
Sample Date:	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/10/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-04-SB-47	R-04-SB-47	R-04-SB-48	R-04-SB-48	R-04-SB-48	R-04-SB-48	R-04-SB-49	R-04-SB-50	R-04-SB-51	R-04-SB-52	R-05 SB-135	R-05-SB-01	R-05-SB-01	R-05-SB-01	R-05-SB-02	R-05-SB-02
Sample ID:	P-029-SB-47B	P-029-SB-47C	P-029-SB-48A	P-029-SB-48B	P-029-SB-48C	P-029-SB-67C	P-029-SB-49A	P-029-SB-50A	P-029-SB-51A	P-029-SB-52A	SB-135A	P-027-SB-01A	P-027-SB-01B	P-027-SB-01C	P-027-SB-02A	P-027-SB-02B
Sample Date:	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/10/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	7.5	12	13.7	14.2	6.3	4.5	11.8	10	8.5	10.2	6420	13.5	8.8	8.7	11.4	10.1
Chromium, Hexavalent											44					
Cobalt																
Copper																
Cyanide																
Iron																
Lead	10.2	15.1	45.6	55.9	11.8	8.5	13.4	12.3	22.7	20.6	60.5	18.2	4.1	21.4	21.6	18.9
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-05-SB-02	R-05-SB-03	R-05-SB-03	R-05-SB-03	R-05-SB-03	R-05-SB-04	R-05-SB-04	R-05-SB-04	R-05-SB-05	R-05-SB-05	R-05-SB-05	R-05-SB-06	R-05-SB-06	R-05-SB-06	R-05-SB-06	R-05-SB-07
Sample ID:	P-027-SB-02C	P-027-SB-03A	P-027-SB-03B	P-027-SB-11B	P-027-SB-03C	P-027-SB-04A	P-027-SB-04B	P-027-SB-04C	P-027-SB-05A	P-027-SB-05B	P-027-SB-05C	P-027-SB-06A	P-027-SB-10A	P-027-SB-06B	P-027-SB-06C	P-027-SB-07A
Sample Date:	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-05-SB-02	R-05-SB-03	R-05-SB-03	R-05-SB-03	R-05-SB-03	R-05-SB-04	R-05-SB-04	R-05-SB-04	R-05-SB-05	R-05-SB-05	R-05-SB-05	R-05-SB-06	R-05-SB-06	R-05-SB-06	R-05-SB-06	R-05-SB-07
Sample ID:	P-027-SB-02C	P-027-SB-03A	P-027-SB-03B	P-027-SB-11B	P-027-SB-03C	P-027-SB-04A	P-027-SB-04B	P-027-SB-04C	P-027-SB-05A	P-027-SB-05B	P-027-SB-05C	P-027-SB-06A	P-027-SB-10A	P-027-SB-06B	P-027-SB-06C	P-027-SB-07A
Sample Date:	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	7.4	11.2	9.5	8.5	11.4	12.3	11.6	11.9	15.6	9	7.8	9.7	8.4	11.4	9.4	8
Chromium, Hexavalent																
Cobalt																
Copper																
Cyanide																
Iron																
Lead	17.3	23.1	13.5	12.5	80.7	96	90.6	225	22.3	17	12.2	92.1	69.7	35.3	28.2	14.4
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-05-SB-07	R-05-SB-07	R-05-SB-08	R-05-SB-08	R-05-SB-08	R-05-SB-136	R-05-SB-140	R-05-SB-140	R-05-SB-140	R-05-SB-141	R-05-SB-141	R-05-SB-141	R-05-SB-144	R-05-SB-144	R-05-SB-144	R-05-SB-145
Sample ID:	P-027-SB-07B	P-027-SB-07C	P-027-SB-08A	P-027-SB-08B	P-027-SB-08C	SB-136A	SB-140A	SB-140B	SB-140C	SB-141A	SB-141B	SB-141C	SB-144A	SB-144B	SB-144C	SB-145A
Sample Date:	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-05-SB-07	R-05-SB-07	R-05-SB-08	R-05-SB-08	R-05-SB-08	R-05-SB-136	R-05-SB-140	R-05-SB-140	R-05-SB-140	R-05-SB-141	R-05-SB-141	R-05-SB-141	R-05-SB-144	R-05-SB-144	R-05-SB-144	R-05-SB-145
Sample ID:	P-027-SB-07B	P-027-SB-07C	P-027-SB-08A	P-027-SB-08B	P-027-SB-08C	SB-136A	SB-140A	SB-140B	SB-140C	SB-141A	SB-141B	SB-141C	SB-144A	SB-144B	SB-144C	SB-145A
Sample Date:	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	8	7.9	8.2	7	8	12100	4420	115	77.6	15500	2830	892	285	103	35	44.9
Chromium, Hexavalent						28 U	23 U	1.1 U	12 U	13	210	23	2.5 U	1.2	0.4 U	4.6
Cobalt																
Copper																
Cyanide																
Iron																
Lead	40.8	20.4	23.7	9.3	23	133	91.9	11.9	7	227	27.9	16.2	86.2	7.2	2.6	817
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-05-SB-145	R-05-SB-145	R-05-SB-148	R-05-SB-148	R-05-SB-148	R-05-SB-149	R-05-SB-149	R-05-SB-149	R-05-SB-149	R-05-SB-150	R-05-SB-150	R-05-SB-150	R-05-SB-152	R-05-SB-152	R-05-SB-152	R-05-SB-153
Sample ID:	SB-145B	SB-145C	SB-148A	SB-148B	SB-148C	SB-149A	SB-233A	SB-149B	SB-149C	SB-150A	SB-150B	SB-150C	SB-152A	SB-152B	SB-152C	SB-153A
Sample Date:	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-05-SB-145	R-05-SB-145	R-05-SB-148	R-05-SB-148	R-05-SB-148	R-05-SB-149	R-05-SB-149	R-05-SB-149	R-05-SB-149	R-05-SB-150	R-05-SB-150	R-05-SB-150	R-05-SB-152	R-05-SB-152	R-05-SB-152	R-05-SB-153
Sample ID:	SB-145B	SB-145C	SB-148A	SB-148B	SB-148C	SB-149A	SB-233A	SB-149B	SB-149C	SB-150A	SB-150B	SB-150C	SB-152A	SB-152B	SB-152C	SB-153A
Sample Date:	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium	5.9	7.3	17.8	10.2	501	14	33	30.6	6.4	23.1	5.1	4.6	10.7	22.9	141	7.8
Chromium, Hexavalent					3	9.1	6.6 U	1.6							5.4	
Cobalt																
Copper																
Cyanide																
Iron																
Lead	13.2	9.4	58.3	29.5	7.5	61.4	91.5	13.6	2.5	807	22	52.2	57.6	12	3.8	43.8
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-05-SB-153	R-05-SB-153	R-05-SB-154	R-05-SB-154	R-05-SB-154	R-05-SB-154	R-05-SB-155	R-05-SB-155	R-05-SB-155	R-05-SB-156	R-05-SB-156	R-05-SB-156	R-05-SB-F1	R-05-SB-F1	R-05-SB-F1	R-05-SB-F2
Sample ID:	SB-153B	SB-153C	SB-154A	SB-154B	SB-229B-Ph2	SB-154C	SB-155A	SB-155B	SB-155C	SB-156A	SB-156B	SB-156C	P-027-SB-F1A	P-027-SB-F1B	P-027-SB-F1C	P-027-SB-F2A
Sample Date:	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	3/9/2011	3/9/2011	3/9/2011	3/9/2011
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-05-SB-153	R-05-SB-153	R-05-SB-154	R-05-SB-154	R-05-SB-154	R-05-SB-154	R-05-SB-155	R-05-SB-155	R-05-SB-155	R-05-SB-156	R-05-SB-156	R-05-SB-156	R-05-SB-F1	R-05-SB-F1	R-05-SB-F1	R-05-SB-F2
Sample ID:	SB-153B	SB-153C	SB-154A	SB-154B	SB-229B-Ph2	SB-154C	SB-155A	SB-155B	SB-155C	SB-156A	SB-156B	SB-156C	P-027-SB-F1A	P-027-SB-F1B	P-027-SB-F1C	P-027-SB-F2A
Sample Date:	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	11/10/2010	3/9/2011	3/9/2011	3/9/2011	3/9/2011
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum													8600	6400	4500	7000
Antimony													2.0 U	2.0 U	2.0 U	2.0 U
Arsenic													3.9	2.2	2.0 U	2.2
Barium													32	24	16	25
Beryllium													0.78 U	0.80 U	0.80 U	0.78 U
Cadmium													0.98 U	1.0 U	1.0 U	0.98 U
Calcium													1100	800	870	880
Chromium	5.8	1.3	32.4	12.1	10.5	10	86.2	7.4	5.4	67.8	174	5.9	37	12	7.7	23
Chromium, Hexavalent			6.9 U				6.2 U			9.6 U	18 U					
Cobalt													2.6	3.4	2.8	2.3
Copper													41	9.6	6.4	8.9
Cyanide																
Iron													11000	10000	8500	9300
Lead	13.1	2.1	50.8	35.1	32.7	27.5	504	11.8	5.9	28.4	39.8	9	38	11	3.8	23
Magnesium													1700	1600	1500	1400
Manganese													200	180	150	160
Mercury																
Nickel													6.7	7.0	6.1	5.9
Potassium													390	450	460	390
Selenium													2.0 U	2.0 U	2.0 U	2.0 U
Silver													0.98 U	1.0 U	1.0 U	0.98 U
Sodium													53	45	35	56
Thallium													3.9 U	4.0 U	4.0 U	3.9 U
Vanadium													20	17	14	16
Zinc													40	26	16	31
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-05-SB-F2	R-05-SB-F2	R-06-SB-01	R-06-SB-02	R-06-SB-03	R-06-SB-04	R-06-SB-05	R-06-SB-06	R-06-SB-07	R-06-SB-08	R-06-SB-09	R-06-SB-10	R-06-SB-11	R-06-SB-11	R-06-SB-11	R-06-SB-12
Sample ID:	P-027-SB-F2B	P-027-SB-F2C	P-060-SB-01A	P-060-SB-02A	P-060-SB-03A	P-060-SB-04A	P-060-SB-05A	P-060-SB-06A	P-060-SB-07A	P-060-SB-08A	P-060-SB-09A	P-060-SB-10A	P-060-SB-11A	P-060-SB-11B	P-060-SB-11C	P-060-SB-12A
Sample Date:	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-05-SB-F2	R-05-SB-F2	R-06-SB-01	R-06-SB-02	R-06-SB-03	R-06-SB-04	R-06-SB-05	R-06-SB-06	R-06-SB-07	R-06-SB-08	R-06-SB-09	R-06-SB-10	R-06-SB-11	R-06-SB-11	R-06-SB-11	R-06-SB-12
Sample ID:	P-027-SB-F2B	P-027-SB-F2C	P-060-SB-01A	P-060-SB-02A	P-060-SB-03A	P-060-SB-04A	P-060-SB-05A	P-060-SB-06A	P-060-SB-07A	P-060-SB-08A	P-060-SB-09A	P-060-SB-10A	P-060-SB-11A	P-060-SB-11B	P-060-SB-11C	P-060-SB-12A
Sample Date:	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/9/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum	3800	3900	14000	15000	14000	12000	14000	15000	13000	14000	12000	13000	14000	14000	14000	14000
Antimony	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Arsenic	2.0 U	2.0 U	5.0	5.6	3.1	3.8	4.1	3.9	3.0	3.6	3.5	3.1	4.2	3.6	4.2	3.1
Barium	12	12	58 J1	36	22	39	29	29	23	23	30	27	31	29	33	25
Beryllium	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.78 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U	0.82 U	0.82 U	0.82 U
Cadmium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.98 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	740	770	1000	1000	1200	1100	990	740	1100	780	1100	1000	3400	2400	2800	1200
Chromium	8.5	8.1	16	18	14	14	14	17	13	16	12	13	17	17	17	15
Chromium, Hexavalent														0.91 U	1.0 U	
Cobalt	2.3	2.2	3.1	3.3	4.1	2.9	3.1	3.0	3.2	3.1	2.9	2.9	3.2	3.4	3.1	2.6
Copper	5.3	4.9	15	18	9.1	14	12	11	9.1	13	12	11	12	11	14	12
Cyanide																
Iron	7700	8600	13000	13000	14000	11000	13000	13000	12000	13000	11000	12000	14000	14000	14000	13000
Lead	3.8	2.7	190 J1	120	25	59	60	47	25	54	54	49	31	26	32	39
Magnesium	1300	1300	1800	1800	2400	1700	1900	1600	1700	1900	1600	1800	2600	1900	1900	1800
Manganese	130	130	170	160 J3	150	150	160	160	130	160	140	150	200	180	210	150
Mercury																
Nickel	5.3	5.2	7.7	8.4	7.7	7.3	7.7	7.3	7.2	7.5	7.2	7.3	8.8	7.6	7.5	7.4
Potassium	400	390	460	550	510	450	440	410	540	470	520	530	660	560	590	550
Selenium	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U
Silver	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.98 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Sodium	36	33	52	52	49	45	140	42	47	44	42	43	54	51	53	48
Thallium	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.1 U	4.1 U	4.1 U
Vanadium	13	15	29	30	27	24	26	26	25	27	24	23	31	27	26	27
Zinc	14	13	47	52	29	39	38	32	28	36	37	36	40	32	39	33
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-06-SB-12	R-06-SB-12	R-06-SB-13	R-06-SB-13	R-06-SB-14	R-06-SB-14	R-06-SB-14	R-06-SB-15	R-06-SB-15	R-06-SB-15	R-07/P-5F-SB-01	R-07/P-5F-SB-01	R-07/P-5F-SB-01	R-07/P-5F-SB-01	R-07/P-5F-SB-02	R-08/PF-30F-SB-01
Sample ID:	P-060-SB-12B	P-060-SB-12C	P-060-SB-13A	P-060-SB-13B	P-060-SB-14A	P-060-SB-14B	P-060-SB-14C	P-060-SB-15A	P-060-SB-15B	P-060-SB-15C	P-05F-SB-01A	P-05F-SB-10A	P-05F-SB-01B	P-05F-SB-01C	P-05F-SB-02A	P-30F-SB-01A
Sample Date:	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	12/17/2010	12/17/2010	12/17/2010	12/17/2010	12/17/2010	12/17/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-06-SB-12	R-06-SB-12	R-06-SB-13	R-06-SB-13	R-06-SB-14	R-06-SB-14	R-06-SB-14	R-06-SB-15	R-06-SB-15	R-06-SB-15	R-07/P-5F-SB-01	R-07/P-5F-SB-01	R-07/P-5F-SB-01	R-07/P-5F-SB-01	R-07/P-5F-SB-02	R-08/PF-30F-SB-01
Sample ID:	P-060-SB-12B	P-060-SB-12C	P-060-SB-13A	P-060-SB-13B	P-060-SB-14A	P-060-SB-14B	P-060-SB-14C	P-060-SB-15A	P-060-SB-15B	P-060-SB-15C	P-05F-SB-01A	P-05F-SB-10A	P-05F-SB-01B	P-05F-SB-01C	P-05F-SB-02A	P-30F-SB-01A
Sample Date:	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	3/17/2011	12/17/2010	12/17/2010	12/17/2010	12/17/2010	12/17/2010	12/17/2010
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum	15000	8800	6000	9700	14000	6100	7100	14000	4600	8200	8360	9210	6560	5740	7030	6190
Antimony	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.4	2.0 U	2.0 U	2.0 U	6.4 U	7.5 U	5.4 U	4.9 U	7.3 U	0.50 J
Arsenic	3.2	3.2	4.3	6.7	3.6	2.2	5.2	3.5	2.0 U	4.3	3.6	4.5	2.1	2.1	3.6	4.9
Barium	26	37	29	38	33	25	63	46	17	360	49.4	56.7	22.4	19.9	44.3	37.7
Beryllium	0.80 U	0.80 U	0.82 U	0.80 U	0.78 U	0.78 U	0.80 U	0.80 U	0.78 U	0.80 U	0.41 J	0.48 J	0.33 J	0.36 J	0.31 J	0.54 J
Cadmium	1.0 U	1.0 U	1.0 U	1.0 U	0.98 U	0.98 U	1.0 U	1.0 U	0.98 U	1.0 U	0.80	0.84	0.50	0.44	0.63	0.52 J
Calcium	1100	1600	2400	1200	1200	940	1300	1200	580	7300	4790	5200	1450	1260	8480	1060
Chromium	15	13	14	19	16	18	26	16	5.4	14	17.9	21.6	10.8	9.7	21.4	11.2
Chromium, Hexavalent						0.88 U	0.87 U									
Cobalt	3.2	3.5	2.0 U	3.6	3.3	2.7	3.9	3.2	2.1	4.1	4.6 J	4.8 J	4.6	4.6	4.3 J	3.6 J
Copper	8.7	110	23	87	17	24	49	14	5.5	58	19.5	22.1	10.2	11.8	19.3	21.5
Cyanide											0.15 J	0.19 J	0.54 U	0.31 J	0.27 J	0.16 J
Iron	14000	11000	10000	13000	15000	12000	16000	14000	8000	12000	12900	15100	11800	10600	11500	9830
Lead	17	89	120	370	110	320	580	58	6.7	85	39.3	42.7	15.3	12.4	52.6	91.6
Magnesium	1900	1700	1300	1700	1800	2100	2000	2000	770	3000	2040	2300	2130	1930	2800	1390
Manganese	170	180	140	210	230	180	340	190	100	220	297	349	250	240	286	171
Mercury											0.050 J	0.050 J	0.010 J	0.11 U	0.040 J	0.090 J
Nickel	8.0	9.9	6.0	9.7	8.4	12	13	8.3	3.5	11	9.7	11.6	7.8	7.5	9.5	6.9
Potassium	480	500	550	540	590	490	680	510	380	570	517 J	609 J	340 J	303 J	458 J	379 J
Selenium	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.5 J	2.5 J	1.6 J	1.7 J	2.3 J	2.0 J
Silver	1.0 U	3.5	1.0 U	2.2	0.98 U	0.98 U	1.0 U	1.0 U	0.98 U	1.0	1.1 U	1.2 U	0.89 U	0.82 U	1.2 U	1.2 U
Sodium	48	56	53	52	54	45	59	47	30	62	164 J	166 J	98.8 J	96.6 J	202 J	71.0 J
Thallium	4.0 U	4.0 U	4.1 U	4.0 U	3.9 U	3.9 U	4.0 U	4.0 U	3.9 U	4.0 U	2.7 U	3.1 U	2.2 U	2.1 U	3.0 U	2.9 U
Vanadium	29	17	14	23	29	16	26	27	11	20	19.0	20.3	13.6	11.9	16.3	16.4
Zinc	27	66	46	70	51	40	140	52	15	250	109	123	48.4	43.8	89.8	75.1
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-08/PF-30F-SB-01	R-08/PF-30F-SB-01	R-08/PF-30F-SB-02	R-08/PF-30F-SB-02	R-08/PF-30F-SB-02	SB-204	SB-204	SB-207	SB-207	SB-207	SB-207	SB-21	SB-21	SB-21	SB-21	SB-214
Sample ID:	P-30F-SB-01B	P-30F-SB-01C	P-30F-SB-02A	P-30F-SB-02B	P-30F-SB-02C	SB-204A	SB-204B	SB-207A	SB-207B	SB-274B	SB-207C	SB-21A	SB-21B	SB-21C	SS-21	SB-214A
Sample Date:	12/17/2010	12/17/2010	12/17/2010	12/17/2010	12/17/2010	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	8/10/2010	8/10/2010	8/10/2010	8/10/2010	6/6/2011
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2.5 (ft bgs)	3.5-4 (ft bgs)	0-4 (ft bgs)	0.5-1 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane								730 U	180 U		97 U					680 U
1,1-Dichloroethane								730 U	180 U		97 U					680 U
2-Butanone								730 U	180 U		97 U					680 U
2-Hexanone								730 U	180 U		97 U					680 U
4-Methyl-2-Pentanone								730 U	180 U		97 U					680 U
Acetone								730 U	180 U		97 U					680 U
Carbon Disulfide								730 U	180 U		97 U					680 U
Chloroethane								730 U	180 U		97 U					680 U
Chloroform								730 U	180 U		97 U					680 U
cis-1,2-Dichloroethene								730 U	180 U		97 U					680 U
Ethylbenzene								730 U	180 U		97 U					680 U
m,p-Xylene								1500 U	370 U		190 U					1400 U
Methyl acetate																
Methylene Chloride								730 U	180 U		97 U					680 U
Naphthalene								730 U	180 U		97 U					680 U
Tetrachloroethene								730 U	180 U		97 U					680 U
Toluene								730 U	180 U		97 U					680 U
Trichloroethene								730 U	180 U		97 U					680 U
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	R-08/PF-30F-SB-01	R-08/PF-30F-SB-01	R-08/PF-30F-SB-02	R-08/PF-30F-SB-02	R-08/PF-30F-SB-02	SB-204	SB-204	SB-207	SB-207	SB-207	SB-207	SB-21	SB-21	SB-21	SB-21	SB-214
Sample ID:	P-30F-SB-01B	P-30F-SB-01C	P-30F-SB-02A	P-30F-SB-02B	P-30F-SB-02C	SB-204A	SB-204B	SB-207A	SB-207B	SB-274B	SB-207C	SB-21A	SB-21B	SB-21C	SS-21	SB-214A
Sample Date:	12/17/2010	12/17/2010	12/17/2010	12/17/2010	12/17/2010	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	8/10/2010	8/10/2010	8/10/2010	8/10/2010	6/6/2011
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2.5 (ft bgs)	3.5-4 (ft bgs)	0-4 (ft bgs)	0.5-1 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260												90 U	90 U		100 U	
Inorganics (mg/kg)																
Aluminum	6550	6380	7880	8240	6000	10000		17000						8800		
Antimony	0.32 J	5.6 U	5.1 U	0.34 J	4.7 U	16 U		51 U						10 U		
Arsenic	7.6	5.7	7.2	44.0	2.7	16 U		51 U						2.0 U		
Barium	48.1	19.1	26.0	27.7	15.2 J	95		390						24		
Beryllium	0.37 J	0.33 J	0.44	0.33 J	0.29 J	6.5 U		20 U						0.80 U		
Cadmium	0.61	0.48	0.52	0.58	0.34 J	8.2 U		26 U						2.0 U		
Calcium	1520	1060	988	1060	507	4100		6500						620		
Chromium	14.8	12.7	17.9	26.8	8.9	4900		15000						1300		
Chromium, Hexavalent						8.1	1.2 U	4.2 U	2.0 U	1.5 U	1.3 U					3.5 U
Cobalt	3.8 J	4.0 J	3.5 J	3.4 J	3.8 J	16 U		140						3.2		
Copper	19.9	9.6	13.4	22.0	5.9	83		2000						56		
Cyanide	0.11 J	0.57 U	0.58 U	0.12 J	0.54 U											
Iron	10900	10800	11000	11300	9450	18000		36000						11000		
Lead	84.8	19.7	33.7	33.3	7.8	75		830						27		
Magnesium	1530	1440	1290	1410	1390	960		4200						1700		
Manganese	203	160	177	156	142	170		780						140		
Mercury	0.11 J	0.040 J	0.050 J	0.060 J	0.020 J											
Nickel	7.8	7.1	6.9	7.0	6.9	28		260						7.6		
Potassium	522	247 J	266 J	250 J	219 J	410		1600						530		
Selenium	1.9 J	1.6 J	2.0 J	1.9 J	1.5 J	16 U		51 U						4.0 U		
Silver	0.81 U	0.93 U	0.85 U	0.89 U	0.78 U	8.5		700						1.0 U		
Sodium	72.6 J	82.6 J	86.0 J	85.9 J	68.0 J	1100		1500						35		
Thallium	2.0 U	2.3 U	2.1 U	2.2 U	1.9 U	16 U		51 U						2.0 U		
Vanadium	16.6	14.2	16.6	18.3	12.6	41 U		130 U						16		
Zinc	80.5	36.5	53.2	60.8	27.7	71		1000						56		
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-214	SB-214	SB-215	SB-215	SB-215	SB-216	SB-216	SB-216	SB-217	SB-22	SB-22	SB-221	SB-221	SB-221	SB-222	SB-223
Sample ID:	SB-214B	SB-214C	SB-215A	SB-215B	SB-215C	SB-216A	SB-216B	SB-216C	SB-217A	SS-22	SS-53	SB-221A	SB-221B	SB-221C	SB-222A	SB-223A
Sample Date:	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	8/10/2010	8/10/2010	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.5-1 (ft bgs)	0.5-1 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane	140 U	89 U										92 U	63 U	110 U		
1,1-Dichloroethane	140 U	89 U										92 U	63 U	110 U		
2-Butanone	140 U	89 U										92 U	63 U	110 U		
2-Hexanone	140 U	89 U										92 U	63 U	110 U		
4-Methyl-2-Pentanone	140 U	89 U										92 U	63 U	110 U		
Acetone	140 U	89 U										92 U	63 U	110 U		
Carbon Disulfide	140 U	89 U										92 U	63 U	110 U		
Chloroethane	140 U	89 U										92 U	63 U	110 U		
Chloroform	140 U	89 U										92 U	63 U	110 U		
cis-1,2-Dichloroethene	140 U	89 U										92 U	63 U	110 U		
Ethylbenzene	140 U	89 U										92 U	63 U	110 U		
m,p-Xylene	270 U	180 U										180 U	130 U	210 U		
Methyl acetate																
Methylene Chloride	140 U	89 U										92 U	63 U	110 U		
Naphthalene	140 U	89 U										92 U	63 U	110 U		
Tetrachloroethene	140 U	89 U										92 U	63 U	110 U		
Toluene	140 U	89 U										92 U	63 U	110 U		
Trichloroethene	140 U	89 U										92 U	63 U	110 U		
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-214	SB-214	SB-215	SB-215	SB-215	SB-216	SB-216	SB-216	SB-217	SB-22	SB-22	SB-221	SB-221	SB-221	SB-222	SB-223
Sample ID:	SB-214B	SB-214C	SB-215A	SB-215B	SB-215C	SB-216A	SB-216B	SB-216C	SB-217A	SS-22	SS-53	SB-221A	SB-221B	SB-221C	SB-222A	SB-223A
Sample Date:	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	8/10/2010	8/10/2010	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.5-1 (ft bgs)	0.5-1 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260										90 U	100 U					
Inorganics (mg/kg)																
Aluminum	9400			11000			5900		9600							6400
Antimony	20 U			100 U			14 U		2.0 U							20 U
Arsenic	20 U			100 U			14 U		2.0 U							20 U
Barium	99			390			94		93							110
Beryllium	8.2 U			41 U			5.5 U		0.82 U							8.2 U
Cadmium	10 U			51 U			6.9 U		1.9							10 U
Calcium	2400			9800			2500		2800							3200
Chromium	6000			24000			4400		740							7700
Chromium, Hexavalent	1.3 U	1.4 U	5.7 U	5.7 U	1.4 U	6.7 U	4.7 U	1.5 U				1.7 U			1.5 U	1.9 U
Cobalt	30			160			19		11							34
Copper	110			1000			130		32							130
Cyanide																
Iron	7300			40000			7400		6600							9000
Lead	110			550			78		18							61
Magnesium	980			3100			760		730							1100
Manganese	190			3200			350		130							480
Mercury																
Nickel	35			410			76		89							130
Potassium	630			1000			410		400							450
Selenium	20 U			100 U			14 U		2.0 U							20 U
Silver	68			720			110		1.2							30
Sodium	520			2800			650		650							780
Thallium	20 U			100 U			14 U		2.0 U							20 U
Vanadium	51 U			260 U			34 U		12							51 U
Zinc	160			650			91		98							160
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-223	SB-224	SB-225	SB-229	SB-229	SB-229	SB-23	SB-230	SB-230	SB-231	SB-232	SB-232	SB-234	SB-234	SB-235	SB-235
Sample ID:	SB-223B	SB-224A	SB-225A	SB-229A	SB-229B	SB-229C	SS-23	SB-230A	SB-230B	SB-231A	SB-232A	SB-279A	SB-234B	SB-234C	SB-235A	SB-235B
Sample Date:	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	8/10/2010	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011
Sample Depth:	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0.5-1 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane				830 U	360 U	63 U										
1,1-Dichloroethane				830 U	360 U	63 U										
2-Butanone				830 U	360 U	63 U										
2-Hexanone				830 U	360 U	63 U										
4-Methyl-2-Pentanone				830 U	360 U	63 U										
Acetone				830 U	360 U	63 U										
Carbon Disulfide				830 U	360 U	63 U										
Chloroethane				830 U	360 U	63 U										
Chloroform				830 U	360 U	63 U										
cis-1,2-Dichloroethene				830 U	360 U	63 U										
Ethylbenzene				830 U	360 U	63 U										
m,p-Xylene				1700 U	730 U	130 U										
Methyl acetate																
Methylene Chloride				830 U	360 U	63 U										
Naphthalene				830 U	360 U	63 U										
Tetrachloroethene				830 U	360 U	63 U										
Toluene				830 U	360 U	63 U										
Trichloroethene				830 U	360 U	63 U										
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-223	SB-224	SB-225	SB-229	SB-229	SB-229	SB-23	SB-230	SB-230	SB-231	SB-232	SB-232	SB-234	SB-234	SB-235	SB-235
Sample ID:	SB-223B	SB-224A	SB-225A	SB-229A	SB-229B	SB-229C	SS-23	SB-230A	SB-230B	SB-231A	SB-232A	SB-279A	SB-234B	SB-234C	SB-235A	SB-235B
Sample Date:	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	8/10/2010	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011
Sample Depth:	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0.5-1 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260							90 U									
Inorganics (mg/kg)																
Aluminum		7400	10000	9600				8200		8500	6100	7000				
Antimony		4.1 U	42 U	20 U				40 U		6.1 U	4.2 U	2.0 U				
Arsenic		4.1 U	42 U	20 U				40 U		6.1 U	4.2 U	2.0 U				
Barium		110	330	240				170		110	190	91				
Beryllium		1.6 U	17 U	8.2 U				16 U		2.4 U	1.7 U	0.78 U				
Cadmium		2.0 U	21 U	10 U				20 U		3.1 U	3.7	1.3				
Calcium		5300	11000	11000				8000		5700	13000	5800				
Chromium		1400	13000	6900				15000		1900	1300	330				
Chromium, Hexavalent	1.2 U	3.6 U	3.6 U	5.7 U	1.7 U			5.0 U	2.2 U	3.3 U			1.7 U	1.1 U	1.7 U	1.4 U
Cobalt		11	86	39				40 U		6.1 U	15	7.0				
Copper		62	560	400				250		51	120	47				
Cyanide																
Iron		8800	22000	25000				16000		5300	9900	8400				
Lead		43	520	320				140		57	130	52				
Magnesium		980	3100	2700				1400		1100	1700	1900				
Manganese		550	1800	1600				1100		370	1000	460				
Mercury																
Nickel		52	420	300				440		30	76	34				
Potassium		460	1100	960				470		530	430	440				
Selenium		4.1 U	42 U	20 U				40 U		6.1 U	4.2 U	2.0 U				
Silver		9.9	630	280				77		17	15	5.0				
Sodium		1200	1800	2100				1700		1400	2700	1400				
Thallium		4.1 U	42 U	20 U				40 U		6.1 U	4.2 U	2.0 U				
Vanadium		16	110 U	66				100 U		18	38	22				
Zinc		92	640	470				250		64	200	90				
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-235	SB-236	SB-237	SB-237	SB-238	SB-238	SB-238	SB-239	SB-239	SB-239	SB-240	SB-240	SB-240	SB-241	SB-241	SB-242
Sample ID:	SB-235C	SB-236C	SB-237B	SB-237C	SB-238A	SB-238B	SB-238C	SB-239A	SB-239B	SB-239C	SB-240A	SB-240B	SB-240C	SB-241B	SB-241C	SB-242C
Sample Date:	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/8/2011	6/8/2011	6/8/2011
Sample Depth:	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-235	SB-236	SB-237	SB-237	SB-238	SB-238	SB-238	SB-239	SB-239	SB-239	SB-240	SB-240	SB-240	SB-241	SB-241	SB-242
Sample ID:	SB-235C	SB-236C	SB-237B	SB-237C	SB-238A	SB-238B	SB-238C	SB-239A	SB-239B	SB-239C	SB-240A	SB-240B	SB-240C	SB-241B	SB-241C	SB-242C
Sample Date:	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/8/2011	6/8/2011	6/8/2011
Sample Depth:	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium																
Chromium, Hexavalent	1.1 U	1.1 U	1.0 U	1.1 U	3.0 U	1.8 U	1.8 U	1.2 U	1.2 U	1.1 U	2.3 U	1.0 U	1.1 U	1.1 U	1.1 U	1.0 U
Cobalt																
Copper																
Cyanide																
Iron																
Lead																
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-243	SB-243	SB-243	SB-243	SB-244	SB-244	SB-245	SB-245	SB-246	SB-246	SB-246	SB-247	SB-247	SB-247	SB-248	SB-248
Sample ID:	SB-243A	SB-275A	SB-243B	SB-243C	SB-244A	SB-244C	SB-245B	SB-245C	SB-246A	SB-246B	SB-246C	SB-247A	SB-247B	SB-247C	SB-248B	SB-248C
Sample Date:	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	1.5-2 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane																
1,1-Dichloroethane																
2-Butanone																
2-Hexanone																
4-Methyl-2-Pentanone																
Acetone																
Carbon Disulfide																
Chloroethane																
Chloroform																
cis-1,2-Dichloroethene																
Ethylbenzene																
m,p-Xylene																
Methyl acetate																
Methylene Chloride																
Naphthalene																
Tetrachloroethene																
Toluene																
Trichloroethene																
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-243	SB-243	SB-243	SB-243	SB-244	SB-244	SB-245	SB-245	SB-246	SB-246	SB-246	SB-247	SB-247	SB-247	SB-248	SB-248
Sample ID:	SB-243A	SB-275A	SB-243B	SB-243C	SB-244A	SB-244C	SB-245B	SB-245C	SB-246A	SB-246B	SB-246C	SB-247A	SB-247B	SB-247C	SB-248B	SB-248C
Sample Date:	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/7/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	1.5-2 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium																
Chromium, Hexavalent	1.3 U	2.8	0.95 U	1.2 U	1.2 U	0.98 U	1.2 U	1.0 U	1.4 U	1.1 U	0.98 U	2.6 U	2.6 U	0.91 U	1.0 U	1.0 U
Cobalt																
Copper																
Cyanide																
Iron																
Lead																
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-249	SB-249	SB-249	SB-249	SB-250	SB-250	SB-250	SB-250	SB-253	SB-253	SB-253	SB-253	SB-254	SB-254	SB-254	SB-255
Sample ID:	SB-249A	SB-280A	SB-249B	SB-249C	SB-250A	SB-276A	SB-250B	SB-250C	SB-253A	SB-270A	SB-253B	SB-253C	SB-254A	SB-254B	SB-254C	SB-255A
Sample Date:	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
1,1-Dichloroethane	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
2-Butanone	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
2-Hexanone	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
4-Methyl-2-Pentanone	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
Acetone	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
Carbon Disulfide	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
Chloroethane	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
Chloroform	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
cis-1,2-Dichloroethene	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
Ethylbenzene	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
m,p-Xylene	470 U		170 U	150 U	1100 U		150 U	84 U	360 U	330 U	180 U	170 U	320 U	220 U	140 U	250 U
Methyl acetate																
Methylene Chloride	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
Naphthalene	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
Tetrachloroethene	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
Toluene	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
Trichloroethene	240 U		87 U	76 U	550 U		73 U	42 U	180 U	170 U	92 U	86 U	160 U	110 U	69 U	120 U
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-249	SB-249	SB-249	SB-249	SB-250	SB-250	SB-250	SB-250	SB-253	SB-253	SB-253	SB-253	SB-254	SB-254	SB-254	SB-255
Sample ID:	SB-249A	SB-280A	SB-249B	SB-249C	SB-250A	SB-276A	SB-250B	SB-250C	SB-253A	SB-270A	SB-253B	SB-253C	SB-254A	SB-254B	SB-254C	SB-255A
Sample Date:	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum	6200	7600			6300											
Antimony	12 U	20 U			10 U											
Arsenic	12 U	20 U			10 U											
Barium	83	120			190											
Beryllium	4.8 U	8.0 U			4.0 U											
Cadmium	6.0 U	10 U			5.0 U											
Calcium	3100	4600			16000											
Chromium	4300	6300			3300											
Chromium, Hexavalent	2.4 U				5.3 U	6.2 U			1.5 U		1.2 U	1.1 U	1.2 U	1.0 U	0.88 U	1.4 U
Cobalt	13	18			12											
Copper	71	120			150											
Cyanide																
Iron	8700	13000			13000											
Lead	73	110			150											
Magnesium	950	1300			2100											
Manganese	180	270			1200											
Mercury																
Nickel	16	24			64											
Potassium	390	510			630											
Selenium	12 U	20 U			10 U											
Silver	35	57			23											
Sodium	530	730			2100											
Thallium	12 U	20 U			10 U											
Vanadium	30 U	50 U			43											
Zinc	130	190			240											
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-255	SB-255	SB-256	SB-256	SB-256	SB-257	SB-257	SB-257	SB-257	SB-257	SB-258	SB-258	SB-258	SB-258	SB-259	SB-259
Sample ID:	SB-255B	SB-255C	SB-256A	SB-256B	SB-256C	SB-257A	SB-257B	SB-271B	SB-277B	SB-257C	SB-258A	SB-258B	SB-258C	SB-278C	SB-259A	SB-259B
Sample Date:	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
1,1-Dichloroethane	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
2-Butanone	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
2-Hexanone	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
4-Methyl-2-Pentanone	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
Acetone	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
Carbon Disulfide	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
Chloroethane	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
Chloroform	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
cis-1,2-Dichloroethene	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
Ethylbenzene	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
m,p-Xylene	180 U	140 U	220 U	140 U	140 U	250 U	160 U	190 U		120 U	200 U	150 U	120 U		300 U	160 U
Methyl acetate																
Methylene Chloride	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
Naphthalene	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
Tetrachloroethene	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
Toluene	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
Trichloroethene	88 U	72 U	110 U	72 U	70 U	130 U	79 U	94 U		61 U	100 U	77 U	59 U		150 U	81 U
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-255	SB-255	SB-256	SB-256	SB-256	SB-257	SB-257	SB-257	SB-257	SB-257	SB-258	SB-258	SB-258	SB-258	SB-259	SB-259
Sample ID:	SB-255B	SB-255C	SB-256A	SB-256B	SB-256C	SB-257A	SB-257B	SB-271B	SB-277B	SB-257C	SB-258A	SB-258B	SB-258C	SB-278C	SB-259A	SB-259B
Sample Date:	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011
Sample Depth:	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium																
Chromium, Hexavalent	1.1 U	0.98 U	1.1 U	0.96 U	1.0 U	1.2 U	1.1 U		1.0 U	1.0 U		1.0 U	1.0 U	0.93 U	1.0 U	1.1 U
Cobalt																
Copper																
Cyanide																
Iron																
Lead																
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-259	SB-260	SB-260	SB-260	SB-261	SB-261	SB-261	SB-261	SB-264	SB-264	SB-264	SB-265	SB-265	SB-265	SB-266	SB-266
Sample ID:	SB-259C	SB-260A	SB-260B	SB-260C	SB-261A	SB-261B	SB-261C	SB-272C	SB-264A	SB-264B	SB-264C	SB-265A	SB-265B	SB-265C	SB-266A	SB-266B
Sample Date:	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
1,1-Dichloroethane	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
2-Butanone	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
2-Hexanone	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
4-Methyl-2-Pentanone	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
Acetone	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
Carbon Disulfide	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
Chloroethane	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
Chloroform	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
cis-1,2-Dichloroethene	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
Ethylbenzene	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
m,p-Xylene	140 U	300 U	130 U	100 U	160 U	110 U	110 U	160 U	580 U	200 U	180 U	1100 U	280 U	130 U	410 U	170 U
Methyl acetate																
Methylene Chloride	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
Naphthalene	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
Tetrachloroethene	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
Toluene	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
Trichloroethene	71 U	150 U	67 U	52 U	81 U	55 U	57 U	82 U	290 U	100 U	89 U	550 U	140 U	66 U	210 U	84 U
SVOCs (ug/kg)																
2-Methylnaphthalene																
4-Methylphenol																
Acenaphthene																
Acenaphthylene																
Anthracene																
Benzaldehyde																
Benzo(a)anthracene																
Benzo(a)pyrene																
Benzo(b)fluoranthene																
Benzo(g,h,i)perylene																
Benzo(k)fluoranthene																
Bis(2-ethylhexyl)phthalate																
Butylbenzylphthalate																
Caprolactam																
Carbazole																
Chrysene																
Dibenz(a,h)anthracene																
Dibenzofuran																
Dimethylphthalate																
Di-n-butylphthalate																
Fluoranthene																
Fluorene																
Indeno(1,2,3-cd)pyrene																
Naphthalene																
Pentachlorophenol																
Phenanthrene																
Phenol																
Pyrene																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-259	SB-260	SB-260	SB-260	SB-261	SB-261	SB-261	SB-261	SB-264	SB-264	SB-264	SB-265	SB-265	SB-265	SB-266	SB-266
Sample ID:	SB-259C	SB-260A	SB-260B	SB-260C	SB-261A	SB-261B	SB-261C	SB-272C	SB-264A	SB-264B	SB-264C	SB-265A	SB-265B	SB-265C	SB-266A	SB-266B
Sample Date:	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011	6/8/2011
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Pesticides (ug/kg)																
4,4'-DDD																
4,4'-DDE																
4,4'-DDT																
Aldrin																
alpha-BHC																
alpha-Chlordane																
beta-BHC																
delta-BHC																
Dieldrin																
Endosulfan II																
Endosulfan sulfate																
Endrin																
Endrin aldehyde																
Endrin ketone																
gamma-Chlordane																
Heptachlor																
Heptachlor epoxide																
Methoxychlor																
PCBs (ug/kg)																
Aroclor-1260																
Inorganics (mg/kg)																
Aluminum																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Calcium																
Chromium																
Chromium, Hexavalent	1.0 U		1.1 U	1.0 U	1.1 U	2.8	1.0 U									
Cobalt																
Copper																
Cyanide																
Iron																
Lead																
Magnesium																
Manganese																
Mercury																
Nickel																
Potassium																
Selenium																
Silver																
Sodium																
Thallium																
Vanadium																
Zinc																
Other																
pH in Soil (S.U.)																

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-266	SB-300	SB-300	SB-301	SB-302	SB-303	SB-304	SD-03	SD-05A	SD-06A	SO-01B
Sample ID:	SB-266C	SB-300A	SB-300B	SB-301A	SB-302A	SB-303A	SB-304A	SD-03	SD-05A	SD-06A	SO-01B
Sample Date:	6/8/2011	12/17/2010	12/17/2010	12/17/2010	12/17/2010	12/17/2010	12/17/2010	1/26/2012	1/25/2012	1/25/2012	1/25/2012
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.25 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0.2-0.8 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter											
VOCs (ug/kg)											
1,1,1-Trichloroethane	79 U										
1,1-Dichloroethane	79 U										
2-Butanone	79 U										
2-Hexanone	79 U										
4-Methyl-2-Pentanone	79 U										
Acetone	79 U										
Carbon Disulfide	79 U										
Chloroethane	79 U										
Chloroform	79 U										
cis-1,2-Dichloroethene	79 U										
Ethylbenzene	79 U										
m,p-Xylene	160 U										
Methyl acetate											
Methylene Chloride	79 U										
Naphthalene	79 U										
Tetrachloroethene	79 U										
Toluene	79 U										
Trichloroethene	79 U										
SVOCs (ug/kg)											
2-Methylnaphthalene											
4-Methylphenol											
Acenaphthene											
Acenaphthylene											
Anthracene											
Benzaldehyde											
Benzo(a)anthracene											
Benzo(a)pyrene											
Benzo(b)fluoranthene											
Benzo(g,h,i)perylene											
Benzo(k)fluoranthene											
Bis(2-ethylhexyl)phthalate											
Butylbenzylphthalate											
Caprolactam											
Carbazole											
Chrysene											
Dibenz(a,h)anthracene											
Dibenzofuran											
Dimethylphthalate											
Di-n-butylphthalate											
Fluoranthene											
Fluorene											
Indeno(1,2,3-cd)pyrene											
Naphthalene											
Pentachlorophenol											
Phenanthrene											
Phenol											
Pyrene											

TABLE 4-1
HISTORICAL SOIL ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-266	SB-300	SB-300	SB-301	SB-302	SB-303	SB-304	SD-03	SD-05A	SD-06A	SO-01B
Sample ID:	SB-266C	SB-300A	SB-300B	SB-301A	SB-302A	SB-303A	SB-304A	SD-03	SD-05A	SD-06A	SO-01B
Sample Date:	6/8/2011	12/17/2010	12/17/2010	12/17/2010	12/17/2010	12/17/2010	12/17/2010	1/26/2012	1/25/2012	1/25/2012	1/25/2012
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.25 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0.2-0.8 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter											
Pesticides (ug/kg)											
4,4'-DDD											
4,4'-DDE											
4,4'-DDT											
Aldrin											
alpha-BHC											
alpha-Chlordane											
beta-BHC											
delta-BHC											
Dieldrin											
Endosulfan II											
Endosulfan sulfate											
Endrin											
Endrin aldehyde											
Endrin ketone											
gamma-Chlordane											
Heptachlor											
Heptachlor epoxide											
Methoxychlor											
PCBs (ug/kg)											
Aroclor-1260											
Inorganics (mg/kg)											
Aluminum		8490	5660	3650	5310	3950	13400	3390	11300	7600	13200
Antimony		38.7 U	2.2 J	35.8 U	29.3 U	13.3 U	10.7 U				
Arsenic		5.1 J	4.3 J	3.0 J	3.7 J	1.5 J	4.1				
Barium		123 J	106	66.6 J	74.7 J	27.4 J	70.3				
Beryllium		1.0 J	0.86 J	0.46 J	0.99 J	0.39 J	0.76 J				
Cadmium		2.6 J	2.8	1.1 J	1.0 J	0.42 J	0.48 J				
Calcium		9560	10400	6410	8040	3360	2560	1070	4360	3780	442
Chromium		22.3	17.6	11.5	16.3	7.9	19.1	9.9	26500 J	28300 J	10.7
Chromium, Hexavalent								32 J	126 J	119 J	2.76 U
Cobalt		6.0 J	6.7 J	2.5 J	3.0 J	1.6 J	2.6 J				
Copper		52.2	42.9	24.3	21.2	9.8	11.8				
Cyanide		0.68 J	2.9 U	0.84 J	1.1 J	1.4 U	1.3 U				
Iron		11300	9150	21800	10400	3670	11500	13000	27300	15800	13300
Lead		115	107	52.9	78.3	32.1	34.8	14.0	1310 J	539 J	10.1
Magnesium		1870 J	1540 J	1180 J	777 J	706 J	821 J	1580	2720	1190	1430
Manganese		423	536	879	257	51.1	110				
Mercury		0.31 J	0.26 J	0.080 J	0.65 U	0.090 J	0.040 J				
Nickel		19.1 J	17.3 J	7.4 J	8.3 J	5.3 J	6.4 J				
Potassium		338 J	261 J	616 J	262 J	164 J	134 J				
Selenium		5.2 J	4.2 J	4.7 J	5.8 J	2.4 J	3.4 J				
Silver		0.67 J	0.73 J	6.0 U	4.9 U	2.2 U	1.8 U				
Sodium		3250	1320 J	1450 J	1330 J	612 J	197 J				
Thallium		16.1 U	11.1 U	14.9 U	12.2 U	5.6 U	4.5 U				
Vanadium		31.0 J	29.2	19.0 J	22.6 J	12.4	25.1				
Zinc		231	281	121	105	94.4	60.6				
Other											
pH in Soil (S.U.)											

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DOT-03	DOT-04	DOT-05	DOT-07	DOT-07	P-78-SB-16	P-78-SB-21	P-78-SB-21	P-78-SB-21	P-78-SB-26	P-78-SB-26
Sample ID:	DOT-03	DOT-04	DOT-05	DOT-07	DOT-100	P-78-SB-16A	P-78-SB-21A	P-78-SB-21B	P-78-SB-21C	P-78-SB-26A	P-78-SB-26B
Sample Date:	4/7/2011	4/7/2011	4/7/2011	4/7/2011	4/7/2011	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/16/2010	12/16/2010
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter											
VOCs (ug/kg)											
1,1,1-Trichloroethane						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
1,1-Dichloroethane						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
1,1-Dichloroethene						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
1,2,3-Trichlorobenzene						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
2-Butanone						24 U	7.6 U	8.5 U	9.6 U	9.7 U	8.9 U
Acetone						420	51	74	85	89	130
Carbon disulfide						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
Chloroform						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
cis-1,2-Dichloroethene						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
Cyclohexane						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
Ethylbenzene						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
Isopropylbenzene						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
m,p-Xylene						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
Methyl acetate						23	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
Methyl tert-butyl ether						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
Methylcyclohexane						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
Methylene chloride						12 U	3.8 U	4.3 U	4.8 U	3.8 J	3.7 J
o-Xylene						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
Toluene						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
Trichloroethene						12 U	3.8 U	4.3 U	4.8 U	4.8 U	4.5 U
SVOCs (ug/kg)											
2-Methylnaphthalene						520 U	190 U	190 U	170 J	180 U	180 U
4-Chloroaniline						520 U	190 U	190 U	200 U	180 U	180 U
4-Methylphenol						520 U	190 U	190 U	200 U	180 U	180 U
Acenaphthene						520 U	90 J	190 U	200 U	180 U	180 U
Acenaphthylene						520 U	190 U	190 U	330	180 U	70 J
Anthracene						520 U	210	190 U	360	180 U	180 U
Benzaldehyde						520 U	190 U	190 U	200 U	180 U	180 U
Benzo(a)anthracene						230 J	320	250	980	340	250
Benzo(a)pyrene						300 J	350	290	950	400	320
Benzo(b)fluoranthene						350 J	230	240	580	420	220
Benzo(g,h,i)perylene						290 J	250	240	600	280	190
Benzo(k)fluoranthene						300 J	360	330	910	370	250
Bis(2-ethylhexyl)phthalate						390 J	190 U	190 U	200 U	100 J	340
Butylbenzylphthalate						520 U	190 U	190 U	200 U	180 U	180 U
Caprolactam						520 U	190 U	190 U	200 U	180 U	180 U
Carbazole						520 U	96 J	190 U	120 J	180 U	180 U
Chrysene						350 J	390	320	1100	430	300
Dibenz(a,h)anthracene						520 U	190 U	100 J	270	120 J	180 U
Dibenzofuran						520 U	190 U	190 U	140 J	180 U	180 U
Diethylphthalate						520 U	190 U	190 U	200 U	180 U	180 U
Dimethylphthalate						520 U	190 U	190 U	200 U	180 U	180 U
Di-n-butylphthalate						520 U	190 U	190 U	200 U	180 U	180 U
Fluoranthene						610	790	600	2500	690	500
Fluorene						520 U	92 J	190 U	270	180 U	180 U
Indeno(1,2,3-cd)pyrene						260 J	210	220	550	270	160 J

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DOT-03	DOT-04	DOT-05	DOT-07	DOT-07	P-78-SB-16	P-78-SB-21	P-78-SB-21	P-78-SB-21	P-78-SB-26	P-78-SB-26
Sample ID:	DOT-03	DOT-04	DOT-05	DOT-07	DOT-100	P-78-SB-16A	P-78-SB-21A	P-78-SB-21B	P-78-SB-21C	P-78-SB-26A	P-78-SB-26B
Sample Date:	4/7/2011	4/7/2011	4/7/2011	4/7/2011	4/7/2011	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/16/2010	12/16/2010
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter											
Naphthalene						520 U	190 U	190 U	81 J	180 U	180 U
Pentachlorophenol						1000 U	360 U	370 U	380 U	350 U	350 U
Phenanthrene						280 J	770	360	1900	320	240
Pyrene						480 J	650	490	2200	640	470
Pesticides (ug/kg)											
4,4'-DDD											
4,4'-DDE											
4,4'-DDT											
Aldrin											
alpha-BHC											
beta-BHC											
delta-BHC											
Dieldrin											
Endosulfan I											
Endosulfan II											
Endosulfan sulfate											
Endrin											
Endrin aldehyde											
Endrin ketone											
gamma-BHC (Lindane)											
gamma-Chlordane											
Heptachlor											
Heptachlor epoxide											
Methoxychlor											
PCBs (ug/kg)											
Aroclor-1260											
Inorganics (mg/kg)											
Aluminum						16500	3100	3790	2600	1920	3910
Antimony						99.9	4.6 U	5.6 U	5.4 U	5.2 U	0.38 J
Arsenic						67.6	1.5	2.7	2.5	1.1	2.3
Barium						742	16.5	21.4	13.4 J	7.6 J	15.4 J
Beryllium						0.83 J	0.24 J	0.33 J	0.17 J	0.13 J	0.32 J
Cadmium						1.2 J	0.15 J	0.47 U	0.45 U	0.44 U	0.40 U
Calcium						1160 J	1260	1360	677	451	616
Chromium						56700	106	480	813	7.4	8.6
Chromium, Hexavalent	5.3 U	4.2 U	2.6 U	2.5 U	2.3 U	18	0.9 U	0.86 U	0.87 U		
Cobalt						19.0	3.8 J	4.2 J	2.5 J	1.9 J	3.3 J
Copper						447	11.8	21.0	24.2	5.8	9.5
Cyanide						199	0.25 J	0.28 J	0.45 J	0.53 U	0.53 U
Iron						44800	8690	10900	6810	6320	9930
Lead						13200	154	241	139	67.3	106
Magnesium						3890	1390	1520	1000	933	1370
Manganese						241	180	221	111	97.3	169
Mercury						0.48 J	0.050 J	0.080 J	0.14	0.11 U	0.17
Nickel						29.5	7.9	12.2	6.1	4.3	7.3
Potassium						893 J	224 J	300 J	187 J	139 J	202 J
Selenium						13.0 U	0.63 J	0.79 J	0.54 J	3.0 U	0.43 J

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DOT-03	DOT-04	DOT-05	DOT-07	DOT-07	P-78-SB-16	P-78-SB-21	P-78-SB-21	P-78-SB-21	P-78-SB-26	P-78-SB-26
Sample ID:	DOT-03	DOT-04	DOT-05	DOT-07	DOT-100	P-78-SB-16A	P-78-SB-21A	P-78-SB-21B	P-78-SB-21C	P-78-SB-26A	P-78-SB-26B
Sample Date:	4/7/2011	4/7/2011	4/7/2011	4/7/2011	4/7/2011	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/16/2010	12/16/2010
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter											
Silver						426	0.36 J	2.2	8.8	0.060 J	0.80 U
Sodium						617 J	232 J	311 J	322 J	85.3 J	105 J
Thallium						14.9	1.9 U	2.3 U	2.2 U	2.2 U	2.0 U
Vanadium						83.6	10.4	14.3	9.4	7.2	11.2
Zinc						143	60.3	71.3	39.3	22.7	42.1
AVS/SEM (umole/g dry wt)											
Acid Volatile Sulfide											
Cadmium, SEM											
Copper, SEM											
Lead, SEM											
Mercury, SEM											
Nickel, SEM											
Silver, SEM											
Zinc, SEM											
Total SEM Metals (det only)											
AVS/SEM											
TCLP metals (mg/L)											
Chromium											
Other											
Total Organic Carbon (avg., ug/g)											

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-78-SB-26	P-78-SB-30	P-78-SB-30	P-78-SB-30	P-78-SB-31	P-78-SB-31	P-78-SB-31	P-78-SB-38	P78 SB-101	P78 SB-102	P78 SB-107	P78 SB-108	P78 SB-111
Sample ID:	P-78-SB-26C	P-78-SB-30A	P-78-SB-30B	P-78-SB-30C	P-78-SB-31A	P-78-SB-31B	P-78-SB-31C	P-78-SB-38A	P78 SB-101A	P78 SB-102A	P78 SB-107A	P78 SB-108A	P78 SB-111A
Sample Date:	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	4/22/2011	4/21/2011	4/21/2011	4/21/2011	4/22/2011
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter													
VOCs (ug/kg)													
1,1,1-Trichloroethane	5.2 U	5.9 U	3.3 J	3.4	7.2 U	5.1 U	3.2 U	5.7 U					
1,1-Dichloroethane	5.2 U	17	9.5	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
1,1-Dichloroethene	5.2 U	5.9 U	4.5 U	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
1,2,3-Trichlorobenzene	5.2 U	5.9 U	4.5 U	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
2-Butanone	10 U	12 U	9.0 U	6.8 U	14 U	10 U	6.5 U	11 U					
Acetone	140	200	84	21	14 U	31	41	110					
Carbon disulfide	5.2 U	5.9 U	8.5	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
Chloroform	5.2 U	5.9 U	4.5 U	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
cis-1,2-Dichloroethene	5.2 U	6.8	4.5 U	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
Cyclohexane	5.2 U	5.9 U	4.5 U	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
Ethylbenzene	5.2 U	5.9 U	4.5 U	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
Isopropylbenzene	5.2 U	5.9 U	4.5 U	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
m,p-Xylene	5.2 U	5.9 U	4.5 U	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
Methyl acetate	5.2 U	320 E	12	2.9 J	7.2 U	13	26	5.7 U					
Methyl tert-butyl ether	5.2 U	5.9 U	4.5 U	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
Methylcyclohexane	5.2 U	5.9 U	4.5 U	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
Methylene chloride	4.0 J	5.9 U	4.5 U	3.4 U	7.2 U	5.1 U	3.2 U	3.8 J					
o-Xylene	5.2 U	5.9 U	4.5 U	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
Toluene	5.2 U	5.9 U	4.5 U	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
Trichloroethene	5.2 U	11	5.8	3.4 U	7.2 U	5.1 U	3.2 U	5.7 U					
SVOCs (ug/kg)													
2-Methylnaphthalene	180 U	300 U	240 U	200 U	260 U	230 U	210 U	200 U					
4-Chloroaniline	180 U	300 U	240 U	200 U	260 U	230 U	210 U	200 U					
4-Methylphenol	180 U	300 U	240 U	200 U	260 U	230 U	210 U	200 U					
Acenaphthene	180 U	300 U	240 U	200 U	260 U	230 U	140 J	200 U					
Acenaphthylene	180 U	300 U	240 U	200 U	260 U	230 U	210 U	200 U					
Anthracene	150 J	300 U	240 U	200 U	260 U	230 U	400	200 U					
Benzaldehyde	180 U	300 U	240 U	200 U	260 U	230 U	210 U	200 U					
Benzo(a)anthracene	460	300 U	240 U	200 U	380	220 J	890	200 U					
Benzo(a)pyrene	440	300 U	240 U	200 U	470	260	810	200 U					
Benzo(b)fluoranthene	370	300 U	240 U	200 U	570	320	760	200 U					
Benzo(g,h,i)perylene	350	300 U	240 U	200 U	370	260	530	200 U					
Benzo(k)fluoranthene	360	300 U	240 U	200 U	440	260	680	200 U					
Bis(2-ethylhexyl)phthalate	180 U	300 U	240 U	200 U	130 J	220 J	110 J	200 U					
Butylbenzylphthalate	180 U	300 U	240 U	200 U	260 U	230 U	210 U	200 U					
Caprolactam	180 U	300 U	240 U	200 U	260 U	230 U	210 U	200 U					
Carbazole	180 U	300 U	240 U	200 U	260 U	230 U	210 U	200 U					
Chrysene	440	300 U	240 U	200 U	550	330	940	200 U					
Dibenz(a,h)anthracene	110 J	300 U	240 U	200 U	140 J	230 U	290	200 U					
Dibenzofuran	180 U	300 U	240 U	200 U	260 U	230 U	210 U	200 U					
Diethylphthalate	73 J	300 U	240 U	200 U	260 U	230 U	210 U	200 U					
Dimethylphthalate	180 U	300 U	240 U	200 U	260 U	230 U	210 U	200 U					
Di-n-butylphthalate	180 U	300 U	240 U	200 U	260 U	230 U	210 U	200 U					
Fluoranthene	1100	300 U	240 U	200 U	1100	600	2500	200 U					
Fluorene	180 U	300 U	240 U	200 U	260 U	230 U	170 J	200 U					
Indeno(1,2,3-cd)pyrene	300	300 U	240 U	200 U	360	250	540	200 U					

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-78-SB-26	P-78-SB-30	P-78-SB-30	P-78-SB-30	P-78-SB-31	P-78-SB-31	P-78-SB-31	P-78-SB-38	P78 SB-101	P78 SB-102	P78 SB-107	P78 SB-108	P78 SB-111
Sample ID:	P-78-SB-26C	P-78-SB-30A	P-78-SB-30B	P-78-SB-30C	P-78-SB-31A	P-78-SB-31B	P-78-SB-31C	P-78-SB-38A	P78 SB-101A	P78 SB-102A	P78 SB-107A	P78 SB-108A	P78 SB-111A
Sample Date:	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	4/22/2011	4/21/2011	4/21/2011	4/21/2011	4/22/2011
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter													
Naphthalene	180 U	300 U	240 U	200 U	260 U	230 U	210 U	200 U					
Pentachlorophenol	360 U	580 U	460 U	400 U	510 U	440 U	400 U	390 U					
Phenanthrene	660	300 U	240 U	200 U	530	290	1700	200 U					
Pyrene	970	300 U	240 U	200 U	900	520	1900	200 U					
Pesticides (ug/kg)													
4,4'-DDD													
4,4'-DDE													
4,4'-DDT													
Aldrin													
alpha-BHC													
beta-BHC													
delta-BHC													
Dieldrin													
Endosulfan I													
Endosulfan II													
Endosulfan sulfate													
Endrin													
Endrin aldehyde													
Endrin ketone													
gamma-BHC (Lindane)													
gamma-Chlordane													
Heptachlor													
Heptachlor epoxide													
Methoxychlor													
PCBs (ug/kg)													
Aroclor-1260													
Inorganics (mg/kg)													
Aluminum	5870	4330	4570	3540	2880	1670	1740	7850	6600	15000	9700	12000	6400
Antimony	0.31 J	7.4 U	7.1 U	6.0 U	0.78 J	5.4 U	5.7 U	0.60 J	2.0 U	24 U	100 U	120 U	2.0 U
Arsenic	2.3	1.4	1.6	1.5	2.5	3.2	2.4	2.9	2.2	24 U	100 U	120 U	2.9
Barium	16.4 J	22.2 J	21.5 J	13.8 J	22.0 J	6.2 J	4.9 J	37.7	30	87	180	300	57
Beryllium	0.25 J	0.15 J	0.14 J	0.22 J	0.26 J	0.24 J	0.17 J	0.39 J	0.80 U	9.5 U	40 U	49 U	0.80 U
Cadmium	0.43 U	0.62 U	0.59 U	0.50 U	0.39 J	0.27 J	0.24 J	0.73	1.0 U	12 U	50 U	61 U	3.8
Calcium	456	527 J	563 J	353 J	1160	462	428 J	1050	1800	2400	4000	5900	2000
Chromium	8.8	46.5	14.0	7.9	18.6	13.4	21.9	41.8	49	6700	24000	37000	280
Chromium, Hexavalent		1.4 U						4.9 U					
Cobalt	3.2 J	2.3 J	1.4 J	1.9 J	2.8 J	1.5 J	1.4 J	5.1 J	2.1	24 U	100 U	120 U	9.6
Copper	8.4	21.3	11.2	3.1	26.4	7.3	9.8	17.2	69	74	540	420	260
Cyanide	0.55 U	0.92 U	0.72 U	0.58 U	0.77	0.14 J	0.30 J	1.0					
Iron	9350	4280	5950	4650	10800	8420	7040	13300	7600	11000	23000	24000	12000
Lead	40.3	17.6	9.2	3.4	48.7	20.0	19.4	90.0	47	350	1100	630	180
Magnesium	1270	539 J	529 J	783	964	585	704	1860	1200	1200	2400	3400	2200
Manganese	147	129	76.7	69.9	164	58.9	64.7	254	140	80	310	540	230
Mercury	0.020 J	0.040 J	0.020 J	0.12 U	0.15 U	0.13 U	0.12 U	0.090 J					
Nickel	6.4	4.1 J	2.7 J	3.6 J	5.9	4.0	4.3	11.9	17	31	290	120 U	230
Potassium	154 J	78.6 J	83.9 J	131 J	296 J	205 J	167 J	401 J	330	400	830	1100	660
Selenium	0.56 J	0.78 J	4.1 U	3.5 U	1.1 J	0.90 J	0.91 J	2.4 J	2.0 U	24 U	100 U	120 U	4.0 U

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P-78-SB-26	P-78-SB-30	P-78-SB-30	P-78-SB-30	P-78-SB-31	P-78-SB-31	P-78-SB-31	P-78-SB-38	P78 SB-101	P78 SB-102	P78 SB-107	P78 SB-108	P78 SB-111
Sample ID:	P-78-SB-26C	P-78-SB-30A	P-78-SB-30B	P-78-SB-30C	P-78-SB-31A	P-78-SB-31B	P-78-SB-31C	P-78-SB-38A	P78 SB-101A	P78 SB-102A	P78 SB-107A	P78 SB-108A	P78 SB-111A
Sample Date:	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	12/16/2010	4/22/2011	4/21/2011	4/21/2011	4/21/2011	4/22/2011
Sample Depth:	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter													
Silver	0.87 U	8.3	0.15 J	1.0 U	1.1 U	0.91 U	0.95 U	0.10 J	24	120	1100	320	970
Sodium	95.4 J	216 J	271 J	156 J	174 J	98.3 J	98.3 J	141 J	170	350	640	1200	230
Thallium	2.2 U	3.1 U	3.0 U	2.5 U	2.8 U	2.3 U	2.4 U	3.1 U	4.0 U	48 U	200 U	240 U	4.0 U
Vanadium	12.1	9.2	8.6	10.1	14.7	13.5	9.8	22.2	17	48 U	200 U	240 U	18
Zinc	33.2	18.2	14.8	15.5	61.3	31.6	29.1	58.0	23	33	310	250	110
AVS/SEM (umole/g dry wt)													
Acid Volatile Sulfide													
Cadmium, SEM													
Copper, SEM													
Lead, SEM													
Mercury, SEM													
Nickel, SEM													
Silver, SEM													
Zinc, SEM													
Total SEM Metals (det only)													
AVS/SEM													
TCLP metals (mg/L)													
Chromium													
Other													
Total Organic Carbon (avg., ug/g)													

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P78 SB-112	P78 SB-113	P78 SB-114	P78 SB-115	P78 SB-117	P78 SB-118	P78 SB-119	P78 SB-120	P78 SB-120	P78 SB-121	P78 SB-122	P78 SB-123	P78 SB-124	P78 SB-125
Sample ID:	P78 SB-112A	P78 SB-113B	P78 SB-114A	P78 SB-115B	P78 SB-117B	P78 SB-118A	P78 SB-119A	P78 SB-120B	P78 SB-150B	P78 SB-121A	P78 SB-122A	P78 SB-123B	P78 SB-124B	P78 SB-125A
Sample Date:	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/22/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter														
VOCs (ug/kg)														
1,1,1-Trichloroethane														
1,1-Dichloroethane														
1,1-Dichloroethene														
1,2,3-Trichlorobenzene														
2-Butanone														
Acetone														
Carbon disulfide														
Chloroform														
cis-1,2-Dichloroethene														
Cyclohexane														
Ethylbenzene														
Isopropylbenzene														
m,p-Xylene														
Methyl acetate														
Methyl tert-butyl ether														
Methylcyclohexane														
Methylene chloride														
o-Xylene														
Toluene														
Trichloroethene														
SVOCs (ug/kg)														
2-Methylnaphthalene														
4-Chloroaniline														
4-Methylphenol														
Acenaphthene														
Acenaphthylene														
Anthracene														
Benzaldehyde														
Benzo(a)anthracene														
Benzo(a)pyrene														
Benzo(b)fluoranthene														
Benzo(g,h,i)perylene														
Benzo(k)fluoranthene														
Bis(2-ethylhexyl)phthalate														
Butylbenzylphthalate														
Caprolactam														
Carbazole														
Chrysene														
Dibenz(a,h)anthracene														
Dibenzofuran														
Diethylphthalate														
Dimethylphthalate														
Di-n-butylphthalate														
Fluoranthene														
Fluorene														
Indeno(1,2,3-cd)pyrene														

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P78 SB-112	P78 SB-113	P78 SB-114	P78 SB-115	P78 SB-117	P78 SB-118	P78 SB-119	P78 SB-120	P78 SB-120	P78 SB-121	P78 SB-122	P78 SB-123	P78 SB-124	P78 SB-125
Sample ID:	P78 SB-112A	P78 SB-113B	P78 SB-114A	P78 SB-115B	P78 SB-117B	P78 SB-118A	P78 SB-119A	P78 SB-120B	P78 SB-150B	P78 SB-121A	P78 SB-122A	P78 SB-123B	P78 SB-124B	P78 SB-125A
Sample Date:	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/22/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter														
Naphthalene														
Pentachlorophenol														
Phenanthrene														
Pyrene														
Pesticides (ug/kg)														
4,4'-DDD														
4,4'-DDE														
4,4'-DDT														
Aldrin														
alpha-BHC														
beta-BHC														
delta-BHC														
Dieldrin														
Endosulfan I														
Endosulfan II														
Endosulfan sulfate														
Endrin														
Endrin aldehyde														
Endrin ketone														
gamma-BHC (Lindane)														
gamma-Chlordane														
Heptachlor														
Heptachlor epoxide														
Methoxychlor														
PCBs (ug/kg)														
Aroclor-1260														
Inorganics (mg/kg)														
Aluminum	15000	13000	10000 J	7800	3300	16000	14000	5500	5300	14000	6700	9100	4800	11000
Antimony	6.1 U	23 U	68 U	2.0 U	4.0 U	20 U	110 U	2.0 U	2.0 U	8.0 U	6.0 U	49 U	21 U	110 U
Arsenic	6.8	23 U	68 U	2.0 U	4.0 U	20 U	110 U	2.0 U	2.0 U	10	6.0 U	49 U	21 U	110 U
Barium	170	160	130 J	66	24	270	230	49	53	190	82	110	58	130
Beryllium	2.4 U	9.1 U	27 U	0.82 U	1.6 U	8.0 U	44 U	0.80 U	0.78 U	3.2 U	2.4 U	20 U	8.5 U	46 U
Cadmium	3.9	11 U	34 U	1.0 U	2.0 U	10 U	54 U	1.0 U	0.98 U	4.0 U	3.0 U	24 U	11 U	57 U
Calcium	4500	4900	5500 J	2300	630	5200	4500	1600	1700	3700	2900	3500	1900	3300
Chromium	2000	9200	30000 J	45	1000	7400	32000	750	630	2400	2300	15000	6600	31000
Chromium, Hexavalent														
Cobalt	24	56	68 U	2.1	4.2	62	110 U	49	45	30	19	110	21 U	110 U
Copper	850	500	340 J, J1	6.4	46	1200	770	35	26	900	180	480	120	400
Cyanide														
Iron	26000	35000	23000 J	6500	4900	39000	27000	5400	4900	43000	10000	19000	4900	22000
Lead	820	310	470 J	9.8	20	620	1600	11	11	280	90	150	73	1000
Magnesium	4500	2900	2800 J	1200 J3	1100	4900	4000	930	660	4600	1700	2700	510	2500
Manganese	500	460	540 J	110	71	710	1100	93	83	510	220	230	110	280
Mercury														
Nickel	200	100	110 J	5.0	11	250	370	10	8.4	84	36	56	21 U	150
Potassium	1300	1000	750 J	290	280	1500	1200	300	270	1600	620	480	260	570 U
Selenium	6.1 U	46 U	68 U	2.2	4.0 U	20 U	110 U	2.0 U	2.0 U	8.0 U	6.0 U	49 U	21 U	110 U

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	P78 SB-112	P78 SB-113	P78 SB-114	P78 SB-115	P78 SB-117	P78 SB-118	P78 SB-119	P78 SB-120	P78 SB-120	P78 SB-121	P78 SB-122	P78 SB-123	P78 SB-124	P78 SB-125
Sample ID:	P78 SB-112A	P78 SB-113B	P78 SB-114A	P78 SB-115B	P78 SB-117B	P78 SB-118A	P78 SB-119A	P78 SB-120B	P78 SB-150B	P78 SB-121A	P78 SB-122A	P78 SB-123B	P78 SB-124B	P78 SB-125A
Sample Date:	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011	4/22/2011	4/21/2011	4/21/2011	4/21/2011	4/21/2011
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	0.75-1.25 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter														
Silver	1000	210	51 J, J1	1.0 U	18	930	1100	1.0 U	1.2	230	110	57	31	580
Sodium	610	610	1100 J	270	97	1600	1300	190	200	790	520	1100	450	800
Thallium	12 U	46 U	140 U	4.1 U	8.0 U	40 U	220 U	4.0 U	3.9 U	16 U	12 U	98 U	42 U	230 U
Vanadium	43	46 U	140 U	9.4	8.0 U	55	220 U	9.4	8.8	50	18	98 U	42 U	230 U
Zinc	270	330	340 J, J1	13	66	530	300	100	84	380	120	470	63	160
AVS/SEM (umole/g dry wt)														
Acid Volatile Sulfide														
Cadmium, SEM														
Copper, SEM														
Lead, SEM														
Mercury, SEM														
Nickel, SEM														
Silver, SEM														
Zinc, SEM														
Total SEM Metals (det only)														
AVS/SEM														
TCLP metals (mg/L)														
Chromium														
Other														
Total Organic Carbon (avg., ug/g)														

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-201	SB-201	SB-201	SB-202	SB-202	SB-202	SB-203	SB-203	SB-203	SB-203	SB-208	SB-208	SB-208	SB-209	SB-209
Sample ID:	SB-201A	SB-201B	SB-201C	SB-202A	SB-202B	SB-202C	SB-203A	SB-273A	SB-203B	SB-203C	SB-208A	SB-208B	SB-208C	SB-209A	SB-209B
Sample Date:	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter															
VOCs (ug/kg)															
1,1,1-Trichloroethane	990 U	670 U	350 U												
1,1-Dichloroethane	990 U	670 U	350 U												
1,1-Dichloroethene	990 U	670 U	350 U												
1,2,3-Trichlorobenzene	990 U	670 U	350 U												
2-Butanone	990 U	670 U	350 U												
Acetone	990 U	670 U	350 U												
Carbon disulfide	990 U	670 U	350 U												
Chloroform	990 U	670 U	350 U												
cis-1,2-Dichloroethene	990 U	670 U	350 U												
Cyclohexane															
Ethylbenzene	990 U	670 U	350 U												
Isopropylbenzene	990 U	670 U	350 U												
m,p-Xylene	2000 U	1300 U	710 U												
Methyl acetate															
Methyl tert-butyl ether	990 U	670 U	350 U												
Methylcyclohexane															
Methylene chloride	990 U	670 U	350 U												
o-Xylene	990 U	670 U	350 U												
Toluene	990 U	670 U	350 U												
Trichloroethene	990 U	670 U	350 U												
SVOCs (ug/kg)															
2-Methylnaphthalene															
4-Chloroaniline															
4-Methylphenol															
Acenaphthene															
Acenaphthylene															
Anthracene															
Benzaldehyde															
Benzo(a)anthracene															
Benzo(a)pyrene															
Benzo(b)fluoranthene															
Benzo(g,h,i)perylene															
Benzo(k)fluoranthene															
Bis(2-ethylhexyl)phthalate															
Butylbenzylphthalate															
Caprolactam															
Carbazole															
Chrysene															
Dibenz(a,h)anthracene															
Dibenzofuran															
Diethylphthalate															
Dimethylphthalate															
Di-n-butylphthalate															
Fluoranthene															
Fluorene															
Indeno(1,2,3-cd)pyrene															

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-201	SB-201	SB-201	SB-202	SB-202	SB-202	SB-203	SB-203	SB-203	SB-203	SB-208	SB-208	SB-208	SB-209	SB-209
Sample ID:	SB-201A	SB-201B	SB-201C	SB-202A	SB-202B	SB-202C	SB-203A	SB-273A	SB-203B	SB-203C	SB-208A	SB-208B	SB-208C	SB-209A	SB-209B
Sample Date:	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter															
Naphthalene															
Pentachlorophenol															
Phenanthrene															
Pyrene															
Pesticides (ug/kg)															
4,4'-DDD															
4,4'-DDE															
4,4'-DDT															
Aldrin															
alpha-BHC															
beta-BHC															
delta-BHC															
Dieldrin															
Endosulfan I															
Endosulfan II															
Endosulfan sulfate															
Endrin															
Endrin aldehyde															
Endrin ketone															
gamma-BHC (Lindane)															
gamma-Chlordane															
Heptachlor															
Heptachlor epoxide															
Methoxychlor															
PCBs (ug/kg)															
Aroclor-1260															
Inorganics (mg/kg)															
Aluminum					8400		10000				11000			10000	
Antimony					51 U		100 U				100 U			51 U	
Arsenic					51 U		100 U				100 U			51 U	
Barium					150		190				320			260	
Beryllium					20 U		40 U				42 U			20 U	
Cadmium					26 U		50 U				52 U			26 U	
Calcium					2400		4200				6100			6500	
Chromium					19000		27000				34000			17000	
Chromium, Hexavalent	3.3 U	110	2.6	4.0 U	31	1.1 U	1.9 U	3.6 U	2.1 U	1.0 U	3.8 U	2.3 U	1.2 U	4.2 U	2.2 U
Cobalt					51 U		100 U				110			97	
Copper					400		600				780			860	
Cyanide															
Iron					11000		19000				36000			26000	
Lead					1100		430				720			420	
Magnesium					1500		1700				2500			2200	
Manganese					220		530				490			750	
Mercury															
Nickel					290		210				230			290	
Potassium					500		690				940			860	
Selenium					51 U		100 U				100 U			51 U	

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-201	SB-201	SB-201	SB-202	SB-202	SB-202	SB-203	SB-203	SB-203	SB-203	SB-208	SB-208	SB-208	SB-209	SB-209
Sample ID:	SB-201A	SB-201B	SB-201C	SB-202A	SB-202B	SB-202C	SB-203A	SB-273A	SB-203B	SB-203C	SB-208A	SB-208B	SB-208C	SB-209A	SB-209B
Sample Date:	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011	6/6/2011
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter															
Silver					870		620				470			710	
Sodium					620		1500				1400			1600	
Thallium					51 U		100 U				100 U			51 U	
Vanadium					130 U		250 U				260 U			130 U	
Zinc					170		200				510			630	
AVS/SEM (umole/g dry wt)															
Acid Volatile Sulfide															
Cadmium, SEM															
Copper, SEM															
Lead, SEM															
Mercury, SEM															
Nickel, SEM															
Silver, SEM															
Zinc, SEM															
Total SEM Metals (det only)															
AVS/SEM															
TCLP metals (mg/L)															
Chromium		1.5			0.20 U		0.20 U				0.20 U			0.20 U	
Other															
Total Organic Carbon (avg., ug/g)															

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-210	SD-01C	SD-01D	SD-04B	SD-04B	SD-07A	SD-09
Sample ID:	SB-210B	SD-01C	SD-01D	SD-04B	SD-08B	SD-07A	SD-09
Sample Date:	6/6/2011	1/25/2012	1/25/2012	1/26/2012	1/26/2012	1/25/2012	2/2/2012
Sample Depth:	0.75-1.25 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample
Parameter							
VOCs (ug/kg)							
1,1,1-Trichloroethane							
1,1-Dichloroethane							
1,1-Dichloroethene							
1,2,3-Trichlorobenzene							
2-Butanone							
Acetone							
Carbon disulfide							
Chloroform							
cis-1,2-Dichloroethene							
Cyclohexane							
Ethylbenzene							
Isopropylbenzene							
m,p-Xylene							
Methyl acetate							
Methyl tert-butyl ether							
Methylcyclohexane							
Methylene chloride							
o-Xylene							
Toluene							
Trichloroethene							
SVOCs (ug/kg)							
2-Methylnaphthalene							
4-Chloroaniline							
4-Methylphenol							
Acenaphthene							
Acenaphthylene							
Anthracene							
Benzaldehyde							
Benzo(a)anthracene							
Benzo(a)pyrene							
Benzo(b)fluoranthene							
Benzo(g,h,i)perylene							
Benzo(k)fluoranthene							
Bis(2-ethylhexyl)phthalate							
Butylbenzylphthalate							
Caprolactam							
Carbazole							
Chrysene							
Dibenz(a,h)anthracene							
Dibenzofuran							
Diethylphthalate							
Dimethylphthalate							
Di-n-butylphthalate							
Fluoranthene							
Fluorene							
Indeno(1,2,3-cd)pyrene							

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-210	SD-01C	SD-01D	SD-04B	SD-04B	SD-07A	SD-09
Sample ID:	SB-210B	SD-01C	SD-01D	SD-04B	SD-08B	SD-07A	SD-09
Sample Date:	6/6/2011	1/25/2012	1/25/2012	1/26/2012	1/26/2012	1/25/2012	2/2/2012
Sample Depth:	0.75-1.25 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample
Parameter							
Naphthalene							
Pentachlorophenol							
Phenanthrene							
Pyrene							
Pesticides (ug/kg)							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
Aldrin							
alpha-BHC							
beta-BHC							
delta-BHC							
Dieldrin							
Endosulfan I							
Endosulfan II							
Endosulfan sulfate							
Endrin							
Endrin aldehyde							
Endrin ketone							
gamma-BHC (Lindane)							
gamma-Chlordane							
Heptachlor							
Heptachlor epoxide							
Methoxychlor							
PCBs (ug/kg)							
Aroclor-1260							
Inorganics (mg/kg)							
Aluminum	6800	6850	6770	4940	7940	8640	5770
Antimony	2.0 U						
Arsenic	3.2						
Barium	29						
Beryllium	0.80 U						
Cadmium	1.0 U						
Calcium	1200	3370	1610	1200	2170	2590	895
Chromium	140	9.9	8.5	2320	4320	4860	672
Chromium, Hexavalent		R	10 U	15.5 J	22 J	38.6	5.63 J
Cobalt	2.5						
Copper	6.0						
Cyanide							
Iron	9000	17600	9070	7880	12100	16700	12200
Lead	13	35.8	8.6	182	342	250	46.1
Magnesium	590	1240	1990	1170	1770	2690	2350
Manganese	62						
Mercury							
Nickel	5.2						
Potassium	180						
Selenium	2.0 U						

TABLE 4-2
HISTORICAL SEDIMENT ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SB-210	SD-01C	SD-01D	SD-04B	SD-04B	SD-07A	SD-09
Sample ID:	SB-210B	SD-01C	SD-01D	SD-04B	SD-08B	SD-07A	SD-09
Sample Date:	6/6/2011	1/25/2012	1/25/2012	1/26/2012	1/26/2012	1/25/2012	2/2/2012
Sample Depth:	0.75-1.25 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample
Parameter							
Silver	1.0 U						
Sodium	330						
Thallium	2.0 U						
Vanadium	12						
Zinc	19						
AVS/SEM (umole/g dry wt)							
Acid Volatile Sulfide							
Cadmium, SEM							
Copper, SEM							
Lead, SEM							
Mercury, SEM							
Nickel, SEM							
Silver, SEM							
Zinc, SEM							
Total SEM Metals (det only)							
AVS/SEM							
TCLP metals (mg/L)							
Chromium	0.20 U						
Other							
Total Organic Carbon (avg., ug/g)							

TABLE 4-3
HISTORICAL SURFACE WATER ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SW-01	SW-02	SW-03	SW-04	SW-05	SW-07	SW-07	SW-09	SW-10	SW-11
Sample ID:	SW-01	SW-02	SW-03	SW-04	SW-05	SW-07	SW-08	SW-09	SW-10	SW-11
Sample Date:	1/25/2012	1/26/2012	1/26/2012	1/26/2012	1/25/2012	1/25/2012	1/25/2012	1/26/2012	1/26/2012	1/26/2012
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane										
1,1-Dichloroethane										
1,1-Dichloroethene										
2-Butanone										
Acetone										
Benzene										
Bromodichloromethane										
Carbon disulfide										
Chloroform										
Chloromethane										
cis-1,2-Dichloroethene										
Dibromochloromethane										
Dichlorodifluoromethane										
m,p-Xylene										
Methyl acetate										
Tetrachloroethene										
Toluene										
Trichloroethene										
Vinyl chloride										
1,4-Dioxane (ug/L)										
1,4-Dioxane										
Inorganics, Dissolved (ug/L)										
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Chromium, Hexavalent										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Mercury										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Vanadium										
Zinc										

TABLE 4-3
HISTORICAL SURFACE WATER ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SW-01	SW-02	SW-03	SW-04	SW-05	SW-07	SW-07	SW-09	SW-10	SW-11
Sample ID:	SW-01	SW-02	SW-03	SW-04	SW-05	SW-07	SW-08	SW-09	SW-10	SW-11
Sample Date:	1/25/2012	1/26/2012	1/26/2012	1/26/2012	1/25/2012	1/25/2012	1/25/2012	1/26/2012	1/26/2012	1/26/2012
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum	200 U	200 U	35.4 J	200 U	200 U	200 U	200 U	200 U	200 U	29.1 J
Antimony	60.0 U	60.0 U	60.0 U	60.0 U	60.0 U	60.0 U	60.0 U	60.0 U	60.0 U	60.0 U
Arsenic	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Barium	58.2 J	41.2 J	69.4 J	64.7 J	23.2 J	41.1 J	39.7 J	27.8 J	27.8 J	29.3 J
Beryllium	0.16 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cadmium	0.15 J	0.11 J	0.11 J	0.29 J	5.0 U	0.12 J	0.083 J	5.0 U	0.094 J	5.0 U
Calcium	10400	21900	25000	24400	10900	17300	16600	29600	19300	19700
Chromium	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	2.3 J	2.4 J	247	21.1	60.4
Chromium, Hexavalent	2 U	5 UJ	5 UJ	5 UJ	2 U	2 U	2 U	96 J	20 J	48 J
Cobalt	50.0 U	0.97 J	12.8 J	9.8 J	1.6 J	1.8 J	1.5 J	1.5 J	50.0 U	50.0 U
Copper	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	3.4 J	25.0 U	25.0 U	25.0 U
Cyanide										
Iron	217	295	1470	194	48.0 J	251	174	120	147	310
Lead	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Magnesium	1710 J	4110 J	5780	5500	2310 J	3470 J	3340 J	4490 J	4120 J	4210 J
Manganese	260	635	591	734	253	375	358	799	285	314
Mercury										
Nickel	1.9 J	2.4 J	4.8 J	7.6 J	2.3 J	3.9 J	3.6 J	2.0 J	1.7 J	2.0 J
Potassium	5000 U	5000 U	548 J	533 J	5000 U	450 J	447 J	2760 J	5000 U	171 J
Selenium	3.9 J	4.4 J	35.0 U	2.8 J	35.0 U	35.0 U	35.0 U	3.1 J	3.0 J	35.0 U
Silver	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Sodium	155000	119000	97800	93100	44600	79500	77100	28500	91400	91000
Thallium	1.6 J	25.0 U	25.0 U	25.0 U	0.61 J	1.7 J	25.0 U	1.3 J	25.0 U	2.3 J
Vanadium	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U	50.0 U
Zinc	11.0 J	19.0 J	26.0 J	30.8 J	13.5 J	25.0 J	25.8 J	10.3 J	15.3 J	16.1 J
Other										
Alkalinity (mg/L)										
Dissolved Organic Carbon (mg/L)										
Dissolved oxygen, field (mg/L)										
Hardness as CaCO3, Calculated (mg/L)										
ORP, field (mV)										
pH, field (S.U.)										
Spec. cond., field (umho/cm)										
Temperature, field (deg C)										
Turbidity, field (N.T.U.)										
Water Depth, field (in.)										

TABLE 4-3
HISTORICAL SURFACE WATER ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SW-12	SW-13	SW-14	SW-15
Sample ID:	SW-12	SW-13	SW-14	SW-15
Sample Date:	1/26/2012	1/26/2012	1/26/2012	1/26/2012
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
Parameter				
VOCs (ug/L)				
1,1,1-Trichloroethane				
1,1-Dichloroethane				
1,1-Dichloroethene				
2-Butanone				
Acetone				
Benzene				
Bromodichloromethane				
Carbon disulfide				
Chloroform				
Chloromethane				
cis-1,2-Dichloroethene				
Dibromochloromethane				
Dichlorodifluoromethane				
m,p-Xylene				
Methyl acetate				
Tetrachloroethene				
Toluene				
Trichloroethene				
Vinyl chloride				
1,4-Dioxane (ug/L)				
1,4-Dioxane				
Inorganics, Dissolved (ug/L)				
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Chromium, Hexavalent				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Vanadium				
Zinc				

TABLE 4-3
HISTORICAL SURFACE WATER ANALYTICAL RESULTS - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SW-12	SW-13	SW-14	SW-15
Sample ID:	SW-12	SW-13	SW-14	SW-15
Sample Date:	1/26/2012	1/26/2012	1/26/2012	1/26/2012
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
Parameter				
Inorganics (ug/L)				
Aluminum	200 U	200 U	200 U	200 U
Antimony	60.0 U	60.0 U	60.0 U	60.0 U
Arsenic	10.0 U	10.0 U	10.0 U	10.0 U
Barium	29.0 J	65.2 J	63.4 J	27.8 J
Beryllium	5.0 U	5.0 U	5.0 U	5.0 U
Cadmium	0.12 J	0.16 J	0.18 J	0.12 J
Calcium	19700	22100	24100	19100
Chromium	61.7	1.5 J	3.2 J	10.0 U
Chromium, Hexavalent	56 J	5 UJ	5 UJ	5 UJ
Cobalt	50.0 U	2.7 J	6.5 J	50.0 U
Copper	25.0 U	25.0 U	25.0 U	25.0 U
Cyanide				
Iron	187	223	985	177
Lead	10.0 U	10.0 U	10.0 U	10.0 U
Magnesium	4260 J	4920 J	5370	4140 J
Manganese	298	824	864	268
Mercury				
Nickel	1.6 J	3.5 J	6.0 J	1.5 J
Potassium	5000 U	484 J	696 J	5000 U
Selenium	35.0 U	3.5 J	3.9 J	35.0 U
Silver	10.0 U	10.0 U	10.0 U	10.0 U
Sodium	90100	92700	93400	92000
Thallium	1.3 J	25.0 U	25.0 U	1.5 J
Vanadium	50.0 U	50.0 U	50.0 U	0.92 J
Zinc	16.3 J	22.1 J	25.8 J	16.7 J
Other				
Alkalinity (mg/L)				
Dissolved Organic Carbon (mg/L)				
Dissolved oxygen, field (mg/L)				
Hardness as CaCO3, Calculated (mg/L)				
ORP, field (mV)				
pH, field (S.U.)				
Spec. cond., field (umho/cm)				
Temperature, field (deg C)				
Turbidity, field (N.T.U.)				
Water Depth, field (in.)				

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-101	SO-101	SO-101	SO-101	SO-102	SO-102	SO-102	SO-103	SO-103	SO-104
Sample ID:	WL-RS0-101-5.0-6.0	WL-RS0-101D-5.0-6.0	WL-SO-101-5.1-6.1	WL-SO-101D-5.1-6.1	WL-RS0-102-0.7-1.7	WL-RS0-102D-0.7-1.7	WL-SO-102-0.5-1.5	WL-RS0-103-4.8-5.8	WL-SO-103-4.4-5.4	WL-RS0-104-4.0-5.0
Sample Date:	7/10/2014	7/10/2014	6/19/2014	6/19/2014	7/10/2014	7/10/2014	6/18/2014	7/10/2014	6/18/2014	7/10/2014
Sample Depth:	5-6 (ft bgs)	5-6 (ft bgs)	5.1-6.1 (ft bgs)	5.1-6.1 (ft bgs)	0.7-1.7 (ft bgs)	0.7-1.7 (ft bgs)	0.5-1.5 (ft bgs)	4.8-5.8 (ft bgs)	4.4-5.4 (ft bgs)	4-5 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/kg)										
1,1,1-Trichloroethane			7.3 U	8.5 U			6.9 U		6.1 U	
1,1-Dichloroethane			7.3 U	8.5 U			R		6.1 U	
2-Butanone			14 J	40 J			370		29	
2-Hexanone			15 U	17 U			72		12 U	
4-Methyl-2-pentanone			15 U	17 U			7.3 J		12 U	
Acetone			93	110			2400		75	
Carbon disulfide			1.2 J	0.86 J			6.9 U		0.64 J	
Chloroethane			7.3 U	8.5 U			6.9 U		6.1 U	
Chloroform			7.3 U	8.5 U			64 JEB		6.1 U	
cis-1,2-Dichloroethene			7.3 U	8.5 U			6.9 U		6.1 U	
Ethylbenzene			7.3 U	8.5 U			0.27 J		0.50 J	
m,p-Xylene			7.3 U	8.5 U			0.16 J		0.14 J	
Methyl acetate			7.3 U	8.5 U			6.9 U		6.1 U	
Methylene chloride			7.3 U	8.5 U			6.9 U		6.1 U	
Naphthalene										
Tetrachloroethene			7.3 U	8.5 U			6.9 U		6.1 U	
Toluene			7.3 U	8.5 U			67		1.1 J	
Trichloroethene			7.3 U	8.5 U			41		6.1 U	
SVOCs (ug/kg)										
2-Methylnaphthalene			100 U	110 U	820 UJ	830 UJ		20 UJ		
4-Methylphenol			2600 U	1400 U	4200 UJ	370 J		1000 UJ		
Acenaphthene			100 U	110 U	580 J	490 J		20 UJ		
Acenaphthylene			46 J	49 J	1200 J	930 J		20 UJ		
Anthracene			50 J	50 J	2800 J	2100 J		20 UJ		
Benzaldehyde			2600 U	1400 U	4200 UJ	4300 UJ		1000 UJ		
Benzo(a)anthracene			300 J	350 J	5300 J	4600 J		20 UJ		
Benzo(a)pyrene			300	330	3500 J	3000 J		20 UJ		
Benzo(b)fluoranthene			450	500	4600 J	4000 J		20 UJ		
Benzo(g,h,i)perylene			210	220	2200 J	1900 J		20 UJ		
Benzo(k)fluoranthene			140	160	1500 J	1400 J		20 UJ		
Bis(2-ethylhexyl)phthalate			2600 U	1400 U	4200 UJ	4300 UJ		1000 UJ		
Butylbenzylphthalate			2600 U	1400 U	4200 UJ	4300 UJ		1000 UJ		
Caprolactam			2600 U	1400 U	4200 UJ	4300 UJ		1000 UJ		
Carbazole			2600 U	1400 U	1500 J	1200 J		1000 UJ		
Chrysene			320	340	3800 J	3300 J		20 UJ		
Dibenz(a,h)anthracene			44 J	50 J	450 J	380 J		20 UJ		
Dibenzofuran			2600 U	1400 U	1300 J	1100 J		1000 UJ		
Dimethylphthalate			2600 U	1400 U	4200 UJ	420 J		1000 UJ		
Di-n-butylphthalate			2600 U	1400 U	4200 UJ	4300 UJ		1000 UJ		
Fluoranthene			600	690	10000 J	9100 J		6.7 J		
Fluorene			100 U	110 U	1000 J	830 J		20 UJ		
Indeno(1,2,3-cd)pyrene			280	310	3000 J	2500 J		20 UJ		
Naphthalene			100 U	110 U	820 UJ	830 UJ		20 UJ		
Pentachlorophenol			200 U	220 U	1700 UJ	1700 UJ		41 UJ		

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-101	SO-101	SO-101	SO-101	SO-102	SO-102	SO-102	SO-103	SO-103	SO-104
Sample ID:	WL-RS0-101-5.0-6.0	WL-RS0-101D-5.0-6.0	WL-SO-101-5.1-6.1	WL-SO-101D-5.1-6.1	WL-RS0-102-0.7-1.7	WL-RS0-102D-0.7-1.7	WL-SO-102-0.5-1.5	WL-RS0-103-4.8-5.8	WL-SO-103-4.4-5.4	WL-RS0-104-4.0-5.0
Sample Date:	7/10/2014	7/10/2014	6/19/2014	6/19/2014	7/10/2014	7/10/2014	6/18/2014	7/10/2014	6/18/2014	7/10/2014
Sample Depth:	5-6 (ft bgs)	5-6 (ft bgs)	5.1-6.1 (ft bgs)	5.1-6.1 (ft bgs)	0.7-1.7 (ft bgs)	0.7-1.7 (ft bgs)	0.5-1.5 (ft bgs)	4.8-5.8 (ft bgs)	4.4-5.4 (ft bgs)	4-5 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Phenanthrene			170	190	13000 J	10000 J		6.5 J		
Phenol			2600 U	1400 U	520 J	640 J		1000 UJ		
Pyrene			480	530	8300 J	8000 J		7.4 J		
Pesticides (ug/kg)										
4,4'-DDD			5.1 U	5.4 U	42 UJ	41 UJ		4.0 UJ		
4,4'-DDE			9.2	4.6 J	23 J	22 J		4.0 UJ		
4,4'-DDT			0.88 J	0.78 J	49 J	60 J		4.0 UJ		
Aldrin			2.6 U	2.8 U	21 UJ	21 UJ		2.1 UJ		
alpha-BHC			2.6 U	2.8 U	21 UJ	21 UJ		2.1 UJ		
alpha-Chlordane			2.6 U	2.8 U	21 UJ	21 UJ		2.1 UJ		
beta-BHC			2.6 U	2.8 U	21 UJ	21 UJ		2.1 UJ		
delta-BHC			2.6 U	2.8 U	21 UJ	21 UJ		2.1 UJ		
Dieldrin			5.1 U	5.4 U	42 UJ	41 UJ		4.0 UJ		
Endosulfan II			5.1 U	5.4 U	42 UJ	41 UJ		4.0 UJ		
Endosulfan sulfate			5.1 U	5.4 U	42 UJ	41 UJ		4.0 UJ		
Endrin			5.1 U	5.4 U	42 UJ	14 J		0.29 J		
Endrin aldehyde			0.73 J	0.65 J	22 J	22 J		4.0 UJ		
Endrin ketone			5.1 U	5.4 U	42 UJ	41 UJ		4.0 UJ		
gamma-Chlordane			0.68 J	2.8 U	9.8 J	10 J		2.1 UJ		
Heptachlor			1.9 JEB	1.5 JEB	21 UJ	21 UJ		2.1 UJ		
Heptachlor epoxide			2.6 U	2.8 U	21 UJ	21 UJ		2.1 UJ		
Methoxychlor			1.2 J	0.74 J	210 UJ	210 UJ		21 UJ		
PCBs (ug/kg)										
Aroclor-1260			51 U	54 U	420 UJ	410 UJ		40 UJ		
Inorganics (mg/kg)										
Aluminum	6990	7230					8120 J		10800 J	9370
Antimony	0.60 J	1.4 J					0.97 J		0.19 UJ	1.6 J
Arsenic	2.5 J	2.7 J					4.0 J		2.2 J	2.9 J
Barium	52.6 J	63.5 J					50.8 J		33.5 J	34.3 J
Beryllium	0.67 U	0.78 U					0.63 U		0.60 U	0.58 U
Cadmium	0.13 U	0.16 U					0.23 J		0.18 J	0.12 U
Calcium	1690	1670					39000 J		884 J	1030
Chromium	34.2 J	63.9 J					544 J		58.9 J	988 J
Chromium, Hexavalent	0.62 UJ	0.13 J					0.53 UJ		1.46 J	107 J
Cobalt	158 J	152 J					6.9 J		3.7 J	5.4 J
Copper	10.6 J	16.2 J					25.9 J		6.1 J	22.9 J
Cyanide	0.067 UJ	0.078 U					0.71 EB		0.062 EB	0.058 U
Iron	6380	7540					11200 J		11500 J	17700
Lead	82.6 JEB	191 JEB					108 J		15.2 J	79.0 JEB
Magnesium	1260	1380					3120 J		1230 J	2630
Manganese	119 JEB	119 JEB					304 J		193 J	229 JEB
Mercury	0.072 J-	0.084 J-					0.064 J-		0.055 J-	0.090 J-
Nickel	6.7 JEB	7.2 JEB					19.3 J		6.2 J	10.9 JEB
Potassium	669 UJ	782 UJ					1060 J		602 UJ	640 JEB
Selenium	1.1 J	1.3 J					0.90 J		0.67 J	0.76 J

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-101	SO-101	SO-101	SO-101	SO-102	SO-102	SO-102	SO-103	SO-103	SO-104
Sample ID:	WL-RS0-101-5.0-6.0	WL-RS0-101D-5.0-6.0	WL-SO-101-5.1-6.1	WL-SO-101D-5.1-6.1	WL-RS0-102-0.7-1.7	WL-RS0-102D-0.7-1.7	WL-SO-102-0.5-1.5	WL-RS0-103-4.8-5.8	WL-SO-103-4.4-5.4	WL-RS0-104-4.0-5.0
Sample Date:	7/10/2014	7/10/2014	6/19/2014	6/19/2014	7/10/2014	7/10/2014	6/18/2014	7/10/2014	6/18/2014	7/10/2014
Sample Depth:	5-6 (ft bgs)	5-6 (ft bgs)	5.1-6.1 (ft bgs)	5.1-6.1 (ft bgs)	0.7-1.7 (ft bgs)	0.7-1.7 (ft bgs)	0.5-1.5 (ft bgs)	4.8-5.8 (ft bgs)	4.4-5.4 (ft bgs)	4-5 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Silver	0.88	1.2					1.7 J		0.60 UJ	0.58 U
Sodium	669 U	782 U					285 J		623 J	578 U
Thallium	0.67 U	0.78 U					0.63 U		0.60 U	0.58 U
Vanadium	16.6 J	16.8 J					10.9 J		15.0 J	17.5 J
Zinc	27.4 J	32.4 J					74.8		29.8	30.8 J
Other										
pH in Soil (S.U.)			6	6			12		6.8	

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-104	SO-105	SO-105	SO-106	SO-106	SO-107	SO-107	SO-107	SO-107	SO-108
Sample ID:	WL-SO-104-3.7-4.7	WL-SO-105-0.5-1.5	WL-SO-105-09-10	WL-RS0-106-0.5-1.5	WL-SO-106-0.5-1.5	WL-RS0-107-0.5-1.5	WL-RS0-107-5.2-6.2	WL-SO-107-0.5-1.5	WL-SO-107-05-06	WL-RS0-108-0.5-1.5
Sample Date:	6/19/2014	6/17/2014	6/17/2014	7/10/2014	6/18/2014	7/10/2014	7/10/2014	6/18/2014	6/18/2014	7/10/2014
Sample Depth:	3.7-4.7 (ft bgs)	0.5-1.5 (ft bgs)	9-10 (ft bgs)	0.5-1.5 (ft bgs)	0.5-1.5 (ft bgs)	0.5-1.5 (ft bgs)	5.2-6.2 (ft bgs)	0.5-1.5 (ft bgs)	5-6 (ft bgs)	0.5-1.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/kg)										
1,1,1-Trichloroethane	5.2 U	5.4 U	5.2 U		5.7 U			5.2 U	5.5 U	
1,1-Dichloroethane	5.2 U	5.4 U	5.2 U		5.7 U			5.2 U	5.5 U	
2-Butanone	10 U	11 U	10 U		11 U			10 U	11 U	
2-Hexanone	10 U	11 U	10 U		11 U			10 U	11 U	
4-Methyl-2-pentanone	10 U	11 U	10 U		11 U			10 U	11 U	
Acetone	10 U	11 U	10 U		11 U			10 U	11 U	
Carbon disulfide	5.2 U	5.4 U	5.2 U		5.7 U			5.2 U	2.2 J	
Chloroethane	5.2 U	5.4 U	5.2 U		5.7 U			5.2 U	5.5 U	
Chloroform	5.2 U	5.4 U	5.2 U		5.7 U			5.2 U	5.5 U	
cis-1,2-Dichloroethene	5.2 U	5.4 U	5.2 U		5.7 U			5.2 U	5.5 U	
Ethylbenzene	5.2 U	5.4 U	5.2 U		5.7 U			5.2 U	5.5 U	
m,p-Xylene	5.2 U	5.4 U	5.2 U		5.7 U			5.2 U	5.5 U	
Methyl acetate	5.2 U	5.4 U	5.2 U		5.7 U			5.2 U	5.5 U	
Methylene chloride	5.2 U	5.4 U	5.2 U		5.7 U			5.2 U	5.5 U	
Naphthalene										
Tetrachloroethene	5.2 U	0.39 J	5.2 U		0.56 J			5.2 U	5.5 U	
Toluene	5.2 U	5.4 U	5.2 U		5.7 U			5.2 U	5.5 U	
Trichloroethene	5.2 U	5.4 U	5.2 U		4.9 J			5.2 U	0.38 J	
SVOCs (ug/kg)										
2-Methylnaphthalene	36 U	37 U	7.5 UJ	71 UJ		76 UJ	18 UJ			450 J
4-Methylphenol	560 U	380 U	380 UJ	5500 UJ		2000 UJ	920 UJ			3800 UJ
Acenaphthene	36 U	37 U	7.5 UJ	37 J		76 UJ	18 UJ			1800 J
Acenaphthylene	36 U	37 U	7.5 UJ	71 UJ		76 UJ	18 UJ			730 UJ
Anthracene	27 J	30 J	7.5 UJ	75 J		29 J	7.5 J			3400 J
Benzaldehyde	560 U	380 U	380 UJ	5500 UJ		2000 UJ	920 UJ			3800 UJ
Benzo(a)anthracene	97 J	130	7.5 UJ	350 J		160 J	30 J			3700 J
Benzo(a)pyrene	71	110	7.5 UJ	230 J		200 J	23 J			2700 J
Benzo(b)fluoranthene	110	170	7.5 UJ	330 J		400 J	35 J			3600 J
Benzo(g,h,i)perylene	43	69	7.5 UJ	170 J		220 J	17 J			1800 J
Benzo(k)fluoranthene	33 J	58	7.5 UJ	120 J		93 J	11 J			1300 J
Bis(2-ethylhexyl)phthalate	560 U	380 U	380 UJ	5500 UJ		2000 UJ	920 UJ			3800 UJ
Butylbenzylphthalate	560 U	380 U	380 UJ	5500 UJ		2000 UJ	920 UJ			3800 UJ
Caprolactam	560 U	380 U	380 UJ	5500 UJ		2000 UJ	920 UJ			3800 UJ
Carbazole	560 U	380 U	380 UJ	5500 UJ		2000 UJ	920 UJ			2100 J
Chrysene	88	130	7.5 UJ	310 J		260 J	27 J			2700 J
Dibenz(a,h)anthracene	36 U	37 U	7.5 UJ	39 J		49 J	18 UJ			380 J
Dibenzofuran	560 U	380 U	380 UJ	5500 UJ		2000 UJ	920 UJ			1500 J
Dimethylphthalate	560 U	380 U	380 UJ	5500 UJ		2000 UJ	920 UJ			3800 UJ
Di-n-butylphthalate	560 U	380 U	380 UJ	5500 UJ		2000 UJ	920 UJ			3800 UJ
Fluoranthene	210	270	7.5 UJ	670 J		260 J	50 J			13000 J
Fluorene	36 U	37 U	7.5 UJ	54 J		76 UJ	18 UJ			2200 J
Indeno(1,2,3-cd)pyrene	62	96	7.5 UJ	200 J		300 J	23 J			2200 J
Naphthalene	36 U	37 U	7.5 UJ	28 JEB		76 UJ	18 UJ			850 JEB
Pentachlorophenol	74 U	74 U	15 UJ	140 UJ		150 UJ	36 UJ			1500 UJ

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-104	SO-105	SO-105	SO-106	SO-106	SO-107	SO-107	SO-107	SO-107	SO-108
Sample ID:	WL-SO-104-3.7-4.7	WL-SO-105-0.5-1.5	WL-SO-105-09-10	WL-RS0-106-0.5-1.5	WL-SO-106-0.5-1.5	WL-RS0-107-0.5-1.5	WL-RS0-107-5.2-6.2	WL-SO-107-0.5-1.5	WL-SO-107-05-06	WL-RS0-108-0.5-1.5
Sample Date:	6/19/2014	6/17/2014	6/17/2014	7/10/2014	6/18/2014	7/10/2014	7/10/2014	6/18/2014	6/18/2014	7/10/2014
Sample Depth:	3.7-4.7 (ft bgs)	0.5-1.5 (ft bgs)	9-10 (ft bgs)	0.5-1.5 (ft bgs)	0.5-1.5 (ft bgs)	0.5-1.5 (ft bgs)	5.2-6.2 (ft bgs)	0.5-1.5 (ft bgs)	5-6 (ft bgs)	0.5-1.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Phenanthrene	110	160	7.5 UJ	500 J		130 J	30 J			15000 J
Phenol	560 U	380 U	380 UJ	5500 UJ		2000 UJ	920 UJ			3800 UJ
Pyrene	150	210	7.5 UJ	530 J		240 J	45 J			5800 J
Pesticides (ug/kg)										
4,4'-DDD	3.6 U	3.7 U	3.7 U	71 UJ		11 J	3.6 UJ			0.95 J
4,4'-DDE	2.0 J	0.66 J	3.7 U	71 J		2.7 J	1.3 J			1.2 J
4,4'-DDT	18	1.6 J	3.7 U	2400 J		40 J	2.5 J			8.1 J
Aldrin	1.9 U	1.9 U	1.9 U	6.9 J		1.9 UJ	1.9 UJ			1.9 UJ
alpha-BHC	1.9 U	1.9 U	0.094 J	38 J		1.9 UJ	1.9 UJ			0.53 J
alpha-Chlordane	1.9 U	1.9 U	1.9 U	37 UJ		1.9 UJ	1.9 UJ			1.9 UJ
beta-BHC	1.9 U	1.9 U	1.9 U	37 UJ		0.77 J	1.9 UJ			1.9 UJ
delta-BHC	1.9 U	1.9 U	1.9 U	37 UJ		1.9 UJ	1.9 UJ			1.9 UJ
Dieldrin	3.6 U	3.7 U	3.7 U	71 UJ		3.8 UJ	3.6 UJ			3.7 UJ
Endosulfan II	3.6 U	0.21 J	3.7 U	71 UJ		3.8 UJ	3.6 UJ			3.7 UJ
Endosulfan sulfate	3.6 U	3.7 U	3.7 U	71 UJ		3.8 UJ	3.6 UJ			3.7 UJ
Endrin	3.6 U	3.7 U	3.7 U	25 J		4.2 J	2.2 J			6.2 J
Endrin aldehyde	7.3 J	0.40 J	0.086 J	2700 J		27 J	1.4 J			2.3 J
Endrin ketone	3.6 U	0.011 J	3.7 U	71 UJ		3.8 UJ	3.6 UJ			3.7 UJ
gamma-Chlordane	1.0 J	0.17 J	1.9 U	110 J		1.8 J	1.9 UJ			1.9 UJ
Heptachlor	1.9 U	1.9 U	1.9 U	37 UJ		1.9 UJ	1.9 UJ			0.56 J
Heptachlor epoxide	1.9 U	1.9 U	1.9 U	37 UJ		1.9 UJ	1.9 UJ			1.9 UJ
Methoxychlor	19 U	1.1 J	19 U	370 UJ		6.1 J	19 UJ			19 UJ
PCBs (ug/kg)										
Aroclor-1260	36 U	37 U	37 U	360 UJ		38 UJ	36 UJ			37 UJ
Inorganics (mg/kg)										
Aluminum		7710	7120		7850 J			6740 J	6680 J	
Antimony		0.19 J-	2.7 J-		1.8 J			2.3 J	0.11 UJ	
Arsenic		2.0	2.9		2.5 J			2.2 J	3.0 J	
Barium		30.3	20.6		36.3 J			27.9 J	13.4 J	
Beryllium		0.56 U	0.55 U		0.56 U			0.55 U	0.55 U	
Cadmium		0.22 J	0.11 UJ		0.15 J			2.9 J	0.11 UJ	
Calcium		1010	953		1380 J			7990 J	975 J	
Chromium		134 J	1390 J		1990 J			472 J	2360 J	
Chromium, Hexavalent		6.88 J	254 J		82.8 J			6.94 J	34.0 J	
Cobalt		4.4 J	5.3 J		68.4 J			5.8 J	6.7 J	
Copper		14.4	16.7		55.9 J			77.9 J	30.4 J	
Cyanide		0.085 U	0.055 U		0.21 EB			0.66 EB	0.085 EB	
Iron		9850	14900		13500 J			13600 J	15800 J	
Lead		24.1	15.0		309 J			263 J	76.3 J	
Magnesium		1840 J	2580 J		1700 J			2290 J	3550 J	
Manganese		218	280		131 J			164 J	257 J	
Mercury		0.062	0.013 J		0.063 J-			0.042 J-	0.0080 J-	
Nickel		8.8	10.8		9.9 J			17.4 J	14.0 J	
Potassium		427 J-	605 J-		559 UJ			708 J	551 UJ	
Selenium		0.58 J	0.60 J		0.34 J			0.26 J	0.37 J	

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-104	SO-105	SO-105	SO-106	SO-106	SO-107	SO-107	SO-107	SO-107	SO-108
Sample ID:	WL-SO-104-3.7-4.7	WL-SO-105-0.5-1.5	WL-SO-105-09-10	WL-RS0-106-0.5-1.5	WL-SO-106-0.5-1.5	WL-RS0-107-0.5-1.5	WL-RS0-107-5.2-6.2	WL-SO-107-0.5-1.5	WL-SO-107-05-06	WL-RS0-108-0.5-1.5
Sample Date:	6/19/2014	6/17/2014	6/17/2014	7/10/2014	6/18/2014	7/10/2014	7/10/2014	6/18/2014	6/18/2014	7/10/2014
Sample Depth:	3.7-4.7 (ft bgs)	0.5-1.5 (ft bgs)	9-10 (ft bgs)	0.5-1.5 (ft bgs)	0.5-1.5 (ft bgs)	0.5-1.5 (ft bgs)	5.2-6.2 (ft bgs)	0.5-1.5 (ft bgs)	5-6 (ft bgs)	0.5-1.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Silver		0.56 U	0.55 U		5.1 J			1.2 J	0.55 UJ	
Sodium		68.2 J	52.0 J		48.9 J			85.8 J	39.4 J	
Thallium		0.56 U	0.55 U		0.56 U			0.55 U	0.55 U	
Vanadium		14.6	7.6		2.8 UJ			2.8 UJ	2.8 UJ	
Zinc		69.1	31.1		129			149	46.1	
Other										
pH in Soil (S.U.)	7.9	6.7	5		7.7			9.9	7.1	

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-108	SO-108	SO-108	SO-109	SO-109	SO-110	SO-110	SO-111	SO-111	SO-112
Sample ID:	WL-RS0-108-08-10	WL-SO-108-0.5-1.5	WL-SO-108-08-10	WL-SO-109-00-01	WL-SO-109-2	WL-SO-110-00-01	WL-SO-110-2	WL-SO-111-00-01	WL-SO-111-2	WL-SO-112-00-01
Sample Date:	7/10/2014	6/18/2014	6/18/2014	6/26/2014	11/6/2014	6/26/2014	11/6/2014	6/25/2014	11/4/2014	6/25/2014
Sample Depth:	8-10 (ft bgs)	0.5-1.5 (ft bgs)	8-10 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/kg)										
1,1,1-Trichloroethane		330 U	5.5 U	17 U		8.2 U		40 UJ		9.0 U
1,1-Dichloroethane		330 U	5.5 U	17 U		8.2 U		40 UJ		9.0 U
2-Butanone		660 U	11 U	35 U		52		80 UJ		18 U
2-Hexanone		660 U	11 U	35 U		16 U		80 UJ		18 U
4-Methyl-2-pentanone		660 U	11 U	35 U		16 U		80 UJ		18 U
Acetone		110 J	11 U	35 U		150		140 J		18 U
Carbon disulfide		330 U	5.5 U	17 U		8.5		40 UJ		9.0 U
Chloroethane		330 U	5.5 U	17 U		8.2 U		40 UJ		9.0 U
Chloroform		330 U	5.5 U	17 U		8.2 U		40 UJ		9.0 U
cis-1,2-Dichloroethene		330 U	1.2 J	17 U		0.51 J		40 UJ		9.0 U
Ethylbenzene		330 U	5.5 U	17 U		8.2 U		40 UJ		9.0 U
m,p-Xylene		330 U	5.5 U	17 U		8.2 U		40 UJ		9.0 U
Methyl acetate		330 U	5.5 U	17 U		8.2 U		40 UJ		9.0 U
Methylene chloride		330 U	5.5 U	17 U		8.2 U		40 UJ		9.0 U
Naphthalene										
Tetrachloroethene		330 U	5.5 U	17 U		8.2 U		40 UJ		9.0 U
Toluene		2800	5.5 U	17 U		8.2 U		40 UJ		9.0 U
Trichloroethene		37 J	0.97 J	0.67 J		8.2 U		40 UJ		9.0 U
SVOCs (ug/kg)										
2-Methylnaphthalene	3.8 UJ				6.3 U		19 UJ		67 J	190 U
4-Methylphenol	390 UJ				320 U		990 UJ		23000 J	9500 U
Acenaphthene	3.8 UJ				6.3 U		29 J		58 J	190 U
Acenaphthylene	3.8 UJ				6.3 U		19 UJ		220 J	190 U
Anthracene	3.8 UJ				6.3 U		46 J		180 JEB	190 U
Benzaldehyde	390 UJ				320 U		990 UJ		1700 UJ	9500 U
Benzo(a)anthracene	3.8 UJ				40 EB		350 JEB		2800 JEB	74 J
Benzo(a)pyrene	3.8 UJ				55 EB		330 JEB		3100 JEB	71 J
Benzo(b)fluoranthene	3.8 UJ				38 EB		300 JEB		3000 JEB	170 J
Benzo(g,h,i)perylene	3.8 UJ				21 EB		330 JEB		1500 JEB	62 J
Benzo(k)fluoranthene	3.8 UJ				55 EB		310 JEB		3100 JEB	190 U
Bis(2-ethylhexyl)phthalate	390 UJ				320 U		1600 J		1700 UJ	9500 U
Butylbenzylphthalate	390 UJ				320 U		990 UJ		1700 UJ	9500 U
Caprolactam	390 UJ				140 J		610 J		1700 UJ	9500 U
Carbazole	390 UJ				320 U		990 UJ		1700 UJ	9500 U
Chrysene	3.8 UJ				52 EB		550 JEB		4600 J	140 J
Dibenz(a,h)anthracene	3.8 UJ				6.3 U		120 J		1700 J	190 U
Dibenzofuran	390 UJ				320 U		990 UJ		1700 UJ	9500 U
Dimethylphthalate	390 UJ				320 U		990 UJ		1700 UJ	9500 U
Di-n-butylphthalate	390 UJ				320 U		990 UJ		1700 UJ	9500 U
Fluoranthene	3.8 UJ				62 EB		700 JEB		5000 J	320
Fluorene	3.8 UJ				6.3 U		31 J		78 J	190 U
Indeno(1,2,3-cd)pyrene	3.8 UJ				27 EB		330 JEB		1700 JEB	83 J
Naphthalene	3.8 UJ				6.3 U		20 J		78 J	190 U
Pentachlorophenol	7.7 UJ				630 U		1900 UJ		3300 UJ	380 U

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-108	SO-108	SO-108	SO-109	SO-109	SO-110	SO-110	SO-111	SO-111	SO-112
Sample ID:	WL-RS0-108-08-10	WL-SO-108-0.5-1.5	WL-SO-108-08-10	WL-SO-109-00-01	WL-SO-109-2	WL-SO-110-00-01	WL-SO-110-2	WL-SO-111-00-01	WL-SO-111-2	WL-SO-112-00-01
Sample Date:	7/10/2014	6/18/2014	6/18/2014	6/26/2014	11/6/2014	6/26/2014	11/6/2014	6/25/2014	11/4/2014	6/25/2014
Sample Depth:	8-10 (ft bgs)	0.5-1.5 (ft bgs)	8-10 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Phenanthrene	3.8 UJ				31 EB		340 JEB		790 JEB	130 J
Phenol	390 UJ				320 U		990 UJ		1700 UJ	9500 U
Pyrene	3.8 UJ				66 EB		580 JEB		6200 J	210
Pesticides (ug/kg)										
4,4'-DDD	3.8 UJ				6.3 UJ		19 UJ		100 J	6.2 U
4,4'-DDE	3.8 UJ				6.3 U		19 UJ		72 J	8.4
4,4'-DDT	3.8 UJ				6.3 U		19 UJ		44 J	4.0 J
Aldrin	1.9 UJ				3.3 U		9.9 UJ		17 UJ	3.2 U
alpha-BHC	1.9 UJ				3.3 U		9.9 UJ		17 UJ	3.2 U
alpha-Chlordane	1.9 UJ				3.3 U		9.9 UJ		17 UJ	3.2 U
beta-BHC	1.9 UJ				3.3 U		9.9 UJ		17 UJ	1.3 J
delta-BHC	1.9 UJ				3.3 U		9.9 UJ		17 UJ	3.2 U
Dieldrin	3.8 UJ				6.3 U		19 UJ		33 UJ	6.2 U
Endosulfan II	3.8 UJ				6.3 U		19 UJ		33 UJ	6.2 U
Endosulfan sulfate	3.8 UJ				6.3 U		19 UJ		33 UJ	6.2 U
Endrin	3.8 UJ				6.3 U		19 UJ		33 UJ	6.2 U
Endrin aldehyde	3.8 UJ				6.3 U		19 UJ		33 UJ	6.2 U
Endrin ketone	3.8 UJ				6.3 UJ		19 UJ		R	6.2 U
gamma-Chlordane	1.9 UJ				3.3 U		9.9 UJ		17 UJ	3.2 U
Heptachlor	1.9 UJ				3.3 U		9.9 UJ		17 UJ	3.2 U
Heptachlor epoxide	1.9 UJ				3.3 U		9.9 UJ		17 UJ	3.2 U
Methoxychlor	19 UJ				33 U		99 UJ		170 UJ	32 U
PCBs (ug/kg)										
Aroclor-1260	38 UJ				63 U		190 UJ		330 UJ	62 U
Inorganics (mg/kg)										
Aluminum		8230 J	4630 J	8170 J-		9890 J-		6000 J		6990 J-
Antimony		2.8 J	0.18 UJ	0.38 UJ		0.60 J		1.2 J		0.40 J-
Arsenic		2.3 J	0.74 J	3.2 J-		3.8 J-		4.7 J		3.4 J-
Barium		73.0 J	16.6 J	44.9 J-		91.0 J-		113 J		32.5 J-
Beryllium		0.55 U	0.59 U	1.5 UJ		1.2 UJ		1.0 UJ		1.9 UJ
Cadmium		0.51 J	0.12 UJ	0.14 J		1.1 J		2.0 J		0.28 J
Calcium		3470 J	1170 J	3760 J-		3720 J-		10900 J		1990 J-
Chromium		2170 J	206 J	18.6 J		60.2 J		422 J		16.2 J
Chromium, Hexavalent		79.8 J	9.22 J	1.1 UJ		0.70 UJ		2.7 UJ		0.05 J
Cobalt		25.9 J	9.4 J	2.2 J		8.3 J		4.7 J		1.9 UJ
Copper		130 J	14.6 J	11.5 J		800 J		79.3 J		16.0 J
Cyanide		0.55 EB	0.53 EB	0.25 EB		0.076 EB		0.73 JEB		0.22 JEB
Iron		13900 J	6650 J	9840 J-		20400 J-		16500 J		8540 J-
Lead		1310 J	20.9 J	60.4 J		46.3 J		266 J		54.9 J-
Magnesium		2410 J	2010 J	1470 UJ		2570 J-		1730 J		973 UJ
Manganese		170 J	130 J	238 J		305 J		581 J		104 J-
Mercury		0.068 J-	0.015 J-	0.21 J-		0.11 J-		0.37 J		0.16 J
Nickel		10.5 J	10.0 J	6.6 J-		21.9 J-		17.7 J		4.5 J-
Potassium		578 J	597 J	1470 UJ		1140 UJ		672 J		322 J-
Selenium		0.31 J	0.23 J	7.3 UJ		0.97 J-		1.6 J		0.87 J-

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-108	SO-108	SO-108	SO-109	SO-109	SO-110	SO-110	SO-111	SO-111	SO-112
Sample ID:	WL-RS0-108-08-10	WL-SO-108-0.5-1.5	WL-SO-108-08-10	WL-SO-109-00-01	WL-SO-109-2	WL-SO-110-00-01	WL-SO-110-2	WL-SO-111-00-01	WL-SO-111-2	WL-SO-112-00-01
Sample Date:	7/10/2014	6/18/2014	6/18/2014	6/26/2014	11/6/2014	6/26/2014	11/6/2014	6/25/2014	11/4/2014	6/25/2014
Sample Depth:	8-10 (ft bgs)	0.5-1.5 (ft bgs)	8-10 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Silver		1.6 J	0.59 UJ	1.5 UJ		3.9 J		10.2 J		1.9 UJ
Sodium		90.9 J	51.6 J	1470 UJ		1140 UJ		1370 J		122 J-
Thallium		0.55 U	0.59 U	1.5 UJ		1.1 UJ		0.50 UJ		0.97 UJ
Vanadium		2.7 UJ	3.5 J	24.1 J		26.5 J		21.6 J		23.4 J-
Zinc		97.0	39.3	32.4 J-		141 J-		233 J		33.5 J-
Other										
pH in Soil (S.U.)		8.9	7.3	5.1		6.1		6		5.3

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-113	SO-114	SO-115	SO-116	SO-117	SO-118	SO-119	SO-119	SO-120	SO-120
Sample ID:	WL-SO-113-00-01	WL-SO-114-00-01	WL-SO-115-00-01	WL-SO-116-00-01	WL-SO-117-00-01	WL-SO-118-00-01	WL-RS0-119-00-01	WL-SO-119-00-01	WL-SO-120-00-01	WL-SO-120-2
Sample Date:	6/17/2014	6/25/2014	6/26/2014	6/17/2014	6/18/2014	6/19/2014	7/1/2014	6/19/2014	6/26/2014	11/6/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/kg)										
1,1,1-Trichloroethane	7.0 U	6.7 U	14 U	8.7 U	17 U	9.6 U		8.3 U	7.1 U	
1,1-Dichloroethane	7.0 U	6.7 U	14 U	8.7 U	17 U	9.6 U		8.3 U	7.1 U	
2-Butanone	14 U	12 J	31	17 U	42	19 U		17 U	14 U	
2-Hexanone	14 U	13 U	27 U	17 U	34 U	19 U		17 U	14 U	
4-Methyl-2-pentanone	14 U	13 U	27 U	17 U	34 U	19 U		17 U	14 U	
Acetone	14 U	26 U	1900 J	17 U	300	19 U		17 U	14 U	
Carbon disulfide	7.0 U	6.7 U	14 U	8.7 U	3.2 J	9.6 U		8.3 U	7.1 U	
Chloroethane	7.0 U	6.7 U	14 U	8.7 U	17 U	9.6 U		8.3 U	7.1 U	
Chloroform	7.0 U	6.7 U	14 U	8.7 U	17 U	9.6 U		8.3 U	7.1 U	
cis-1,2-Dichloroethene	7.0 U	6.7 U	14 U	8.7 U	17 U	9.6 U		8.3 U	7.1 U	
Ethylbenzene	7.0 U	6.7 U	14 U	8.7 U	17 U	9.6 U		8.3 U	7.1 U	
m,p-Xylene	7.0 U	6.7 U	14 U	8.7 U	17 U	9.6 U		8.3 U	7.1 U	
Methyl acetate	7.0 U	6.7 U	14 UJ	8.7 U	17 U	9.6 U		8.3 U	7.1 U	
Methylene chloride	7.0 U	6.7 U	14 U	8.7 U	17 U	9.6 U		8.3 U	7.1 U	
Naphthalene										
Tetrachloroethene	7.0 U	6.7 U	14 U	8.7 U	17 U	9.6 U		8.3 U	7.1 U	
Toluene	7.0 U	6.7 U	14 U	8.7 U	17 U	9.6 U		8.3 U	7.1 U	
Trichloroethene	7.0 U	6.7 U	14 U	0.54 J	17 U	9.6 U		8.3 U	7.1 U	
SVOCs (ug/kg)										
2-Methylnaphthalene	21 U			2100 U						6.2 U
4-Methylphenol	1100 U			6300 U						320 U
Acenaphthene	21 U			2100 U						6.2 U
Acenaphthylene	21 U			1500 J						6.2 U
Anthracene	21 U			1400 J						6.2 U
Benzaldehyde	1100 U			6300 U						320 U
Benzo(a)anthracene	12 J			10000						36 EB
Benzo(a)pyrene	13 J			6600						35 EB
Benzo(b)fluoranthene	21			12000						28 EB
Benzo(g,h,i)perylene	8.8 J			3200						20 EB
Benzo(k)fluoranthene	21 U			4200						41 EB
Bis(2-ethylhexyl)phthalate	1100 U			6300 U						320 U
Butylbenzylphthalate	1100 U			6300 U						320 U
Caprolactam	1100 U			6300 U						140 J
Carbazole	1100 U			6300 U						320 U
Chrysene	17 J			8000						60 EB
Dibenz(a,h)anthracene	21 U			1100 J						6.2 U
Dibenzofuran	1100 U			6300 U						320 U
Dimethylphthalate	1100 U			6300 U						320 U
Di-n-butylphthalate	1100 U			6300 U						320 U
Fluoranthene	35			17000						70 EB
Fluorene	21 U			2100 U						6.2 U
Indeno(1,2,3-cd)pyrene	13 J			4900						18 EB
Naphthalene	21 U			2100 U						6.2 U
Pentachlorophenol	42 U			4200 U						620 U

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-113	SO-114	SO-115	SO-116	SO-117	SO-118	SO-119	SO-119	SO-120	SO-120
Sample ID:	WL-SO-113-00-01	WL-SO-114-00-01	WL-SO-115-00-01	WL-SO-116-00-01	WL-SO-117-00-01	WL-SO-118-00-01	WL-RS0-119-00-01	WL-SO-119-00-01	WL-SO-120-00-01	WL-SO-120-2
Sample Date:	6/17/2014	6/25/2014	6/26/2014	6/17/2014	6/18/2014	6/19/2014	7/1/2014	6/19/2014	6/26/2014	11/6/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Phenanthrene	15 J			2300						36 EB
Phenol	1100 U			6300 U						320 U
Pyrene	28			16000						62 EB
Pesticides (ug/kg)										
4,4'-DDD	4.2 U			120 J						6.1 UJ
4,4'-DDE	0.84 J			38 J						6.1 U
4,4'-DDT	4.4			250						6.1 U
Aldrin	2.2 U			21 U						3.2 U
alpha-BHC	2.2 U			3.0 J						3.2 U
alpha-Chlordane	2.2 U			21 U						3.2 U
beta-BHC	2.2 U			21 U						3.2 U
delta-BHC	0.34 JEB			21 U						3.2 U
Dieldrin	0.57 J			28 J						6.1 U
Endosulfan II	0.13 J			7.2 J						6.1 U
Endosulfan sulfate	4.2 U			41 U						6.1 U
Endrin	4.2 U			41 U						6.1 U
Endrin aldehyde	4.2 U			41 J						6.1 U
Endrin ketone	4.2 U			41 U						6.1 UJ
gamma-Chlordane	0.12 J			19 J						3.2 U
Heptachlor	2.2 U			0.88 JEB						3.2 U
Heptachlor epoxide	0.10 J			8.7 J						3.2 U
Methoxychlor	2.7 J			57 J						32 U
PCBs (ug/kg)										
Aroclor-1260	42 U			410 U						62 U
Inorganics (mg/kg)										
Aluminum	6880	5190 J-	12300 J-	12200	8000 J	10600 J	9250		6800 J-	
Antimony	0.12 J-	0.21 UJ	0.81 J	0.61 J-	17.3 J	0.62 J	0.45 J		0.50 J	
Arsenic	1.9	1.4 J-	3.4 J-	3.7	7.2 J	3.6 J	3.3 J		1.5 UJ	
Barium	25.4	57.5 J-	82.8 J-	140	87.5 J	65.8 J	79.9 J		61.5 J-	
Beryllium	0.62 U	2.0 UJ	1.6 UJ	0.62 U	0.50 UJ	1.0 U	0.91 U		1.5 UJ	
Cadmium	0.12 UJ	0.31 J	1.0 J	1.8 J	2.0 J	0.35 J	0.57		0.39 J	
Calcium	696	2500 J-	6460 J-	10700	9300 J	1470 J	2710		3960 J-	
Chromium	30.3 J	10.0 J	23.2 J	78.6 J	11100 J	294 J	288 J		21.7 J	
Chromium, Hexavalent	0.25 J	0.66 UJ	1.1 UJ	0.49 UJ	2.0 UJ	0.67 UJ	0.59 UJ		1.0 UJ	
Cobalt	3.1 J	2.0 UJ	5.5 J	6.4 J	6.6 J	5.7 J	3.2 J		1.5 UJ	
Copper	5.6 J	19.0 J	83.7 J	94.5	141 J	45.4 J	64.6 J		10.0 J	
Cyanide	0.062 U	0.099 UJ	0.22 EB	0.58 EB	12.0 JEB	0.12 EB	0.16 JEB		0.052 EB	
Iron	11300	3770 J-	22500 J-	17400	15500 J	13300 J	9380		5030 J-	
Lead	16.4	31.7 J-	92.3 J	331	629 J	130 J	124 JEB		41.9 J	
Magnesium	635 J	1000 J	3470 J-	2420 J	2030 J	1400 J	1120		1450 UJ	
Manganese	121	144 J-	349 J	627	191 J	134 J	94.1 JEB		96.0 J	
Mercury	0.028 J	0.068 J	0.87 J-	0.22	0.42 J	0.28 J-	0.21		0.17 J-	
Nickel	4.3	5.0 J-	21.6 J-	24.2	36.2 J	12.5 J	10.8 JEB		4.4 J-	
Potassium	363 J-	418 J-	1570 UJ	565 J-	629 J	1010 UJ	907 UJ		1450 UJ	
Selenium	0.85 J	0.66 J-	0.60 J-	0.80 J	0.95 J	0.82 J	0.91		0.45 J-	

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-113	SO-114	SO-115	SO-116	SO-117	SO-118	SO-119	SO-119	SO-120	SO-120
Sample ID:	WL-SO-113-00-01	WL-SO-114-00-01	WL-SO-115-00-01	WL-SO-116-00-01	WL-SO-117-00-01	WL-SO-118-00-01	WL-RS0-119-00-01	WL-SO-119-00-01	WL-SO-120-00-01	WL-SO-120-2
Sample Date:	6/17/2014	6/25/2014	6/26/2014	6/17/2014	6/18/2014	6/19/2014	7/1/2014	6/19/2014	6/26/2014	11/6/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Silver	0.62 U	2.0 UJ	1.6 UJ	1.7	62.2 J	3.5 J	2.8		1.5 UJ	
Sodium	80.4 J	519 J-	1570 UJ	188 J	1050 J	199 J	907 U		1450 UJ	
Thallium	0.62 U	0.99 UJ	1.6 UJ	0.62 U	0.50 UJ	1.0 U	0.91 U		1.5 UJ	
Vanadium	20.5	12.8 J-	35.5 J	30.3	2.5 UJ	13.3 J	16.6 J		12.4 J	
Zinc	31.0	26.8 J-	257 J-	290	278 J	118	151 J		16.5 J-	
Other										
pH in Soil (S.U.)	5.2	5.7	6	7.7	6.8	5.2		5.9	4.7	

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-121	SO-121	SO-122	SO-123	SO-124	SO-125	SO-126	SO-127	SO-128	SO-129
Sample ID:	WL-SO-121-00-01	WL-SO-121D-00-01	WL-SO-122-00-01	WL-SO-123-00-01	WL-SO-124-00-01	WL-SO-125-00-01	WL-SO-126-00-01	WL-SO-127-00-01	WL-SO-128-00-01	WL-SO-129-00-01
Sample Date:	6/25/2014	6/25/2014	6/25/2014	6/25/2014	6/25/2014	6/23/2014	6/23/2014	6/23/2014	6/23/2014	6/23/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/kg)										
1,1,1-Trichloroethane	5.1 U	5.4 U	7.1 U	6.0 U	5.2 U	11 U	8.7 U	7.3 U	7.5 U	5.8 U
1,1-Dichloroethane	5.1 U	5.4 U	7.1 U	6.0 U	5.2 U	11 U	8.7 U	7.3 U	7.5 U	5.8 U
2-Butanone	10 U	11 U	14 U	12 U	10 U	21 U	17 U	15 U	15 U	12 U
2-Hexanone	10 U	11 U	14 U	12 U	10 U	21 U	17 U	15 U	15 U	12 U
4-Methyl-2-pentanone	10 U	11 U	14 U	12 U	10 U	21 U	17 U	15 U	15 U	12 U
Acetone	10 U	11 U	14 U	12 U	10 U	21 U	17 U	15 U	15 U	12 U
Carbon disulfide	5.1 U	5.4 U	7.1 U	6.0 U	5.2 U	11 U	8.7 U	7.3 U	7.5 U	5.8 U
Chloroethane	5.1 U	5.4 U	7.1 U	6.0 U	5.2 U	11 U	8.7 U	7.3 U	7.5 U	5.8 U
Chloroform	5.1 U	5.4 U	7.1 U	6.0 U	5.2 U	11 U	8.7 U	7.3 U	7.5 U	5.8 U
cis-1,2-Dichloroethene	5.1 U	5.4 U	7.1 U	6.0 U	5.2 U	11 U	8.7 U	7.3 U	7.5 U	5.8 U
Ethylbenzene	5.1 U	5.4 U	7.1 U	6.0 U	5.2 U	11 U	8.7 U	7.3 U	7.5 U	5.8 U
m,p-Xylene	5.1 U	5.4 U	7.1 U	6.0 U	5.2 U	11 U	8.7 U	7.3 U	7.5 U	5.8 U
Methyl acetate	5.1 U	5.4 U	7.1 U	6.0 U	5.2 U	11 U	8.7 U	7.3 U	7.5 U	5.8 U
Methylene chloride	5.1 U	5.4 U	7.1 U	6.0 U	5.2 U	11 U	8.7 U	7.3 U	7.5 U	5.8 U
Naphthalene										
Tetrachloroethene	5.1 U	5.4 U	7.1 U	6.0 U	5.2 U	11 U	8.7 U	7.3 U	7.5 U	5.8 U
Toluene	5.1 U	5.4 U	7.1 U	6.0 U	5.2 U	11 U	8.7 U	7.3 U	7.5 U	5.8 U
Trichloroethene	5.1 U	5.4 U	7.1 U	6.0 U	5.2 U	11 U	8.7 U	7.3 U	7.5 U	5.8 U
SVOCs (ug/kg)										
2-Methylnaphthalene	230 U	570 U	120 U			220 U	120 U	47 U		
4-Methylphenol	5900 U	5900 U	6400 U			11000 U	6000 U	2400 U		
Acenaphthene	230 U	170 J	120 U			220 U	120 U	47 U		
Acenaphthylene	220 J	330 J	73 J			220 U	120 U	47 U		
Anthracene	220 J	480 J	44 J			220 U	120 U	47 U		
Benzaldehyde	5900 U	5900 U	6400 U			11000 U	6000 U	2400 U		
Benzo(a)anthracene	1200 J	1600 J	130 J			90 J	120 UJ	49 J		
Benzo(a)pyrene	900	1200	150			140 J	38 J	53		
Benzo(b)fluoranthene	1500	2000	270			230	70 J	84		
Benzo(g,h,i)perylene	650	820	140			120 J	37 J	43 J		
Benzo(k)fluoranthene	490	630	86 J			73 J	120 U	26 J		
Bis(2-ethylhexyl)phthalate	480 J	4200 J	6400 U			11000 U	6000 U	270 J		
Butylbenzylphthalate	5900 U	5900 U	6400 U			11000 U	6000 U	2400 U		
Caprolactam	5900 U	5900 U	6400 U			11000 U	6000 U	2400 U		
Carbazole	5900 U	5900 U	6400 U			11000 U	6000 U	2400 U		
Chrysene	1100	1500	150			120 J	43 J	57		
Dibenz(a,h)anthracene	180 J	240 J	120 U			220 U	120 U	47 U		
Dibenzofuran	5900 U	5900 U	6400 U			11000 U	6000 U	2400 U		
Dimethylphthalate	5900 U	5900 U	6400 U			11000 U	6000 U	2400 U		
Di-n-butylphthalate	5900 U	5900 U	6400 U			11000 U	6000 U	2400 U		
Fluoranthene	1900 J	3300 J	370			300	77 J	110		
Fluorene	74 J	280 J	120 U			220 U	120 U	47 U		
Indeno(1,2,3-cd)pyrene	850	1100	190			150 J	49 J	56		
Naphthalene	230 U	570 U	120 U			220 U	120 U	47 U		
Pentachlorophenol	460 U	1200 U	250 U			440 U	240 U	96 U		

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-121	SO-121	SO-122	SO-123	SO-124	SO-125	SO-126	SO-127	SO-128	SO-129
Sample ID:	WL-SO-121-00-01	WL-SO-121D-00-01	WL-SO-122-00-01	WL-SO-123-00-01	WL-SO-124-00-01	WL-SO-125-00-01	WL-SO-126-00-01	WL-SO-127-00-01	WL-SO-128-00-01	WL-SO-129-00-01
Sample Date:	6/25/2014	6/25/2014	6/25/2014	6/25/2014	6/25/2014	6/23/2014	6/23/2014	6/23/2014	6/23/2014	6/23/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Phenanthrene	830 J	2000 J	160			130 J	120 U	44 J		
Phenol	5900 U	5900 U	6400 U			11000 U	6000 U	2400 U		
Pyrene	1600	2400	190			160 J	56 J	86		
Pesticides (ug/kg)										
4,4'-DDD	37 U	38 U	32			5.5 J	5.8 U	4.7 U		
4,4'-DDE	56	76	210			7.4 J	1.2 J	1.5 J		
4,4'-DDT	330 J	550	1800 J			11 J	0.69 J	4.2 J		
Aldrin	19 U	20 U	2.1 U			3.7 U	3.0 U	2.4 U		
alpha-BHC	19 U	20 U	2.1 U			3.7 U	3.0 U	2.4 U		
alpha-Chlordane	19 U	20 U	2.1 U			3.7 U	3.0 U	2.4 U		
beta-BHC	19 U	20 U	0.68 J			3.7 U	3.0 U	2.4 U		
delta-BHC	19 U	20 U	0.35 J			0.27 J	0.37 J	2.4 U		
Dieldrin	37 U	38 U	4.1 U			7.2 U	5.8 U	4.7 U		
Endosulfan II	37 U	38 U	4.1 U			7.2 U	5.8 U	4.7 U		
Endosulfan sulfate	37 U	38 U	8.2 J			7.2 U	1.1 J	4.7 U		
Endrin	37 U	52 J	29 J			7.2 U	5.8 U	4.7 U		
Endrin aldehyde	37 U	38 U	47 J			7.9 J	5.8 U	4.7 U		
Endrin ketone	37 U	38 U	4.1 U			7.2 U	5.8 U	4.7 U		
gamma-Chlordane	19 U	4.0 J	1.6 J			3.7 U	3.0 U	2.4 U		
Heptachlor	19 U	20 U	2.1 U			3.7 U	3.0 U	2.4 U		
Heptachlor epoxide	19 U	20 U	2.1 U			1.6 J	3.0 U	2.4 U		
Methoxychlor	8.1 J	9.5 J	21 U			37 U	30 U	24 U		
PCBs (ug/kg)										
Aroclor-1260	370 U	380 U	41 U			72 U	58 U	47 U		
Inorganics (mg/kg)										
Aluminum	4400 J-	4920 J-	6660 J-	6580 J-	10300 J-	7810 J-	7410 J-	7170 J-	8460 J-	8060 J-
Antimony	0.41 J-	0.45 J-	5.0 J-	0.31 UJ	0.34 UJ	0.45 UJ	0.17 UJ	0.15 UJ	0.32 UJ	1.3 J
Arsenic	2.3 J-	2.4 J-	2.6 J-	3.7 J-	3.6 J-	3.5 J-	2.8 J-	1.9 J-	3.6 J-	13.3 J-
Barium	33.5 J-	33.8 J-	30.7 J-	24.6 J-	35.3 J-	29.4 J-	27.6 J-	18.2 J-	48.0 J-	41.3 J-
Beryllium	1.1 UJ	1.2 UJ	1.3 UJ	1.1 UJ	1.1 UJ	1.4 UJ	0.85 UJ	0.77 UJ	0.80 UJ	0.57 UJ
Cadmium	0.30 J	0.44 J	0.17 J	0.11 UJ	0.22 J	0.36 J-	0.17 UJ	0.15 UJ	0.25 J-	0.40 J-
Calcium	2560 J-	2820 J-	1020 J-	1020 J-	641 J-	2360 J-	1560 J-	1050 J-	1160 J-	1150 J-
Chromium	34.9 J	40.7 J	4370 J	17.1 J	18.4 J	24.4 J-	15.0 J-	11.8 J-	34.2 J-	17.4 J-
Chromium, Hexavalent	0.44 UJ	0.03 J	0.03 J	0.11 J	0.42 UJ	0.87 UJ	0.63 UJ	0.55 UJ	0.56 UJ	0.44 UJ
Cobalt	3.0 J	3.2 J	4.8 J	2.9 J	3.4 J	1.4 UJ	7.3 J-	1.9 J-	2.8 J-	4.2 J-
Copper	14.0 J	16.3 J	38.2 J-	17.1 J-	21.5 J-	16.0 J	13.3 J	5.3 J	21.3 J	40.6 J
Cyanide	0.093 JEB	0.28 JEB	4.4 JEB	0.055 UJ	0.16 JEB	0.46 JEB	0.085 UJ	0.18 JEB	0.47 JEB	0.11 JEB
Iron	8480 J-	9510 J-	10100 J-	10100 J-	13400 J-	5080 J-	12200 J-	8390 J-	11400 J-	16800 J-
Lead	57.3 J-	66.2 J-	167 J-	100 J-	279 J-	124 J	19.0 J	28.5 J	79.9 J	145 J
Magnesium	1630 J	1800 J	1560 J	1520 J	1520 J	1390 UJ	2310 J-	1340 J-	1160 J-	1980 J-
Manganese	288 J-	275 J-	114 J-	154 J-	198 J-	31.7 J-	379 J-	95.8 J-	96.2 J-	213 J-
Mercury	0.063 J	0.074 J	0.14 J	0.11 J-	0.20 J-	0.25 J-	0.032 J-	0.075 J-	0.26 J-	0.33 J-
Nickel	8.7 J-	9.4 J-	7.0 J-	7.5 J-	9.3 J-	7.2 J-	10.6 J-	5.8 J-	7.6 J-	10.6 J-
Potassium	478 J-	454 J-	477 J-	442 J-	356 J-	1390 UJ	847 UJ	768 UJ	799 UJ	575 UJ
Selenium	0.64 J-	0.52 J-	0.56 J-	2.8 UJ	2.7 UJ	0.77 J-	0.21 J-	0.22 J-	0.39 J-	1.5 J-

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-121	SO-121	SO-122	SO-123	SO-124	SO-125	SO-126	SO-127	SO-128	SO-129
Sample ID:	WL-SO-121-00-01	WL-SO-121D-00-01	WL-SO-122-00-01	WL-SO-123-00-01	WL-SO-124-00-01	WL-SO-125-00-01	WL-SO-126-00-01	WL-SO-127-00-01	WL-SO-128-00-01	WL-SO-129-00-01
Sample Date:	6/25/2014	6/25/2014	6/25/2014	6/25/2014	6/25/2014	6/23/2014	6/23/2014	6/23/2014	6/23/2014	6/23/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Silver	1.1 UJ	1.2 UJ	57.8 J-	1.1 UJ	1.1 UJ	1.4 UJ	0.85 UJ	0.77 UJ	0.80 UJ	0.57 UJ
Sodium	46.0 J-	39.0 J-	90.7 J-	97.2 J-	29.4 J-	1390 UJ	847 UJ	768 UJ	799 UJ	575 UJ
Thallium	0.57 UJ	0.59 UJ	0.65 UJ	0.55 UJ	0.54 UJ	1.4 UJ	0.85 UJ	0.77 UJ	0.80 UJ	0.57 UJ
Vanadium	14.3 J-	15.0 J-	3.2 UJ	19.8 J-	21.1 J-	20.8 J-	20.2 J-	15.8 J-	27.0 J-	20.4 J-
Zinc	83.8 J-	102 J-	32.8 J-	34.8 J-	51.9 J-	24.0 J-	37.9 J-	19.6 J-	49.7 J-	83.9 J-
Other										
pH in Soil (S.U.)	6.1	6.1	4.6	5.8	5.2	4.8	5.6	5.2	4.8	5.8

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-130	SO-131	SO-132	SO-133	SO-134	SO-135	SO-135	SO-136	SO-136	SO-137
Sample ID:	WL-SO-130-00-01	WL-SO-131-00-01	WL-SO-132-00-01	WL-SO-133-00-01	WL-SO-134-00-01	WL-SO-135-00-01	WL-SO-135-2	WL-SO-136-00-01	WL-SO-136-2	WL-SO-137-00-01
Sample Date:	6/23/2014	6/23/2014	6/23/2014	6/23/2014	6/23/2014	6/26/2014	10/30/2014	6/26/2014	10/30/2014	6/26/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/kg)										
1,1,1-Trichloroethane	6.4 U	6.9 U	7.0 U	9.1 U	6.3 U	28 UJ		7.5 U		8.9 U
1,1-Dichloroethane	6.4 U	6.9 U	7.0 U	9.1 U	6.3 U	28 UJ		7.5 U		8.9 U
2-Butanone	4.8 J	14 U	14 U	12 J	13 U	57 UJ		15 U		18 U
2-Hexanone	13 U	14 U	14 U	18 U	13 U	57 UJ		15 U		18 U
4-Methyl-2-pentanone	13 U	14 U	14 U	18 U	13 U	57 UJ		15 U		18 U
Acetone	31	14 U	14 U	66	13 U	57 UJ		15 U		18 U
Carbon disulfide	6.4 U	6.9 U	7.0 U	1.4 J	6.3 U	28 UJ		7.5 U		8.9 U
Chloroethane	6.4 U	6.9 U	7.0 U	9.1 U	6.3 U	28 UJ		7.5 U		8.9 U
Chloroform	6.4 U	6.9 U	7.0 U	9.1 U	6.3 U	28 UJ		7.5 U		8.9 U
cis-1,2-Dichloroethene	6.4 U	6.9 U	7.0 U	9.1 U	6.3 U	28 UJ		7.5 U		8.9 U
Ethylbenzene	6.4 U	6.9 U	7.0 U	9.1 U	6.3 U	28 UJ		7.5 U		8.9 U
m,p-Xylene	6.4 U	6.9 U	7.0 U	9.1 U	6.3 U	28 UJ		7.5 U		8.9 U
Methyl acetate	2.5 J	6.9 U	7.0 U	9.1 U	6.3 U	28 UJ		7.5 U		8.9 U
Methylene chloride	6.4 U	6.9 U	7.0 U	9.1 U	6.3 U	28 UJ		7.5 U		8.9 U
Naphthalene										
Tetrachloroethene	6.4 U	6.9 U	7.0 U	9.1 U	6.3 U	28 UJ		7.5 U		8.9 U
Toluene	6.4 U	6.9 U	7.0 U	9.1 U	6.3 U	28 UJ		7.5 U		8.9 U
Trichloroethene	6.4 U	6.9 U	7.0 U	9.1 U	6.3 U	28 UJ		7.5 U		8.9 U
SVOCs (ug/kg)										
2-Methylnaphthalene							6.1		11	
4-Methylphenol							590		230 U	
Acenaphthene							6.8		22	
Acenaphthylene							7.8		43	
Anthracene							22		130	
Benzaldehyde							250 U		230 U	
Benzo(a)anthracene							180		1200	
Benzo(a)pyrene							220		1300	
Benzo(b)fluoranthene							260		1400	
Benzo(g,h,i)perylene							160		910	
Benzo(k)fluoranthene							240		1100	
Bis(2-ethylhexyl)phthalate							650		740	
Butylbenzylphthalate							250 U		230 U	
Caprolactam							120 J		230 U	
Carbazole							250 U		95 J	
Chrysene							290		1300	
Dibenz(a,h)anthracene							81		190	
Dibenzofuran							250 U		230 U	
Dimethylphthalate							250 U		230 U	
Di-n-butylphthalate							250 U		230 U	
Fluoranthene							440		2600	
Fluorene							9.9		36	
Indeno(1,2,3-cd)pyrene							170		860	
Naphthalene							7.2		19	
Pentachlorophenol							9.7 UJ		9.0 UJ	

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-130	SO-131	SO-132	SO-133	SO-134	SO-135	SO-135	SO-136	SO-136	SO-137
Sample ID:	WL-SO-130-00-01	WL-SO-131-00-01	WL-SO-132-00-01	WL-SO-133-00-01	WL-SO-134-00-01	WL-SO-135-00-01	WL-SO-135-2	WL-SO-136-00-01	WL-SO-136-2	WL-SO-137-00-01
Sample Date:	6/23/2014	6/23/2014	6/23/2014	6/23/2014	6/23/2014	6/26/2014	10/30/2014	6/26/2014	10/30/2014	6/26/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Phenanthrene							180		810	
Phenol							250 U		230 U	
Pyrene							390		2100	
Pesticides (ug/kg)										
4,4'-DDD							7.3		2.1 J	
4,4'-DDE							1.0 J		19	
4,4'-DDT							4.8 U		11	
Aldrin							2.5 U		2.3 U	
alpha-BHC							2.5 U		2.3 U	
alpha-Chlordane							2.5 U		2.3 U	
beta-BHC							2.5 U		2.3 U	
delta-BHC							2.5 U		2.3 U	
Dieldrin							4.8 U		4.4 U	
Endosulfan II							4.8 U		4.4 U	
Endosulfan sulfate							4.8 U		4.4 U	
Endrin							4.8 U		4.4 UJ	
Endrin aldehyde							4.8 U		4.4 U	
Endrin ketone							4.8 U		4.4 UJ	
gamma-Chlordane							2.5 U		2.3 U	
Heptachlor							2.5 U		2.3 U	
Heptachlor epoxide							2.5 U		2.3 U	
Methoxychlor							3.8 J		19 J	
PCBs (ug/kg)										
Aroclor-1260							48 U		45 J	
Inorganics (mg/kg)										
Aluminum	7540 J-	4030 J-	5790 J-	7580 J-	10200 J-	6370 J		8000 J-		12100 J-
Antimony	0.94 J	0.27 UJ	0.13 UJ	0.62 J	0.17 UJ	1.7 J		1.4 J		0.24 UJ
Arsenic	3.4 J-	2.9 J-	2.1 J-	3.4 J-	10.4 J-	4.1 J		6.4 J-		3.2 J-
Barium	30.6 J-	15.8 J-	24.7 J-	40.5 J-	39.2 J-	85.6 J		52.0 J-		61.7 J-
Beryllium	0.65 UJ	0.63 UJ	0.64 UJ	0.82 UJ	0.58 UJ	0.62 UJ		0.78 UJ		0.90 UJ
Cadmium	0.21 J-	0.13 UJ	0.13 UJ	0.47 J-	0.22 J-	0.69 J		0.51 J		0.25 J
Calcium	1430 J-	793 J-	1370 J-	1630 J-	1630 J-	5450 J		1610 J-		1490 J-
Chromium	25.9 J-	40.2 J-	27.0 J-	85.9 J-	59.3 J-	2790 J		1680 J		32.7 J
Chromium, Hexavalent	0.48 UJ	0.51 UJ	0.53 UJ	0.48 UJ	0.46 UJ	2.2 UJ		0.61 UJ		0.62 UJ
Cobalt	4.1 J-	2.5 J-	2.4 J-	4.3 J-	4.5 J-	5.6 J		4.8 J		4.4 J
Copper	25.3 J	12.8 J	11.7 J	35.8 J	11.4 J	49.4 J		63.7 J		34.0 J
Cyanide	0.14 JEB	0.33 JEB	0.072 JEB	0.082 UJ	0.099 JEB	2.5 JEB		0.56 EB		0.14 EB
Iron	11700 J-	8470 J-	8300 J-	13200 J-	13500 J-	19200 J		13800 J-		15100 J-
Lead	67.0 J	17.7 J	32.6 J	80.5 J	66.8 J	128 J		373 J		714 J
Magnesium	2140 J-	1190 J-	1310 J-	2160 J-	1690 J-	1530 J		1650 J-		2160 J-
Manganese	225 J-	146 J-	115 J-	226 J-	315 J-	400 J		294 J		190 J
Mercury	0.21 J-	0.028 J-	0.082 J-	0.17 J-	0.090 J-	0.34 J		0.41 J-		0.42 J-
Nickel	8.5 J-	4.6 J-	6.7 J-	10.9 J-	8.8 J-	15.3 J		21.0 J-		14.6 J-
Potassium	646 UJ	630 UJ	643 UJ	821 UJ	579 UJ	787 J		779 UJ		898 UJ
Selenium	1.1 J-	3.1 UJ	0.29 J-	0.41 J-	0.36 J-	0.79 J		0.60 J-		0.91 J-

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-130	SO-131	SO-132	SO-133	SO-134	SO-135	SO-135	SO-136	SO-136	SO-137
Sample ID:	WL-SO-130-00-01	WL-SO-131-00-01	WL-SO-132-00-01	WL-SO-133-00-01	WL-SO-134-00-01	WL-SO-135-00-01	WL-SO-135-2	WL-SO-136-00-01	WL-SO-136-2	WL-SO-137-00-01
Sample Date:	6/23/2014	6/23/2014	6/23/2014	6/23/2014	6/23/2014	6/26/2014	10/30/2014	6/26/2014	10/30/2014	6/26/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Silver	0.65 UJ	0.63 UJ	0.64 UJ	0.82 UJ	0.58 UJ	9.9 J		49.5 J		1.4 J
Sodium	646 UJ	630 UJ	643 UJ	821 UJ	579 UJ	523 J		779 UJ		898 UJ
Thallium	0.65 UJ	0.63 UJ	0.64 UJ	0.82 UJ	0.58 UJ	0.50 UJ		0.78 UJ		0.90 UJ
Vanadium	17.2 J-	11.3 J-	14.7 J-	19.8 J-	19.5 J-	2.5 UJ		3.9 UJ		25.6 J
Zinc	83.0 J-	37.3 J-	26.5 J-	83.1 J-	87.8 J-	87.2 J		71.8 J-		47.5 J-
Other										
pH in Soil (S.U.)	5.4	6.3	6.3	5.8	6.4	5.4		5.1		5.4

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-138	SO-138	SO-139	SO-139	SO-140	SO-141	SO-142	SO-143	SO-144	SO-145
Sample ID:	WL-SO-138-00-01	WL-SO-138-2	WL-SO-139-2	WL-SO-139D-2	WL-SO-140-2	WL-SO-141-2	WL-SO-142-2	WL-SO-143-00-01	WL-SO-144-00-01	WL-SO-145-00-01
Sample Date:	6/26/2014	10/30/2014	10/30/2014	10/30/2014	10/30/2014	11/4/2014	10/30/2014	6/26/2014	6/23/2014	6/26/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/kg)										
1,1,1-Trichloroethane	10 U							26 UJ	9.2 U	R
1,1-Dichloroethane	10 U							26 UJ	9.2 U	23 UJ
2-Butanone	21 U							53 UJ	18 U	46 UJ
2-Hexanone	21 U							53 UJ	18 U	R
4-Methyl-2-pentanone	21 U							53 UJ	18 U	R
Acetone	21 U							53 UJ	18 U	46 UJ
Carbon disulfide	10 U							26 UJ	9.2 U	23 UJ
Chloroethane	10 U							26 UJ	9.2 U	23 UJ
Chloroform	10 U							26 UJ	9.2 U	23 UJ
cis-1,2-Dichloroethene	10 U							26 UJ	9.2 U	23 UJ
Ethylbenzene	10 U							26 UJ	9.2 U	R
m,p-Xylene	10 U							26 UJ	9.2 U	R
Methyl acetate	10 U							26 UJ	9.2 U	23 UJ
Methylene chloride	10 U							26 UJ	9.2 U	23 UJ
Naphthalene										
Tetrachloroethene	10 U							26 UJ	9.2 U	R
Toluene	10 U							26 UJ	9.2 U	R
Trichloroethene	10 U							26 UJ	9.2 U	R
SVOCs (ug/kg)										
2-Methylnaphthalene		120	4.2 UJ	3.8 J	3.2 J	4.8 U	10	490 UJ	170 U	280 UJ
4-Methylphenol		460 U	210 UJ	210 U	310 U	250 U	200 U	17000 UJ	8900 U	14000 UJ
Acenaphthene		220	6.4 J	7.0	7.7	4.8 U	14	490 UJ	170 U	280 UJ
Acenaphthylene		140	4.2 UJ	4.1 U	6.1 U	4.8 U	15	490 UJ	170 U	280 UJ
Anthracene		590	54 J	35	20	4.7 JEB	79	490 UJ	170 U	59 J
Benzaldehyde		460 U	210 UJ	210 U	310 U	250 U	200 U	17000 UJ	8900 U	14000 UJ
Benzo(a)anthracene		3800	290 J	240	240	39 EB	700	730 J	56 J	330 J
Benzo(a)pyrene		4100	220 J	170	240	28 EB	660	1100 J	60 J	340 J
Benzo(b)fluoranthene		4600	190 J	140	280	46 EB	750	2600 J	110 J	570 J
Benzo(g,h,i)perylene		3300	110 J	88	170	33 EB	290	1400 J	54 J	300 J
Benzo(k)fluoranthene		3500	230 J	200	270	30 EB	600	790 J	170 U	190 J
Bis(2-ethylhexyl)phthalate		2000	210 UJ	580	870	250 U	480	17000 UJ	8900 U	14000 UJ
Butylbenzylphthalate		410 J	210 UJ	210 U	310 U	250 U	200 U	17000 UJ	8900 U	14000 UJ
Caprolactam		210 J	210 UJ	210 U	310 U	110 J	200 U	17000 UJ	8900 U	14000 UJ
Carbazole		650	210 UJ	210 U	310 U	250 U	200 U	17000 UJ	8900 U	14000 UJ
Chrysene		5100	330 J	280	360	63 EB	760	1700 J	75 J	400 J
Dibenz(a,h)anthracene		800	45 J	49 J	45	5.9	85	200 J	170 U	280 UJ
Dibenzofuran		460 U	210 UJ	210 U	310 U	250 U	200 U	17000 UJ	8900 U	14000 UJ
Dimethylphthalate		460 U	210 UJ	210 U	310 U	250 U	200 U	17000 UJ	8900 U	14000 UJ
Di-n-butylphthalate		360 J	210 UJ	210 U	310 U	250 U	200 U	17000 UJ	8900 U	14000 UJ
Fluoranthene		9700	510 J	400	600	78 EB	1300	2100 J	120 J	940 J
Fluorene		320	6.9 J	7.6	9.2	4.8 U	14	490 UJ	170 U	280 UJ
Indeno(1,2,3-cd)pyrene		3600	120 J	96	160	34 EB	300	1700 J	73 J	370 J
Naphthalene		150	4.2 UJ	4.3	4.9 J	4.8 U	11	490 UJ	170 U	280 UJ
Pentachlorophenol		7.1 J	420 UJ	8.4 UJ	12 UJ	480 U	7.8 UJ	1000 UJ	350 U	560 UJ

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-138	SO-138	SO-139	SO-139	SO-140	SO-141	SO-142	SO-143	SO-144	SO-145
Sample ID:	WL-SO-138-00-01	WL-SO-138-2	WL-SO-139-2	WL-SO-139D-2	WL-SO-140-2	WL-SO-141-2	WL-SO-142-2	WL-SO-143-00-01	WL-SO-144-00-01	WL-SO-145-00-01
Sample Date:	6/26/2014	10/30/2014	10/30/2014	10/30/2014	10/30/2014	11/4/2014	10/30/2014	6/26/2014	6/23/2014	6/26/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Phenanthrene		5300	130 J	120	240	44 EB	300	500 J	170 U	380 J
Phenol		460 U	210 UJ	210 U	310 U	250 U	200 U	17000 UJ	8900 U	14000 UJ
Pyrene		7400	430 J	380 J	520	71 EB	980	1500 J	98 J	640 J
Pesticides (ug/kg)										
4,4'-DDD		9.7	4.1 UJ	2.7 J	1.7 J	4.8 U	2.9 J	170 UJ	1.6 J	14 UJ
4,4'-DDE		20	4.1 UJ	5.0	3.3 J	4.8 U	1.9 J	38 J	1.1 J	49 J
4,4'-DDT		22	4.1 UJ	2.8 J	3.2 J	4.8 U	3.2 J	170 UJ	5.8 U	8.6 J
Aldrin		4.5 U	2.1 UJ	2.1 U	3.1 U	2.5 U	2.0 U	85 UJ	3.0 U	7.1 UJ
alpha-BHC		4.5 U	2.1 UJ	2.1 U	3.1 U	2.5 U	2.0 U	85 UJ	3.0 U	7.1 UJ
alpha-Chlordane		4.5 U	2.1 UJ	2.1 U	3.1 U	2.5 U	2.0 U	85 UJ	3.0 U	11 J
beta-BHC		4.5 U	2.1 UJ	2.1 U	3.1 U	2.5 U	2.0 U	85 UJ	3.0 U	7.1 UJ
delta-BHC		4.5 U	2.1 UJ	2.1 U	3.1 U	2.5 U	2.0 U	85 UJ	3.0 U	7.1 UJ
Dieldrin		8.8 U	4.1 UJ	4.1 U	6.1 U	4.8 U	3.9 U	170 UJ	5.8 U	14 UJ
Endosulfan II		8.8 U	4.1 UJ	4.1 U	6.1 U	4.8 U	3.9 U	170 UJ	5.8 U	14 UJ
Endosulfan sulfate		8.8 U	4.1 UJ	4.1 U	6.1 U	4.8 U	3.9 U	170 UJ	5.8 U	14 UJ
Endrin		8.8 UJ	4.1 UJ	4.1 UJ	6.1 UJ	4.8 U	3.9 UJ	170 UJ	5.8 U	14 UJ
Endrin aldehyde		8.8 U	4.1 UJ	4.1 U	6.1 U	4.8 U	3.9 U	170 UJ	5.8 U	14 UJ
Endrin ketone		8.8 UJ	R	4.1 UJ	6.1 UJ	R	3.9 UJ	170 UJ	5.8 U	14 UJ
gamma-Chlordane		4.5 U	2.1 UJ	2.1 U	3.1 U	2.5 U	2.0 U	85 UJ	3.0 U	4.5 J
Heptachlor		4.5 U	2.1 UJ	2.1 U	3.1 U	2.5 U	2.0 U	85 UJ	3.0 U	7.1 UJ
Heptachlor epoxide		4.5 U	2.1 UJ	2.1 U	3.1 U	2.5 U	2.0 U	85 UJ	3.0 U	4.2 J
Methoxychlor		50	21 UJ	2.9 J	4.4 J	25 U	18 J	23 J	30 U	71 UJ
PCBs (ug/kg)										
Aroclor-1260		150 J	41 U	41 U	60 U	48 U	25 J	1700 UJ	58 U	140 UJ
Inorganics (mg/kg)										
Aluminum	9420 J-		4280	4280	6000	7850	9250	8390 J	8960 J-	5600 J
Antimony	2.3 J		0.26 UJ	0.25 UJ	0.37 UJ	0.33 J	0.36 UJ	0.78 J	0.17 UJ	0.47 J
Arsenic	7.6 J-		5.2	4.7	2.0	2.5	3.5	3.9 J	1.7 J-	1.9 J
Barium	104 J-		14.7	14.1	76.0	29.9	60.4	104 J	32.7 J-	50.0 J
Beryllium	1.2 UJ		0.14 J	0.15 J	0.25 J	0.28 J	0.50	0.78 J	0.84 UJ	0.50 UJ
Cadmium	0.90 J		0.26 U	0.25 U	0.39	0.47	0.38	3.2 J	0.19 J-	1.0 J
Calcium	5030 J-		654 U	627 U	3680	803 J	1870	7120 J	1890 J-	7920 J
Chromium	4460 J		5.4 J	5.2 J	8.0 J	29.9 J	8.3 J	18.9 J	10.2 J-	9.1 J
Chromium, Hexavalent	0.86 UJ		0.50 UJ	0.51 UJ	0.70 UJ	0.59 UJ	0.46 UJ	2.2 UJ	0.05 J	1.5 UJ
Cobalt	12.2 J		0.87	0.71	2.2	2.1	4.0	5.0 J	2.2 J-	1.7 J
Copper	79.4 J		7.0	6.6	12.2	26.5	42.5	47.6 J	4.8 J	14.9 J
Cyanide	1.2 EB		0.10	0.089	0.76	0.93	0.21	0.72 JEB	0.084 UJ	0.40 JEB
Iron	25500 J-		6150	5520	8350	8830	14200	13800 J	7920 J-	5010 J
Lead	295 J		50.0	39.9	45.7	92.4	306	88.5 J	23.3 J	74.4 J
Magnesium	2130 J-		654 U	627 U	1100	1010	1930	1890 J	1400 J-	926 J
Manganese	2050 J		51.6	32.4	254	74.8	306	347 J	187 J-	132 J
Mercury	0.41 J-		0.097	0.088	0.093	0.52	1.3	0.22 J	0.071 J-	0.39 J
Nickel	19.2 J-		2.9 J	2.8 J	5.8 J	12.8 J	21.2 J	16.1 J	5.3 J-	7.1 J
Potassium	1190 UJ		654 U	627 U	916 U	813 U	595 U	923 J	838 UJ	500 UJ
Selenium	0.91 J-		0.64 J	0.65	0.56 J	0.69 J	0.70	1.0 J	0.24 J-	1.1 J

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-138	SO-138	SO-139	SO-139	SO-140	SO-141	SO-142	SO-143	SO-144	SO-145
Sample ID:	WL-SO-138-00-01	WL-SO-138-2	WL-SO-139-2	WL-SO-139D-2	WL-SO-140-2	WL-SO-141-2	WL-SO-142-2	WL-SO-143-00-01	WL-SO-144-00-01	WL-SO-145-00-01
Sample Date:	6/26/2014	10/30/2014	10/30/2014	10/30/2014	10/30/2014	11/4/2014	10/30/2014	6/26/2014	6/23/2014	6/26/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Silver	27.4 J		0.58	0.57	0.80	3.3	12.4	0.86 J	0.84 UJ	1.3 J
Sodium	1190 UJ		654 U	627 U	916 U	813 U	595 U	500 UJ	838 UJ	500 UJ
Thallium	1.2 UJ		0.13 U	0.13 U	0.18 U	0.16 U	0.36 U	0.50 UJ	0.84 UJ	0.50 UJ
Vanadium	6.0 UJ		14.2	12.3	13.6	26.3	13.2	27.2 J	18.0 J-	16.6 J
Zinc	145 J-		12.8 J	11.5 J	48.8 J	37.7 J	103 J	302 J	29.7 J-	59.4 J
Other										
pH in Soil (S.U.)	5.8		4.4	4.4	4.9	3.7	5.8	6	6	6.2

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-146	SO-147	SO-147	SO-147	SO-147	SO-148	SO-148	SO-149	SO-149	SO-150
Sample ID:	WL-SO-146-2	WL-RS0-147-0.5-1.5	WL-RS0-147-9.0-10.0	WL-SO-147-00-01	WL-SO-147-09-10	WL-RS0-148-0.5-1.5	WL-SO-148-0.5-1.5	WL-RS0-149-4.8-5.8	WL-SO-149-05-06	WL-RS0-150-5.9-6.9
Sample Date:	10/30/2014	7/10/2014	7/10/2014	6/19/2014	6/19/2014	7/10/2014	6/19/2014	7/10/2014	6/19/2014	7/10/2014
Sample Depth:	0-1 (ft bgs)	0.5-1.5 (ft bgs)	9-10 (ft bgs)	0-1 (ft bgs)	9-10 (ft bgs)	0.5-1.5 (ft bgs)	0.5-1.5 (ft bgs)	4.8-5.8 (ft bgs)	5-6 (ft bgs)	5.9-6.9 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/kg)										
1,1,1-Trichloroethane				5.7 U	5.0 U		24 J		5.5 U	
1,1-Dichloroethane				5.7 U	5.0 U		320 U		5.5 U	
2-Butanone				11 U	10 U		640 U		6.7 J	
2-Hexanone				11 U	10 U		640 U		11 U	
4-Methyl-2-pentanone				11 U	10 U		640 U		11 U	
Acetone				11 U	10 U		120 J		27	
Carbon disulfide				5.7 U	5.0 U		320 U		1.1 J	
Chloroethane				5.7 U	5.0 U		320 U		5.5 U	
Chloroform				5.7 U	5.0 U		320 U		5.5 U	
cis-1,2-Dichloroethene				5.7 U	5.0 U		320 U		5.5 U	
Ethylbenzene				5.7 U	5.0 U		320 U		5.5 U	
m,p-Xylene				5.7 U	5.0 U		320 U		5.5 U	
Methyl acetate				5.7 U	5.0 U		250 J		5.5 U	
Methylene chloride				5.7 U	5.0 U		320 U		5.5 U	
Naphthalene										
Tetrachloroethene				5.7 U	5.0 U		320 U		5.5 U	
Toluene				5.7 U	5.0 U		650		5.5 U	
Trichloroethene				5.7 U	5.0 U		18 J		5.5 U	
SVOCs (ug/kg)										
2-Methylnaphthalene	22 J			370 U	7.3 U		110 U		3.8 U	
4-Methylphenol	630 J			3800 U	370 U		990 U		390 U	
Acenaphthene	18 J			370 U	7.3 U		140		3.8 U	
Acenaphthylene	23 UJ			370 U	7.3 U		110 U		3.8 U	
Anthracene	41 J			370 J	7.3 U		160		3.8 U	
Benzaldehyde	2100 J			3800 U	370 U		990 U		390 U	
Benzo(a)anthracene	450 J			1200 J	7.3 UJ		390 J		3.8 UJ	
Benzo(a)pyrene	410 J			910	7.3 U		280		3.8 U	
Benzo(b)fluoranthene	480 J			1400	7.3 U		420		1.9 J	
Benzo(g,h,i)perylene	390 J			580	7.3 U		160		3.8 U	
Benzo(k)fluoranthene	460 J			430	7.3 U		140		3.8 U	
Bis(2-ethylhexyl)phthalate	3200 J			3800 U	370 U		990 U		390 U	
Butylbenzylphthalate	1200 UJ			3800 U	370 U		990 U		390 U	
Caprolactam	1200 UJ			3800 U	370 U		990 U		390 U	
Carbazole	1200 UJ			300 J	370 U		91 J		390 U	
Chrysene	710 J			1000	7.3 U		330		3.8 U	
Dibenz(a,h)anthracene	140 J			370 U	7.3 U		110 U		3.8 U	
Dibenzofuran	1200 UJ			3800 U	370 U		990 U		390 U	
Dimethylphthalate	1200 UJ			3800 U	370 U		990 U		390 U	
Di-n-butylphthalate	1200 UJ			3800 U	370 U		990 U		390 U	
Fluoranthene	800 J			2700	4.7 J		810		2.7 J	
Fluorene	31 J			170 J	7.3 U		77 J		3.8 U	
Indeno(1,2,3-cd)pyrene	380 J			780	7.3 U		240		3.8 U	
Naphthalene	32 J			370 U	7.3 U		110 U		3.8 U	
Pentachlorophenol	48 UJ			750 U	15 U		230 U		7.6 U	

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-146	SO-147	SO-147	SO-147	SO-147	SO-148	SO-148	SO-149	SO-149	SO-150
Sample ID:	WL-SO-146-2	WL-RS0-147-0.5-1.5	WL-RS0-147-9.0-10.0	WL-SO-147-00-01	WL-SO-147-09-10	WL-RS0-148-0.5-1.5	WL-SO-148-0.5-1.5	WL-RS0-149-4.8-5.8	WL-SO-149-05-06	WL-RS0-150-5.9-6.9
Sample Date:	10/30/2014	7/10/2014	7/10/2014	6/19/2014	6/19/2014	7/10/2014	6/19/2014	7/10/2014	6/19/2014	7/10/2014
Sample Depth:	0-1 (ft bgs)	0.5-1.5 (ft bgs)	9-10 (ft bgs)	0-1 (ft bgs)	9-10 (ft bgs)	0.5-1.5 (ft bgs)	0.5-1.5 (ft bgs)	4.8-5.8 (ft bgs)	5-6 (ft bgs)	5.9-6.9 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Phenanthrene	270 J			1900	4.5 J		720		2.3 J	
Phenol	1200 UJ			3800 U	370 U		990 U		390 U	
Pyrene	850 J			1800	7.3 U		610		2.2 J	
Pesticides (ug/kg)										
4,4'-DDD	22 J			3.7 U	3.6 U		3.8 U		3.8 U	
4,4'-DDE	26 J			15	3.6 U		3.8 U		3.8 U	
4,4'-DDT	19 J			27 J	3.6 U		1.5 J		3.8 U	
Aldrin	12 UJ			1.9 U	1.9 U		2.0 U		2.0 U	
alpha-BHC	12 UJ			1.9 U	1.9 U		2.0 U		2.0 U	
alpha-Chlordane	12 UJ			1.9 U	1.9 U		2.0 U		2.0 U	
beta-BHC	12 UJ			1.9 U	1.9 U		2.0 U		2.0 U	
delta-BHC	12 UJ			1.9 U	1.9 U		2.0 U		2.0 U	
Dieldrin	23 UJ			3.7 U	3.6 U		3.8 U		3.8 U	
Endosulfan II	23 UJ			3.7 U	3.6 U		3.8 U		3.8 U	
Endosulfan sulfate	23 UJ			3.7 U	3.6 U		3.8 U		3.8 U	
Endrin	23 UJ			3.7 U	3.6 U		3.8 U		3.8 U	
Endrin aldehyde	23 UJ			4.2 J	3.6 U		3.8 U		3.8 U	
Endrin ketone	23 UJ			3.7 U	3.6 U		3.8 U		3.8 U	
gamma-Chlordane	12 UJ			1.6 J	1.9 U		2.0 U		2.0 U	
Heptachlor	12 UJ			1.9 U	1.9 U		2.0 U		2.0 U	
Heptachlor epoxide	12 UJ			1.9 U	1.9 U		2.0 U		2.0 U	
Methoxychlor	21 J			19 U	19 U		20 U		20 U	
PCBs (ug/kg)										
Aroclor-1260	88 J			37 U	36 U		38 U		38 U	
Inorganics (mg/kg)										
Aluminum	4440 J	9780	6640			7350		5310		3690
Antimony	0.86 J	0.70 J	0.23 UJ			0.39 J		2.8 J		0.12 UJ
Arsenic	5.7 J	3.7 J	4.0 J			9.4 J		1.7 J		0.82 J
Barium	90.7 J	33.6 J	30.3 J			24.4 J		37.1 J		16.1 J
Beryllium	1.2 J	0.57 U	0.55 U			0.55 U		0.55 U		0.58 U
Cadmium	1.1 J	0.19	0.11 U			0.11 U		0.11 U		0.12 U
Calcium	11100 J	1710	1210			1880		1190		1160
Chromium	7.7 J	454 J	1450 J			234 J		55.8 J		86.1 J
Chromium, Hexavalent	2.7 UJ	32.3 J	37.0 J			52.0 J		22.3 J		39.7 J
Cobalt	4.2 J	5.7 J	5.6 J			4.5 J		236 J		33.1 J
Copper	42.3 J	30.8 J	18.0 J			17.0 J		12.9 J		3.7 J
Cyanide	1.0 J	0.12 EB	0.055 UJ			0.055 U		0.055 UJ		0.058 UJ
Iron	10800 J	13000	20100			14600		7990		4470
Lead	135 J	89.6 JEB	6.4 JEB			76.5 JEB		614 JEB		8.9 JEB
Magnesium	1330 J	1890	2450			2170		1490		1160
Manganese	491 J	202 JEB	643 JEB			268 JEB		177 JEB		114 JEB
Mercury	0.34 J	0.059 J-	0.055 UJ			0.10 J-		0.022 J-		0.013 J-
Nickel	13.7 J	8.5 JEB	7.4 JEB			8.7 JEB		8.9 JEB		5.2 JEB
Potassium	500 UJ	570 JEB	632 JEB			549 UJ		568 JEB		583 UJ
Selenium	2.2 J	0.84 J	0.50 J			0.67 J		0.56 J		0.66 J

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-146	SO-147	SO-147	SO-147	SO-147	SO-148	SO-148	SO-149	SO-149	SO-150
Sample ID:	WL-SO-146-2	WL-RS0-147-0.5-1.5	WL-RS0-147-9.0-10.0	WL-SO-147-00-01	WL-SO-147-09-10	WL-RS0-148-0.5-1.5	WL-SO-148-0.5-1.5	WL-RS0-149-4.8-5.8	WL-SO-149-05-06	WL-RS0-150-5.9-6.9
Sample Date:	10/30/2014	7/10/2014	7/10/2014	6/19/2014	6/19/2014	7/10/2014	6/19/2014	7/10/2014	6/19/2014	7/10/2014
Sample Depth:	0-1 (ft bgs)	0.5-1.5 (ft bgs)	9-10 (ft bgs)	0-1 (ft bgs)	9-10 (ft bgs)	0.5-1.5 (ft bgs)	0.5-1.5 (ft bgs)	4.8-5.8 (ft bgs)	5-6 (ft bgs)	5.9-6.9 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Silver	2.2 J	0.57 U	0.55 U			0.55 U		0.62		0.58 U
Sodium	1170 J	568 U	549 U			549 U		549 U		583 U
Thallium	0.10 UJ	0.57 U	0.55 U			0.55 U		0.55 U		0.58 U
Vanadium	29.9 J	12.2 J	5.8 J			12.6 J		15.4 J		7.3 J
Zinc	95.6 J	55.5 J	37.6 J			63.8 J		28.9 J		21.1 J
Other										
pH in Soil (S.U.)	5.3			7	5.6		7.1		6.8	

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-150	SO-401	SO-402	SO-403	SO-404	SO-405	SO-406	SO-407
Sample ID:	WL-SO-150-5.4-6.4	WL-SO-401-2	WL-SO-402-2	WL-SO-403-2	WL-SO-404-2	WL-SO-405-2	WL-SO-406-2	WL-SO-407-2
Sample Date:	6/19/2014	11/6/2014	11/4/2014	10/30/2014	11/5/2014	11/5/2014	11/5/2014	11/5/2014
Sample Depth:	5.4-6.4 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter								
VOCs (ug/kg)								
1,1,1-Trichloroethane	8.6 U							
1,1-Dichloroethane	8.6 U							
2-Butanone	50							
2-Hexanone	17 U							
4-Methyl-2-pentanone	17 U							
Acetone	130							
Carbon disulfide	4.3 J							
Chloroethane	8.6 U							
Chloroform	8.6 U							
cis-1,2-Dichloroethene	0.68 J							
Ethylbenzene	8.6 U							
m,p-Xylene	8.6 U							
Methyl acetate	8.6 U							
Methylene chloride	8.6 U							
Naphthalene								
Tetrachloroethene	8.6 U							
Toluene	8.6 U							
Trichloroethene	8.6 U							
SVOCs (ug/kg)								
2-Methylnaphthalene	110 U	3.6 J	5.9 U	15				
4-Methylphenol	2900 U	220 U	310 U	270 U				
Acenaphthene	110 U	5.0	5.9 U	23				
Acenaphthylene	110 U	5.9	5.9 U	9.8				
Anthracene	54 J	13	5.4 JEB	67				
Benzaldehyde	2900 U	220 U	310 U	270 U				
Benzo(a)anthracene	220 J	94 EB	50 EB	460				
Benzo(a)pyrene	220	77 EB	80 EB	430				
Benzo(b)fluoranthene	290	68 JEB	75 JEB	430				
Benzo(g,h,i)perylene	140	62 JEB	49 EB	270				
Benzo(k)fluoranthene	93 J	82 EB	90 EB	430				
Bis(2-ethylhexyl)phthalate	2900 U	220 U	310 U	850				
Butylbenzylphthalate	2900 U	220 U	310 U	270 U				
Caprolactam	2900 U	220 U	310 U	270 U				
Carbazole	2900 U	220 U	310 U	270 U				
Chrysene	210	130 EB	82 EB	620				
Dibenz(a,h)anthracene	110 U	27	23	120				
Dibenzofuran	2900 U	220 U	310 U	270 U				
Dimethylphthalate	2900 U	220 U	310 U	270 U				
Di-n-butylphthalate	2900 U	220 U	310 U	150 J				
Fluoranthene	510	190 EB	110 EB	1200				
Fluorene	110 U	8.3	5.9 U	27				
Indeno(1,2,3-cd)pyrene	180	44 EB	52 EB	260				
Naphthalene	110 U	4.3	5.9 U	22				
Pentachlorophenol	230 U	420 U	590 U	11 UJ				

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-150	SO-401	SO-402	SO-403	SO-404	SO-405	SO-406	SO-407
Sample ID:	WL-SO-150-5.4-6.4	WL-SO-401-2	WL-SO-402-2	WL-SO-403-2	WL-SO-404-2	WL-SO-405-2	WL-SO-406-2	WL-SO-407-2
Sample Date:	6/19/2014	11/6/2014	11/4/2014	10/30/2014	11/5/2014	11/5/2014	11/5/2014	11/5/2014
Sample Depth:	5.4-6.4 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter								
Phenanthrene	180	130 EB	42 EB	470				
Phenol	2900 U	220 U	310 U	270 U				
Pyrene	370	150 EB	89 EB	890				
Pesticides (ug/kg)								
4,4'-DDD	5.8 U	4.2 UJ	5.9 U	6.0				
4,4'-DDE	5.8 U	4.2 U	5.9 U	8.8				
4,4'-DDT	0.98 J	4.2 U	5.9 U	4.8 J				
Aldrin	3.0 U	2.2 U	3.1 U	2.7 U				
alpha-BHC	3.0 U	2.2 U	3.1 U	2.7 U				
alpha-Chlordane	3.0 U	2.2 U	3.1 U	2.7 U				
beta-BHC	3.0 U	2.2 U	3.1 U	2.7 U				
delta-BHC	3.0 U	2.2 U	3.1 U	2.7 U				
Dieldrin	5.8 U	4.2 U	5.9 U	5.2 U				
Endosulfan II	5.8 U	4.2 U	5.9 U	5.2 U				
Endosulfan sulfate	5.8 U	4.2 U	5.9 U	5.2 U				
Endrin	5.8 U	4.2 U	5.9 U	5.2 UJ				
Endrin aldehyde	5.8 U	4.2 U	5.9 U	5.2 U				
Endrin ketone	5.8 U	4.2 UJ	R	5.2 UJ				
gamma-Chlordane	3.0 U	2.2 U	3.1 U	2.7 U				
Heptachlor	1.0 JEB	2.2 U	3.1 U	2.7 U				
Heptachlor epoxide	3.0 U	2.2 U	3.1 U	2.7 U				
Methoxychlor	30 U	22 U	31 U	38				
PCBs (ug/kg)								
Aroclor-1260	58 U	42 U	60 U	52 U				
Inorganics (mg/kg)								
Aluminum		10500	7740	8570	7230	7840	7870	6870
Antimony		0.25 J	0.18 J	0.32 J	0.28 J	0.22 J	0.17 J	0.42 J
Arsenic		3.3	2.7	4.1	4.1	4.0	3.9	6.6
Barium		51.5	32.9	54.9 J	45.4 J	43.5 J	29.8 J	88.2 J
Beryllium		0.45	0.46 J	0.53 J	0.40 J	0.42 J	0.37 J	0.65 J
Cadmium		0.40	0.22	0.33 J	0.37 J	0.43 J	0.20 J	0.67
Calcium		2720	1630	1450	4220	3580	1260	2710
Chromium		965 J	178 J	462 J	20.0 J	18.5 J	18.7 J	121 J
Chromium, Hexavalent		0.68 UJ	0.68 UJ	0.61 UJ	0.55 UJ	0.49 UJ	0.49 UJ	0.86 UJ
Cobalt		3.3	3.0 J	6.1 J	3.8 J	3.6 J	2.8 J	6.0 J
Copper		18.1	14.9 J	41.9 J	83.6 J	85.0 J	58.2 J	86.6 J
Cyanide		0.12	0.083 UJ	0.36				
Iron		12800	13600	14400	15000	13400	11300	16000
Lead		119	64.9	283	175	165	85.1	672
Magnesium		2300	2080	2070	2090	2270	1840	1930
Manganese		180	172	541	320	288	174	417
Mercury		0.19	0.11	0.24	0.19	0.19	0.19	0.14
Nickel		13.7 J	7.2 J	12.7 J	9.2 J	10.1 J	7.0 J	15.9 J
Potassium		988 U	833 U	831 U	415 J	490 J	462 J	437 J
Selenium		0.83 J	0.76 J	1.2	0.70 J	0.77	0.83	1.4

TABLE 4-4
RI SOIL ANALYTICAL RESULTS, PHASES 1 AND 2 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-150	SO-401	SO-402	SO-403	SO-404	SO-405	SO-406	SO-407
Sample ID:	WL-SO-150-5.4-6.4	WL-SO-401-2	WL-SO-402-2	WL-SO-403-2	WL-SO-404-2	WL-SO-405-2	WL-SO-406-2	WL-SO-407-2
Sample Date:	6/19/2014	11/6/2014	11/4/2014	10/30/2014	11/5/2014	11/5/2014	11/5/2014	11/5/2014
Sample Depth:	5.4-6.4 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter								
Silver		0.59	0.27	15.3 J	2.5 J	2.9 J	2.3 J	4.4 J
Sodium		988 U	833 U	831 U	718 U	617 U	619 U	1080 U
Thallium		0.20 U	0.17 U	0.33 U	0.14 U	0.12 U	0.12 U	0.22 U
Vanadium		0.99 U	18.8	5.4	15.8	17.3	18.3	32.7
Zinc		51.3 J	28.6 J	54.0 J	102 J	78.1 J	36.3 J	95.9 J
Other								
pH in Soil (S.U.)	6.7	5.5	5.6	5.3				

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-201	SD-201	SD-202	SD-203	SD-203	SD-204	SD-204	SD-204	SD-205	SD-205	SD-205
Sample ID:	WL-SD-201	WL-SD-201D	WL-SD-202	WL-SD-203	WL-SD-3-203	WL-SD-204	WL-SD-204-2	WL-SD-204D-2	WL-SD-205	WL-SD-3-205	WL-SD-3-205D
Sample Date:	6/18/2014	6/18/2014	7/1/2014	6/19/2014	7/23/2015	6/25/2014	10/28/2014	10/28/2014	6/25/2014	7/23/2015	7/23/2015
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate
Parameter											
VOCs (ug/kg)											
1,1,1-Trichloroethane	7.7 U	6.3 U	14 U	5.9 U	23 UJ	42 UJ			21 UJ	R	R
1,1-Dichloroethane	7.7 U	6.3 U	14 U	5.9 U	23 UJ	42 UJ			21 UJ	R	R
1,1-Dichloroethene	7.7 U	6.3 U	14 U	5.9 U	23 UJ	42 UJ			21 UJ	R	R
1,2,3-Trichlorobenzene	R	6.3 U	R	R	23 UJ	R			R	R	R
2-Butanone	6.8 J	13 U	48	34	47 UJ	230 J			490 J	R	R
Acetone	25 J	48 J	170	86	140 J	270 J			1100 J	130 J	120 J
Carbon disulfide	0.51 J	0.75 J	2.0 J	0.92 J	23 UJ	7.1 J			5.0 J	R	R
Chloroform	7.7 U	6.3 U	14 U	5.9 U	23 UJ	42 UJ			21 UJ	R	R
cis-1,2-Dichloroethene	7.7 U	6.3 U	14 U	5.9 U	23 UJ	42 UJ			21 UJ	R	R
Cyclohexane	7.7 U	6.3 U	14 U	5.9 U	23 UJ	42 UJ			21 UJ	R	R
Ethylbenzene	7.7 U	6.3 U	0.37 J	5.9 U	23 UJ	42 UJ			21 UJ	R	R
Isopropylbenzene	7.7 U	6.3 U	14 U	5.9 U	23 UJ	42 UJ			21 UJ	R	R
m,p-Xylene	7.7 U	6.3 U	14 U	5.9 U	23 UJ	42 UJ			21 UJ	R	R
Methyl acetate	7.7 U	6.3 U	14 U	5.9 U	96 J	42 UJ			21 UJ	86 J	R
Methyl tert-butyl ether	7.7 U	6.3 U	14 U	5.9 U	23 UJ	42 UJ			21 UJ	R	R
Methylcyclohexane	7.7 U	6.3 U	14 U	5.9 U	23 UJ	42 UJ			21 UJ	R	R
Methylene chloride	7.7 U	6.3 U	14 U	5.9 U	23 UJ	42 UJ			21 UJ	R	R
o-Xylene	7.7 U	6.3 U	14 U	5.9 U	23 UJ	42 UJ			21 UJ	R	R
Toluene	0.22 J	0.22 J	14 U	5.9 U	23 UJ	42 UJ			21 UJ	R	R
Trichloroethene	7.7 U	6.3 U	14 U	5.9 U	23 UJ	42 UJ			21 UJ	R	R
SVOCs (ug/kg)											
2-Methylnaphthalene	42 U	42 U	430 U	110 U	18 UJ		33 UJ	28 J	430 UJ	R	R
4-Chloroaniline	1100 U	1100 U	9000 U	1900 U	1800 UJ		1700 UJ	1300 UJ	22000 UJ	R	R
4-Methylphenol	1100 U	1100 U	9000 U	1900 U	1800 UJ		1700 UJ	1300 UJ	22000 UJ	R	R
Acenaphthene	42 U	42 U	430 U	110 U	94 J		33 UJ	25 UJ	430 UJ	49 J	34 J
Acenaphthylene	28 J	42 U	180 J	110 U	110 J		33 UJ	25 UJ	250 J	370 J	300 J
Anthracene	21 J	42 U	150 J	110 U	220 J		48 J	38 J	140 J	210 J	160 J
Benzaldehyde	1100 U	1100 U	9000 U	1900 U	1800 UJ		1000 J	670 J	22000 UJ	R	R
Benzo(a)anthracene	99	79	890 J	270 J	1800 J		430 J	330 J	540 J	2100 J	1400 J
Benzo(a)pyrene	110	81	1000	340	2400 J		550 J	320 J	650 J	2900 J	1600 J
Benzo(b)fluoranthene	200	140	1900	650	3300 J		760 J	420 J	1600 J	3800 J	2200 J
Benzo(g,h,i)perylene	93	61	1000	290	2400 J		500 J	270 J	790 J	3200 J	1900 J
Benzo(k)fluoranthene	62	42	640	190	2300 J		420 J	370 J	400 J	2600 J	1600 J
Bis(2-ethylhexyl)phthalate	1100 U	1100 U	1100 J	1900 U	3000 J		8500 J	4100 J	22000 UJ	1500 J	1300 J
Butylbenzylphthalate	1100 U	1100 U	9000 U	1900 U	920 UJ		1700 UJ	1300 UJ	22000 UJ	R	R
Caprolactam	1100 U	1100 U	9000 U	1900 U	1800 UJ		1700 UJ	1600 J	22000 UJ	R	R
Carbazole	1100 U	1100 U	9000 U	1900 U	1800 UJ		1700 UJ	1300 UJ	22000 UJ	R	R
Chrysene	130	99	1200	420	3100 J		660 J	560 J	870 J	3300 J	2200 J
Dibenz(a,h)anthracene	22 J	42 U	180 J	55 J	600 J		240 J	100 J	180 J	2100 J	1400 J
Dibenzofuran	1100 U	1100 U	9000 U	1900 U	920 UJ		1700 UJ	1300 UJ	22000 UJ	R	R
Diethylphthalate	1100 U	1100 U	9000 U	1900 U	920 UJ		1700 UJ	1300 UJ	22000 UJ	R	R
Dimethylphthalate	1100 U	1100 U	9000 U	1900 U	920 UJ		1700 UJ	1300 UJ	22000 UJ	R	R
Di-n-butylphthalate	1100 U	1100 U	9000 U	1900 U	920 UJ		920 J	1700 J	22000 UJ	R	R
Fluoranthene	240	160	2300	790	5900 J		960 J	720 J	1300 J	4400 J	3000 J
Fluorene	42 U	42 U	430 U	110 U	110 J		37 J	28 J	430 UJ	85 J	56 J
Indeno(1,2,3-cd)pyrene	130	87	1300	380	2300 J		540 J	280 J	1000 J	2700 J	1700 J

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-201	SD-201	SD-202	SD-203	SD-203	SD-204	SD-204	SD-204	SD-205	SD-205	SD-205
Sample ID:	WL-SD-201	WL-SD-201D	WL-SD-202	WL-SD-203	WL-SD-3-203	WL-SD-204	WL-SD-204-2	WL-SD-204D-2	WL-SD-205	WL-SD-3-205	WL-SD-3-205D
Sample Date:	6/18/2014	6/18/2014	7/1/2014	6/19/2014	7/23/2015	6/25/2014	10/28/2014	10/28/2014	6/25/2014	7/23/2015	7/23/2015
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate
Parameter											
Naphthalene	42 U	42 U	430 U	110 U	19 J		37 J	27 J	430 UJ	R	R
Pentachlorophenol	85 U	86 U	880 U	220 U	26 J		66 UJ	51 UJ	870 UJ	R	270 J
Phenanthrene	90	68	720	270	2000 J		460 J	370 J	430 J	1200 J	830 J
Pyrene	170	130	1500	560	4500 J		870 J	690 J	950 J	3200 J	2100 J
Pesticides (ug/kg)											
4,4'-DDD	4.2 U	4.4 J	88 U	3.6 U			51 J	37 J	3000 J		
4,4'-DDE	0.73 J	0.94 J	6.1 J	2.0 J			140 J	39 J	290 J		
4,4'-DDT	1.7 J	0.27 J	6.3 J	3.7 J			61 J	11 J	340 J		
Aldrin	2.2 U	2.2 U	45 U	1.8 U			17 UJ	13 UJ	7.3 UJ		
alpha-BHC	2.2 U	0.12 J	2.2 J	1.8 U			17 UJ	13 UJ	7.3 UJ		
beta-BHC	2.2 U	0.081 J	45 U	1.8 U			17 UJ	13 UJ	2.4 J		
delta-BHC	2.2 U	2.2 U	45 U	1.8 U			17 UJ	13 UJ	1.2 J		
Dieldrin	0.17 JEB	0.16 JEB	88 U	3.6 U			33 UJ	25 UJ	5.4 J		
Endosulfan I	2.2 U	2.2 U	45 U	1.8 U			17 UJ	13 UJ	7.3 UJ		
Endosulfan II	0.32 J	0.39 J	88 U	3.6 U			33 UJ	25 UJ	14 UJ		
Endosulfan sulfate	4.2 U	4.2 U	88 U	3.6 U			33 UJ	25 UJ	14 UJ		
Endrin	4.2 U	4.2 U	88 U	3.6 U			33 UJ	25 UJ	14 UJ		
Endrin aldehyde	0.26 J	0.37 J	4.5 J	0.90 J			33 UJ	25 UJ	36 J		
Endrin ketone	4.2 U	4.2 U	88 U	3.6 U			33 UJ	25 UJ	14 UJ		
gamma-BHC (Lindane)	2.2 U	2.2 U	45 U	1.8 U			17 UJ	13 UJ	7.3 UJ		
gamma-Chlordane	0.37 J	0.34 J	45 U	1.6 J			17 UJ	13 UJ	20 J		
Heptachlor	2.2 U	1.3 J	45 U	1.8 U			17 UJ	13 UJ	7.3 UJ		
Heptachlor epoxide	0.21 J	0.25 J	45 U	1.8 U			17 UJ	13 UJ	6.2 J		
Methoxychlor	22 U	22 U	24 J	18 U			1300 J	17 J	73 UJ		
PCBs (ug/kg)											
Aroclor-1260	42 U	42 U	880 U	36 U			330 UJ	250 UJ	140 UJ		
Inorganics (mg/kg)											
Aluminum	4450	4050	14100 J	8800 J	2840 J	6060 J			7560 J	1240 J	1540 J
Antimony	0.16 J	0.18 J	2.9 J	2.6 J	4.5 J	0.86 J			12.9 J	10.6 J	16.2 J
Arsenic	0.81	0.77	5.6	10.7 J	0.75 J-	5.6 J			7.7 J	1.0 U	1.0 U
Barium	32.6	32.2	94.2 J	153 J	41.7 J	70.8 J			207 J	35.1 J	47.0 J
Beryllium	0.64 U	0.67 U	1.3 U	2.9 J	0.30 J	1.0 UJ			0.69 J	0.048 J	0.092 J
Cadmium	0.13 U	0.14 U	0.82	3.4 J	1.2 J	0.68 J			1.5 J	0.50 UJ	0.65 J
Calcium	790	789	2360 J	2710 J	821 J	4460 J			5790 J	1190 J	1550 J
Chromium	126 J	107 J	2440	2980 J	558 J	35.0 J			4110 J	1580 J	2040 J
Chromium, Hexavalent	1.93	0.18 J	1.2 UJ	1.3 J	8.7 J	1.8 UJ			1.5 UJ	122 J	141 J
Cobalt	2.0	1.7	17.4 J	46.6 J	9.4 J	1.5 J			37.5 J	3.6 J	3.8 J
Copper	4.4 J	4.0 J	91.8 J	587 J	82.7 J	58.7 J			362 J	34.1 J	49.0 J
Cyanide	0.068 UJ	0.064 UJ	2.2 JEB	6.2 JEB	3.6 J-	0.28 JEB			16.3 JEB	3.1 J-	3.3 J-
Iron	2940	2420	19600 J	67600 J	12600 J	10100 J			18100 J	3260 J	4210 J
Lead	21.9 J	19.0 J	240 J	251 J	56.0 J	117 J			142 J	39.2 J	71.0 J
Magnesium	675 U	644 U	2660 J	2240 J	755 J	737 J			1790 J	299 J	369 J
Manganese	59.6 J	60.1 J	320	881 J	116 J	176 J			540 J	88.0 J	105 J
Mercury	0.030 J	0.031 J	0.12	0.24 J	0.13	0.40 J			0.45 J	0.29	0.29
Nickel	2.7 J	2.3 J	39.8 J	59.6 J	11.1	8.5 J			498 J	5.5	6.7
Potassium	338 J-	405 J-	1340 UJ	955 J	351 J	237 J			795 J	150 J	179 J
Selenium	0.77 J	0.63 J	1.7 J	2.3 J	3.5 U	2.3 J			1.3 J	3.5 U	3.5 U

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-201	SD-201	SD-202	SD-203	SD-203	SD-204	SD-204	SD-204	SD-205	SD-205	SD-205
Sample ID:	WL-SD-201	WL-SD-201D	WL-SD-202	WL-SD-203	WL-SD-3-203	WL-SD-204	WL-SD-204-2	WL-SD-204D-2	WL-SD-205	WL-SD-3-205	WL-SD-3-205D
Sample Date:	6/18/2014	6/18/2014	7/1/2014	6/19/2014	7/23/2015	6/25/2014	10/28/2014	10/28/2014	6/25/2014	7/23/2015	7/23/2015
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate
Parameter											
Silver	1.4	1.4	129 J	76.6 J	44.0 J	1.8 J			82.5 J	21.8 J	28.4 J
Sodium	308 J	313 J	1340 UJ	683 J	204 J	1150 J			1200 J	266 J	271 J
Thallium	0.64 U	0.67 U	1.3 U	0.50 UJ	2.5 U	0.50 UJ			0.50 UJ	2.5 U	0.27 J
Vanadium	6.2	6.3	6.7 UJ	2.5 UJ	9.7 J	48.5 J			2.5 UJ	5.1 J	7.1 J
Zinc	12.7	13.6	109 J	354 J	79.1	44.4 J			224 J	37.2	49.0
AVS/SEM (umole/g dry wt)											
Acid Volatile Sulfide					5.1 J					14 J	6.1 J
Cadmium, SEM					0.0259 J					0.0166 J	0.0186 J
Copper, SEM					2.91 J					0.201 J	1.74 J
Lead, SEM					1.08 J					1.04 J	1.02 J
Mercury, SEM					0.0000304 UJ					0.0000235 UJ	0.0000838 UJ
Nickel, SEM					0.434 J					0.404 J	0.347 J
Silver, SEM					0.284 J					0.0110 J	0.271 J
Zinc, SEM					3.95 J					3.25 J	3.22 J
Total SEM Metals (det only)					8.68 J					4.92 J	6.62 J
AVS/SEM					0.587 J					2.84 J	0.922 J
TCLP metals (mg/L)											
Chromium											
Other											
Total Organic Carbon (avg., ug/g)	6300	7200	57000	120000 J	140000 J	320000 J			180000 J	330000 J	220000 J

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-206	SD-206	SD-206	SD-207	SD-207	SD-207	SD-208	SD-208	SD-208	SD-209	SD-209	SD-210	SD-210
Sample ID:	WL-RSD-206	WL-RSD-206D	WL-SD-206	WL-RSD-207	WL-SD-207	WL-SD-3-207	WL-RSD-208	WL-SD-208	WL-SD-3-208	WL-RSD-209	WL-SD-209	WL-SD-210	WL-SD-3-210
Sample Date:	6/30/2014	6/30/2014	6/20/2014	6/30/2014	6/20/2014	7/23/2015	7/1/2014	6/20/2014	7/22/2015	7/1/2014	6/20/2014	6/25/2014	7/22/2015
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter													
VOCs (ug/kg)													
1,1,1-Trichloroethane			6.4 U		6.4 U	6.7 U		R	30 UJ		21 UJ	8.4 U	20 UJ
1,1-Dichloroethane			6.4 U		6.4 U	6.7 U		15 U	30 UJ		21 UJ	8.4 U	20 UJ
1,1-Dichloroethene			6.4 U		6.4 U	6.7 U		15 U	30 UJ		21 UJ	8.4 U	20 UJ
1,2,3-Trichlorobenzene			6.4 U		6.4 U	6.7 U		R	30 UJ		R	R	20 UJ
2-Butanone			13 U		13 U	13 U		71	61 UJ		130 J	23	39 UJ
Acetone			13 U		13 U	13		450	61 UJ		520 J	90	39 UJ
Carbon disulfide			6.4 U		6.4 U	6.7 U		15 U	30 UJ		1.9 J	0.82 J	20 UJ
Chloroform			6.4 U		6.4 U	6.7 U		15 U	30 UJ		21 UJ	8.4 U	20 UJ
cis-1,2-Dichloroethene			6.4 U		6.4 U	6.7 U		15 U	30 UJ		1.0 J	8.4 U	20 UJ
Cyclohexane			6.4 U		6.4 U	6.7 U		R	30 UJ		21 UJ	8.4 U	20 UJ
Ethylbenzene			6.4 U		6.4 U	6.7 U		R	30 UJ		21 UJ	8.4 U	20 UJ
Isopropylbenzene			6.4 U		6.4 U	6.7 U		R	30 UJ		21 UJ	8.4 U	20 UJ
m,p-Xylene			6.4 U		6.4 U	6.7 U		R	30 UJ		1.1 J	8.4 U	20 UJ
Methyl acetate			6.4 U		6.4 U	20		15 U	270 J		21 UJ	8.4 U	290 J
Methyl tert-butyl ether			6.4 U		6.4 U	6.7 U		15 U	30 UJ		21 UJ	8.4 U	20 UJ
Methylcyclohexane			6.4 U		6.4 U	6.7 U		R	30 UJ		21 UJ	8.4 U	20 UJ
Methylene chloride			6.4 U		6.4 U	6.7 U		15 U	30 UJ		21 UJ	8.4 U	20 UJ
o-Xylene			6.4 U		6.4 U	6.7 U		R	30 UJ		21 UJ	8.4 U	20 UJ
Toluene			6.4 U		6.4 U	6.7 U		R	30 UJ		51 UJ	8.4 U	20 UJ
Trichloroethene			6.4 U		6.4 U	6.7 U		R	30 UJ		21 UJ	8.4 U	20 UJ
SVOCs (ug/kg)													
2-Methylnaphthalene			41 U		23 U	5.2 U		90 U	19 UJ		150 UJ		13 UJ
4-Chloroaniline			2100 U		2400 U	520 U		4600 U	1900 UJ		7900 UJ		1300 UJ
4-Methylphenol			2100 U		2400 U	520 U		4600 U	1900 UJ		7900 UJ		4700 J
Acenaphthene			41 U		23 U	5.2 U		90 U	19 UJ		150 UJ		13 UJ
Acenaphthylene			41 U		23 U	5.2 U		90 U	20 J		150 UJ		13 UJ
Anthracene			41 U		23 U	5.2 U		90 U	36 J		150 UJ		31 J
Benzaldehyde			2100 U		2400 U	520 U		4600 U	1900 UJ		7900 UJ		1300 UJ
Benzo(a)anthracene			34 J		15 J	20		90 UJ	210 J		160 J		310 J
Benzo(a)pyrene			36 J		17 J	25		90 U	260 J		150 J		460 J
Benzo(b)fluoranthene			66		35	110		57 J	300 J		270 J		610 J
Benzo(g,h,i)perylene			24 J		12 J	35		90 U	280 J		96 J		570 J
Benzo(k)fluoranthene			19 J		9.8 J	25		90 U	300 J		84 J		420 J
Bis(2-ethylhexyl)phthalate			2100 U		2400 U	270 U		4600 U	730 J		7900 UJ		690 UJ
Butylbenzylphthalate			2100 U		2400 U	270 U		4600 U	980 UJ		7900 UJ		690 UJ
Caprolactam			2100 U		2400 U	150 J		4600 U	790 J		7900 UJ		1300 UJ
Carbazole			2100 U		2400 U	520 U		4600 U	1900 UJ		7900 UJ		1300 UJ
Chrysene			48		25	39		90 U	310 J		200 J		550 J
Dibenz(a,h)anthracene			41 U		23 U	17		90 U	110 J		150 UJ		350 J
Dibenzofuran			2100 U		2400 U	270 U		4600 U	980 UJ		7900 UJ		690 UJ
Diethylphthalate			2100 U		2400 U	270 U		4600 U	980 UJ		7900 UJ		690 UJ
Dimethylphthalate			2100 U		2400 U	270 U		4600 U	980 UJ		7900 UJ		690 UJ
Di-n-butylphthalate			2100 U		2400 U	270 U		4600 U	980 UJ		7900 UJ		690 UJ
Fluoranthene			93		44	320		100	410 J		390 J		810 J
Fluorene			41 U		23 U	5.2 U		90 U	20 J		150 UJ		16 J
Indeno(1,2,3-cd)pyrene			37 J		19 J	27		90 U	250 J		160 J		460 J

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-206	SD-206	SD-206	SD-207	SD-207	SD-207	SD-208	SD-208	SD-208	SD-209	SD-209	SD-210	SD-210
Sample ID:	WL-RSD-206	WL-RSD-206D	WL-SD-206	WL-RSD-207	WL-SD-207	WL-SD-3-207	WL-RSD-208	WL-SD-208	WL-SD-3-208	WL-RSD-209	WL-SD-209	WL-SD-210	WL-SD-3-210
Sample Date:	6/30/2014	6/30/2014	6/20/2014	6/30/2014	6/20/2014	7/23/2015	7/1/2014	6/20/2014	7/22/2015	7/1/2014	6/20/2014	6/25/2014	7/22/2015
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter													
Naphthalene			41 U		23 U	5.2 U		90 U	19 UJ		150 UJ		13 UJ
Pentachlorophenol			83 U		47 U	11 U		180 UJ	39 UJ		310 UJ		27 UJ
Phenanthrene			28 J		18 J	14		41 J	160 J		140 J		190 J
Pyrene			64		23 U	39		59 J	300 J		280 J		550 J
Pesticides (ug/kg)													
4,4'-DDD			8.3		1.7 J			3.7 J			23 J		
4,4'-DDE			1.2 J		0.60 J			1.6 J			26 J		
4,4'-DDT			0.42 J		4.6 U			9.0 U			9.4 J		
Aldrin			2.1 U		2.4 U			4.7 U			8.0 UJ		
alpha-BHC			2.1 U		2.4 U			4.7 U			8.0 UJ		
beta-BHC			2.1 U		2.4 U			4.7 U			8.0 UJ		
delta-BHC			2.1 U		2.4 U			4.7 U			8.0 UJ		
Dieldrin			4.1 U		4.6 U			9.0 U			15 UJ		
Endosulfan I			2.1 U		2.4 U			4.7 U			8.0 UJ		
Endosulfan II			4.1 U		4.6 U			1.8 J			15 UJ		
Endosulfan sulfate			4.1 U		4.6 U			9.0 U			15 UJ		
Endrin			4.1 U		4.6 U			9.0 U			15 UJ		
Endrin aldehyde			4.1 U		4.6 U			9.0 U			15 UJ		
Endrin ketone			4.1 U		4.6 U			9.0 U			15 UJ		
gamma-BHC (Lindane)			2.1 U		2.4 U			4.7 U			8.0 UJ		
gamma-Chlordane			2.1 U		2.4 U			4.7 U			8.0 UJ		
Heptachlor			2.1 U		2.4 U			4.7 U			8.0 UJ		
Heptachlor epoxide			2.1 U		2.4 U			4.7 U			8.0 UJ		
Methoxychlor			21 U		2.4 J			47 U			3.0 J		
PCBs (ug/kg)													
Aroclor-1260			41 U		46 U			90 U			150 UJ		
Inorganics (mg/kg)													
Aluminum	6320 J-	6740 J-		3600 J-		7370 J	8540 J		2910 J	16100 J		4820 J	3730 J
Antimony	0.13 UJ	0.12 UJ		0.12 UJ		0.81 J	0.33 J		1.4 J	0.36 J		0.19 UJ	4.4 J
Arsenic	1.3 J-	1.3 J-		2.2 J-		1.5 J-	6.5 J		0.95 J	9.3 J		2.2 J-	0.62 J
Barium	32.5 J-	28.0 J-		12.9 J-		71.0 J	69.8 J		53.1 J	107 J		30.9 J-	32.6 J
Beryllium	0.64 UJ	0.62 UJ		0.62 UJ		1.1 U	1.0 J		0.50 U	1.4 J		1.9 UJ	0.50 U
Cadmium	0.19 J	0.16 J		0.12 UJ		1.1 J	0.71 J		0.50 UJ	0.96 J		0.19 UJ	0.59 J
Calcium	954 J-	1280 J-		968 J-		3200 J	5940 J		1460 J	4900 J		1680 J	1300 J
Chromium	9.8 J-	10.9 J-		9.0 J-		43.4 J	679 J		213 J	2260 J		138 J-	672 J
Chromium, Hexavalent	0.49 UJ	0.49 UJ		0.07 J		0.74 UJ	1.6 UJ		11.2 J	0.1 J		0.06 J	13.6 J
Cobalt	5.1 J-	4.0 J-		2.5 J-		8.8 J	7.6 J		3.3 J	10.4 J		2.5 J-	3.8 J
Copper	6.7 J	5.4 J		5.7 J		12.4 J	24.1 J		6.7 J	45.0 J		5.2 J	8.5 J
Cyanide	0.064 U	0.062 U		0.062 U		0.49 J-	0.22 UJ		0.18 J-	0.72 JEB		0.093 UJ	0.30 J-
Iron	11400 J-	14000 J-		8290 J-		17700 J	16400 J		4830 J	21500 J		5450 J	6590 J
Lead	14.5 J	8.6 J		5.6 J		19.7 J	52.8 J		53.1 J	146 J		19.8 J-	22.2 J
Magnesium	2350 J-	2610 J-		1610 J-		3310 J	2960 J		1020 J	4130 J		935 UJ	1100 J
Manganese	282 J-	251 J-		159 J-		592 J	604 J		147 J	565 J		135 J-	139 J
Mercury	0.064 UJ	0.012 J		0.019 J		0.025 J	0.15 J		0.11	0.33 J		0.094 UJ	0.17
Nickel	8.9 J-	8.2 J-		5.2 J-		11.3	14.8 J		4.6	21.5 J		5.1 J	6.2
Potassium	636 UJ	620 UJ		625 UJ		1270	1280 J		511	1930 J		322 J	448 J
Selenium	3.2 UJ	3.1 UJ		0.23 J-		7.8 U	2.5 J		3.5 U	2.2 J		4.7 UJ	3.5 U

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-206	SD-206	SD-206	SD-207	SD-207	SD-207	SD-208	SD-208	SD-208	SD-209	SD-209	SD-210	SD-210
Sample ID:	WL-RSD-206	WL-RSD-206D	WL-SD-206	WL-RSD-207	WL-SD-207	WL-SD-3-207	WL-RSD-208	WL-SD-208	WL-SD-3-208	WL-RSD-209	WL-SD-209	WL-SD-210	WL-SD-3-210
Sample Date:	6/30/2014	6/30/2014	6/20/2014	6/30/2014	6/20/2014	7/23/2015	7/1/2014	6/20/2014	7/22/2015	7/1/2014	6/20/2014	6/25/2014	7/22/2015
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter													
Silver	0.64 UJ	0.62 UJ		0.62 UJ		2.2 UJ	0.50 UJ		1.0 UJ	0.62 J		1.9 UJ	1.0 UJ
Sodium	636 UJ	620 UJ		625 UJ		219 J	617 J		130 J	555 J		82.0 J-	159 J
Thallium	0.64 UJ	0.62 UJ		0.62 UJ		5.6 U	0.50 UJ		2.5 U	0.50 UJ		0.93 UJ	2.5 U
Vanadium	13.6 J-	15.6 J-		11.0 J-		18.0 J	8.3 J		6.7 J	2.5 UJ		7.8 J-	8.9 J
Zinc	55.0 J	47.0 J		15.3 J		72.2	92.7 J		35.8	163 J		38.4 J	52.7
AVS/SEM (umole/g dry wt)													
Acid Volatile Sulfide						0.15 UJ			0.90 J				1.7 J
Cadmium, SEM						0.00268 J			0.00533 J				0.0125 J
Copper, SEM						0.0534 J			0.0728 J				0.317 J
Lead, SEM						0.0365 J			0.269 J				0.308 J
Mercury, SEM						0.0000096 UJ			0.000014 UJ				0.0000146 UJ
Nickel, SEM						0.0252 J			0.0272 J				0.126 J
Silver, SEM						0.000484 J			0.00013 UJ				0.00212 J
Zinc, SEM						0.461 J			1.11 J				1.94 J
Total SEM Metals (det only)						0.579 J			1.48 J				2.71 J
AVS/SEM						NC			0.606 J				0.628 J
TCLP metals (mg/L)													
Chromium													
Other													
Total Organic Carbon (avg., ug/g)			24000 J		16000	29000		94000	140000 J		170000 J	50000	110000 J

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-211	SD-211	SD-211	SD-212	SD-212	SD-212	SD-213	SD-213	SD-214	SD-214	SD-214	SD-215	SD-215	SD-216
Sample ID:	WL-SD-211	WL-SD-211-2	WL-SD-3-211	WL-SD-212	WL-SD-212-2	WL-SD-3-212	WL-SD-213	WL-SD-213-2	WL-SD-214	WL-SD-214-2	WL-SD-3-214	WL-SD-215	WL-SD-215-2	WL-SD-216
Sample Date:	6/25/2014	10/29/2014	7/22/2015	6/24/2014	10/29/2014	7/22/2015	6/24/2014	10/28/2014	6/24/2014	10/28/2014	7/27/2015	6/24/2014	10/28/2014	6/24/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter														
VOCs (ug/kg)														
1,1,1-Trichloroethane	210 J		5.4 U	14 U		5.8 U	6.0 U		29 UJ		9.3 U	6.6 U		5.6 U
1,1-Dichloroethane	130 J		5.4 U	14 U		5.8 U	6.0 U		2.0 J		9.3 U	6.6 U		5.6 U
1,1-Dichloroethene	120 J		5.4 U	14 U		5.8 U	6.0 U		29 UJ		9.3 U	6.6 U		5.6 U
1,2,3-Trichlorobenzene	360 U		5.4 U	R		5.8 U	R		R		9.3 U	6.6 U		5.6 U
2-Butanone	720 U		11 U	29 U		12 U	12 U		57 UJ		19 U	26		11 U
Acetone	720 U		11 U	29 U		12 U	12 U		57 UJ		19 U	87		11 U
Carbon disulfide	360 U		5.4 U	3.4 J		5.8 U	6.0 U		2.6 J		9.3 U	1.2 J		5.6 U
Chloroform	30 JEB		5.4 U	14 U		5.8 U	6.0 U		29 UJ		9.3 U	6.6 U		5.6 U
cis-1,2-Dichloroethene	250 J		5.4 U	14 U		5.8 U	6.0 U		29 UJ		9.3 U	6.6 U		5.6 U
Cyclohexane	360 U		5.4 U	14 U		5.8 U	6.0 U		29 UJ		9.3 U	6.6 U		5.6 U
Ethylbenzene	360 U		5.4 U	14 U		5.8 U	6.0 U		29 UJ		9.3 U	1.1 J		5.6 U
Isopropylbenzene	360 U		5.4 U	0.72 J		5.8 U	0.14 J		29 UJ		9.3 U	0.40 J		5.6 U
m,p-Xylene	360 U		5.4 U	14 U		5.8 U	6.0 U		29 UJ		9.3 U	0.89 J		5.6 U
Methyl acetate	140 J		5.4 U	14 U		5.8 U	6.0 U		29 UJ		9.3 U	6.6 U		5.6 U
Methyl tert-butyl ether	360 U		5.4 U	14 U		5.8 U	6.0 U		29 UJ		9.3 U	6.6 U		5.6 U
Methylcyclohexane	360 U		5.4 U	14 U		5.8 U	6.0 U		29 UJ		9.3 U	6.6 U		5.6 U
Methylene chloride	360 U		5.4 U	14 U		5.8 U	6.0 U		29 UJ		9.3 U	6.6 U		5.6 U
o-Xylene	360 U		5.4 U	14 U		5.8 U	6.0 U		29 UJ		9.3 U	0.53 J		5.6 U
Toluene	360 U		5.4 U	14 U		5.8 U	6.0 U		29 UJ		9.3 U	6.6 U		5.6 U
Trichloroethene	950		3.2 J	1.5 J		5.8 U	0.18 J		6.1 J		9.3 U	6.6 U		0.13 J
SVOCs (ug/kg)														
2-Methylnaphthalene		3.9 U	3.9 U		3.5 J	4.4 U		31		14 J	9.9		58	
4-Chloroaniline		200 U	390 U		230 U	440 U		350 U		580 UJ	620 U		240 U	
4-Methylphenol		200 U	390 U		230 U	440 U		350 U		290 J	770		240 U	
Acenaphthene		10	4.0		36	7.1		53		16 J	13		160	
Acenaphthylene		3.9 U	3.9 U		4.4 U	4.4 U		18		11 UJ	52		52 J	
Anthracene		36	14		190	35		150		67 J	53		800	
Benzaldehyde		200 U	390 U		230 U	440 U		350 U		580 UJ	620 U		240 U	
Benzo(a)anthracene		170	150		580	570		870		400 J	430		3300	
Benzo(a)pyrene		140	140		540	560		640		370 J	460		2800	
Benzo(b)fluoranthene		130	150		390	690		680		480 J	470		2800	
Benzo(g,h,i)perylene		83	140		220	540		490		330 J	400		1800	
Benzo(k)fluoranthene		140	140		450	550		440		290 J	380		2000	
Bis(2-ethylhexyl)phthalate		540	200 U		480	130 J		840		1400 J	170 J		590	
Butylbenzylphthalate		200 U	200 U		230 U	230 U		350 U		580 UJ	320 U		240 U	
Caprolactam		190 J	130 J		140 J	440 U		350 U		580 UJ	210 J		220 J	
Carbazole		200 U	390 U		140 J	440 U		350 U		580 UJ	620 U		240	
Chrysene		200	200		640	730		610		390 J	510		3200	
Dibenz(a,h)anthracene		34	67 J		140	340		190		150 J	280		440	
Dibenzofuran		200 U	200 U		230 U	230 U		350 U		580 UJ	320 U		130 J	
Diethylphthalate		200 U	200 U		230 U	230 U		350 U		580 UJ	320 U		240 U	
Dimethylphthalate		200 U	200 U		230 U	230 U		350 U		580 UJ	320 U		240 U	
Di-n-butylphthalate		120 J	200 U		230 U	230 U		180 J		390 J	320 U		150 J	
Fluoranthene		370	350		1500	1400		1800		580 J	880		5800	
Fluorene		10	6.6		73	13		74 J		25 J	19		210	
Indeno(1,2,3-cd)pyrene		86	110		270	460		510		360 J	370		1700	

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-211	SD-211	SD-211	SD-212	SD-212	SD-212	SD-213	SD-213	SD-214	SD-214	SD-214	SD-215	SD-215	SD-216
Sample ID:	WL-SD-211	WL-SD-211-2	WL-SD-3-211	WL-SD-212	WL-SD-212-2	WL-SD-3-212	WL-SD-213	WL-SD-213-2	WL-SD-214	WL-SD-214-2	WL-SD-3-214	WL-SD-215	WL-SD-215-2	WL-SD-216
Sample Date:	6/25/2014	10/29/2014	7/22/2015	6/24/2014	10/29/2014	7/22/2015	6/24/2014	10/28/2014	6/24/2014	10/28/2014	7/27/2015	6/24/2014	10/28/2014	6/24/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter														
Naphthalene		3.9 U	3.9 U		4.3 J	4.4 U		44		20 J	14		110	
Pentachlorophenol		8.0 UJ	8.0 U		8.9 UJ	8.9 U		14 UJ		23 UJ	13 U		9.4 UJ	
Phenanthrene		210	180		1100	470		570		210 J	320		2400	
Pyrene		330	220		1000	840		1400		810 J	610		4400	
Pesticides (ug/kg)														
4,4'-DDD		2.5 J			5.5			10		14 J			8.8	
4,4'-DDE		1.0 J			2.8 J			16		23 J			7.8	
4,4'-DDT		1.9 J			1.7 J			6.8 U		11 UJ			2.9 J	
Aldrin		2.0 U			2.2 U			3.5 U		5.8 UJ			2.4 U	
alpha-BHC		2.0 U			2.2 U			3.5 U		5.8 UJ			2.4 U	
beta-BHC		2.0 U			2.2 U			3.5 U		5.8 UJ			2.4 U	
delta-BHC		2.0 U			2.2 U			3.5 U		5.8 UJ			2.4 U	
Dieldrin		4.0 U			4.4 U			6.8 U		11 UJ			4.7 U	
Endosulfan I		2.0 U			2.2 U			3.5 U		5.8 UJ			2.4 U	
Endosulfan II		4.0 U			4.4 U			6.8 U		11 UJ			4.7 U	
Endosulfan sulfate		4.0 U			4.4 U			6.8 U		11 UJ			4.7 U	
Endrin		4.0 UJ			4.4 UJ			6.8 UJ		11 UJ			4.7 UJ	
Endrin aldehyde		4.0 U			4.4 U			6.8 U		11 UJ			4.7 U	
Endrin ketone		4.0 UJ			4.4 UJ			6.8 UJ		11 UJ			4.7 UJ	
gamma-BHC (Lindane)		2.0 U			2.2 U			3.5 U		5.8 UJ			2.4 U	
gamma-Chlordane		2.0 U			2.2 U			3.5 U		5.8 UJ			2.4 U	
Heptachlor		2.0 U			2.2 U			3.5 U		5.8 UJ			2.4 U	
Heptachlor epoxide		2.0 U			2.2 U			3.5 U		5.8 UJ			2.4 U	
Methoxychlor		2.6 J			3.3 J			95 J		130 J			6.7 J	
PCBs (ug/kg)														
Aroclor-1260		39 U			44 U			69 U		110 UJ			47 U	
Inorganics (mg/kg)														
Aluminum	5610 J		3460 J	8140 J		4400 J	4320 J		9400 J		3970 JEB	4610 J		3120 J
Antimony	0.12 UJ		2.5 J	0.41 J		3.9 J	0.56 UJ		2.1 J		1.8 UJ	0.39 UJ		0.13 UJ
Arsenic	2.2 J-		1.5 J-	5.9 J		0.32 J	3.1		6.6 J		3.2 UJ	6.7		3.1
Barium	27.4 J-		44.3 J	95.5 J		28.6 J	31.2		155 J		77.7 J	68.3		16.3
Beryllium	1.2 UJ		0.61 U	1.0 UJ		0.70 U	0.96 U		1.3 J		0.039 J	0.73 U		0.63 U
Cadmium	0.12 UJ		0.61 UJ	1.0 J		0.70 UJ	0.21		2.1 J		1.6 UJ	0.19		0.13 U
Calcium	1210 J		1050 J	4040 J		923 J	1860 J		6260 J		4070 J	1160 J		852 J
Chromium	596 J-		342 J	3240 J		594 J	418		7330 J		1040 J	294		124
Chromium, Hexavalent	87.0		108 J	1.5 UJ		48.5 J	0.14 J		2.5 UJ		26.4 J	0.56 U		6.10
Cobalt	4.9 J-		4.7 J	8.6 J		3.8 J	3.1		10.8 J		2.3 J	8.3		3.1
Copper	6.4 J		8.3 J	48.6 J		5.5 J	15.9 J		60.3 J		29.5 J	32.9 J		7.9 J
Cyanide	0.16 JEB		0.17 J-	0.52 JEB		R	0.096 UJ		0.48 JEB		1.6 U	0.073 UJ		0.063 UJ
Iron	14200 J		11100 J	16000 J		8940 J	8540 J		22900 J		9290	13400 J		6790 J
Lead	19.0 J-		10.9 J	72.3 J		15.4 J	23.7		97.9 J		93.2 J	109		18.3
Magnesium	2240 J		1400 J	2490 J		2050 J	1540 J		2280 J		1050 J	1460 J		948 J
Manganese	641 J-		746 J	500 J		173 J	188		738 J		238 J	182		131
Mercury	0.060 UJ		0.0075 J	0.16 J		0.0066 J	0.096 U		0.38 J		0.25 J-EB	0.073 U		0.063 U
Nickel	8.3 J		6.3	19.9 J		6.0	7.2 J		19.7 J		13.0 UJ	10.1 J		6.9 J
Potassium	327 J		335 J	860 J		392 J	490 J		1000 J		1620 U	321 J		280 J
Selenium	3.0 UJ		4.3 U	2.5 UJ		4.9 U	4.8 U		2.5 UJ		1.9 J	3.6 U		3.2 U

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-211	SD-211	SD-211	SD-212	SD-212	SD-212	SD-213	SD-213	SD-214	SD-214	SD-214	SD-215	SD-215	SD-216
Sample ID:	WL-SD-211	WL-SD-211-2	WL-SD-3-211	WL-SD-212	WL-SD-212-2	WL-SD-3-212	WL-SD-213	WL-SD-213-2	WL-SD-214	WL-SD-214-2	WL-SD-3-214	WL-SD-215	WL-SD-215-2	WL-SD-216
Sample Date:	6/25/2014	10/29/2014	7/22/2015	6/24/2014	10/29/2014	7/22/2015	6/24/2014	10/28/2014	6/24/2014	10/28/2014	7/27/2015	6/24/2014	10/28/2014	6/24/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter														
Silver	1.2 UJ		1.2 UJ	1.0 UJ		1.4 UJ	0.96 U		0.87 J		0.27 J	0.73 U		1.7
Sodium	87.0 J-		84.1 J+	524 J		108 J	198 J		848 J		1620 U	88.2 J		75.4 J
Thallium	0.60 UJ		3.1 U	0.50 UJ		3.5 U	0.96 UJ		0.50 UJ		8.1 UJ	0.73 UJ		0.63 UJ
Vanadium	0.26 J-		13.5 J	R		12.1 J	2.8 J-		R		12.3 J	5.0 J-		6.1 J-
Zinc	35.8 J		40.0	146 J		41.6	52.9 J		198 J		391 J	70.4 J		22.4 J
AVS/SEM (umole/g dry wt)														
Acid Volatile Sulfide			0.12 UJ			0.18 J					0.12 J			
Cadmium, SEM			0.000879 J			0.000564 J					0.00995 J			
Copper, SEM			0.204 J			0.0274 J					0.619 J			
Lead, SEM			0.0206 J			0.0339 J					0.668 J			
Mercury, SEM			0.0000027 UJ			0.0000037 UJ					0.0000608 J			
Nickel, SEM			0.0354 J			0.0124 J					0.124 J			
Silver, SEM			0.00013 J			0.00019 J					0.00478 J			
Zinc, SEM			0.295 J			0.159 J					5.73 J			
Total SEM Metals (det only)			0.556 J			0.233 J					7.16 J			
AVS/SEM			NC			0.771 J					0.0168 J			
TCLP metals (mg/L)														
Chromium														
Other														
Total Organic Carbon (avg., ug/g)	12000 J		14000 J	88000 J		9900 J	66000 J		190000 J		96000	12000 J		4300 J

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-217	SD-217	SD-218	SD-218	SD-218	SD-219	SD-219	SD-220	SD-220	SD-221	SD-221	SD-222	SD-223	SD-224	SD-224	SD-225
Sample ID:	WL-SD-217	WL-SD-217-2	WL-SD-218	WL-SD-218-2	WL-SD-3-218	WL-SD-219	WL-SD-219-2	WL-SD-220	WL-SD-3-220	WL-SD-221	WL-SD-221D	WL-SD-222	WL-SD-223	WL-SD-224	WL-SD-3-224	WL-SD-225
Sample Date:	6/24/2014	11/5/2014	6/27/2014	11/5/2014	7/27/2015	7/1/2014	10/29/2014	7/1/2014	7/23/2015	6/27/2014	6/27/2014	6/27/2014	7/1/2014	7/1/2014	7/23/2015	6/27/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
VOCs (ug/kg)																
1,1,1-Trichloroethane	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
1,1-Dichloroethane	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
1,1-Dichloroethene	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
1,2,3-Trichlorobenzene	6.5 U		6.3 U		32 J-	R		R	26 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
2-Butanone	13		13 U		29 U	120 J		200 J	240 J	5.8 J	38	24	23 U	110 J	38 UJ	12 U
Acetone	50		13 U		370	290 J		430 J	820 J	100 J	130	120	6.2 J	500 J	38 UJ	12 U
Carbon disulfide	4.7 J		0.76 J		14 U	2.9 J		5.7 J	26 UJ	9.6 U	1.5 J	0.56 J	12 U	3.2 J	19 UJ	0.84 J
Chloroform	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
cis-1,2-Dichloroethene	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
Cyclohexane	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
Ethylbenzene	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
Isopropylbenzene	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
m,p-Xylene	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	0.26 J	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
Methyl acetate	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	9.6 U	10 U	9.0 U	12 U	5.7 J	19 UJ	6.1 U
Methyl tert-butyl ether	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	9.6 U	0.26 J	9.0 U	12 U	20 UJ	19 UJ	6.1 U
Methylcyclohexane	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
Methylene chloride	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
o-Xylene	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	0.20 J	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
Toluene	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
Trichloroethene	6.5 U		6.3 U		14 U	17 UJ		24 UJ	26 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	19 UJ	6.1 U
SVOCs (ug/kg)																
2-Methylnaphthalene		22		19	29		57 J	760 UJ	43 J	120 U	120 U	350 U	2500 U	2100 UJ	93 J	42 U
4-Chloroaniline		210 U		300 U	990 U		1100 UJ	16000 UJ	1900 UJ	6100 U	6200 U	6100 U	13000 U	22000 UJ	2300 J	2200 U
4-Methylphenol		210 U		300 U	990 U		1100 UJ	16000 UJ	1900 UJ	6100 U	6200 U	6100 U	13000 U	22000 UJ	1500 UJ	2200 U
Acenaphthene		100		110	120		110 J	760 UJ	98 J	120 U	120 U	75 J	2500 U	2100 UJ	370 J	42 U
Acenaphthylene		19		12	210		46 J	760 UJ	230 J	32 J	26 J	350 U	2500 U	2100 UJ	150 J	42 U
Anthracene		170		380	430		370 J	340 J	430 J	42 J	53 J	220 J	1700 J	870 J	1600 J	15 J
Benzaldehyde		210 U		300 U	990 U		1100 UJ	16000 UJ	1900 UJ	6100 U	6200 U	6100 U	13000 U	22000 UJ	1500 UJ	2200 U
Benzo(a)anthracene		540		1900	1800		2500 J	1700 J	1900 J	250 J	220 J	1000 J	5800 J	3700 J	3800 J	75 J
Benzo(a)pyrene		340		1900	2000		2700 J	1500 J	2100 J	250	200	750	3600	2700 J	3200 J	63
Benzo(b)fluoranthene		210		2700	2100		3200 J	2300 J	2100 J	460	380	1300	5500	4500 J	3200 J	110
Benzo(g,h,i)perylene		140		1600	1600		1300 J	1100 J	1700 J	250	200	560	2300 J	1900 J	2200 J	51
Benzo(k)fluoranthene		350		1600	1700		2800 J	780 J	2100 J	150	110 J	370	2000 J	1600 J	2800 J	34 J
Bis(2-ethylhexyl)phthalate		490		500	1000		2900 J	16000 UJ	770 J	6100 U	6200 U	6100 U	13000 U	22000 UJ	1700 J	2200 U
Butylbenzylphthalate		210 U		160 J	760		1100 UJ	16000 UJ	960 UJ	6100 U	6200 U	6100 U	13000 U	22000 UJ	770 UJ	2200 U
Caprolactam		210 U		300 U	350 J		670 J	16000 UJ	820 J	6100 U	6200 U	6100 U	13000 U	22000 UJ	610 J	2200 U
Carbazole		210 U		360	990 U		1100 UJ	16000 UJ	1900 UJ	6100 U	6200 U	6100 U	1100 J	22000 UJ	770 J	2200 U
Chrysene		630		2600	2200		2900 J	1700 J	2400 J	310	240	920	5000	3500 J	3700 J	79
Dibenz(a,h)anthracene		59		310	950		720 J	760 UJ	1100 J	55 J	46 J	130 J	2500 U	2100 UJ	1900 J	11 J
Dibenzofuran		110 J		300 U	510 U		1100 UJ	16000 UJ	960 UJ	6100 U	6200 U	6100 U	13000 U	22000 UJ	770 UJ	2200 U
Diethylphthalate		210 U		300 U	510 U		1100 UJ	16000 UJ	960 UJ	6100 U	6200 U	6100 U	13000 U	22000 UJ	770 UJ	2200 U
Dimethylphthalate		210 U		300 U	510 U		1100 UJ	16000 UJ	960 UJ	6100 U	6200 U	6100 U	13000 U	22000 UJ	770 UJ	2200 U
Di-n-butylphthalate		210 U		300 U	510 U		1100 UJ	16000 UJ	830 J	6100 U	6200 U	550 JEB	13000 U	22000 UJ	660 J	2200 U
Fluoranthene		1400		5900	5000		6200 J	3700 J	4200 J	480	480	2000	14000	7700 J	8100 J	180
Fluorene		210		140	200		150 J	760 UJ	150 J	120 U	28 J	84 J	2500 U	2100 UJ	450 J	42 U
Indeno(1,2,3-cd)pyrene		170		1400	1400		1600 J	1500 J	1600 J	320	250	730	3200	2600 J	2200 J	68

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-217	SD-217	SD-218	SD-218	SD-218	SD-219	SD-219	SD-220	SD-220	SD-221	SD-221	SD-222	SD-223	SD-224	SD-224	SD-225
Sample ID:	WL-SD-217	WL-SD-217-2	WL-SD-218	WL-SD-218-2	WL-SD-3-218	WL-SD-219	WL-SD-219-2	WL-SD-220	WL-SD-3-220	WL-SD-221	WL-SD-221D	WL-SD-222	WL-SD-223	WL-SD-224	WL-SD-3-224	WL-SD-225
Sample Date:	6/24/2014	11/5/2014	6/27/2014	11/5/2014	7/27/2015	7/1/2014	10/29/2014	7/1/2014	7/23/2015	6/27/2014	6/27/2014	6/27/2014	7/1/2014	7/1/2014	7/23/2015	6/27/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Naphthalene		120		21	29		77 J	760 UJ	59 J	120 U	120 U	350 U	2500 U	2100 UJ	120 J	42 U
Pentachlorophenol		410 U		590 U	20 U		41 UJ	1500 UJ	38 UJ	240 U	250 U	720 U	5200 U	4300 UJ	30 UJ	85 U
Phenanthrene		1100		2500	2500		2000 J	1400 J	1700 J	200 J	260	1100	8900	4300 J	5300 J	69
Pyrene		1200		3900	3400		4400 J	2500 J	3100 J	350	310	1400	8000	5100 J	5600 J	120
Pesticides (ug/kg)																
4,4'-DDD		6.3 J		5.9 J			18 J	150 UJ		60 U	61 U	410	85 U	140 UJ		9.3
4,4'-DDE		2.3 J		2.3 J			21 J	15 J		60 U	61 U	130 J	13 J	35 J		2.3 J
4,4'-DDT		1.8 J		7.8 J			15 J	34 J		60 U	61 U	97	32 J	140 UJ		2.4 J
Aldrin		0.56 J		3.0 UJ			10 UJ	78 UJ		31 U	31 U	30 U	44 U	72 UJ		2.2 U
alpha-BHC		2.1 UJ		3.0 UJ			10 UJ	18 J		31 U	31 U	30 U	44 U	72 UJ		2.2 U
beta-BHC		2.1 UJ		3.0 UJ			10 UJ	78 UJ		31 U	31 U	30 U	44 U	5.4 J		2.2 U
delta-BHC		2.1 UJ		3.0 UJ			10 UJ	78 UJ		31 U	31 U	30 U	44 U	72 UJ		2.2 U
Dieldrin		4.1 UJ		5.9 UJ			20 UJ	150 UJ		60 U	61 U	59 U	85 U	140 UJ		4.2 U
Endosulfan I		2.1 UJ		3.0 UJ			10 UJ	78 UJ		31 U	31 U	30 U	44 U	72 UJ		2.2 U
Endosulfan II		4.1 UJ		5.9 UJ			20 UJ	150 UJ		60 U	61 U	59 U	85 U	140 UJ		4.2 U
Endosulfan sulfate		4.1 UJ		5.9 UJ			20 UJ	150 UJ		60 U	61 U	59 U	85 U	140 UJ		4.2 U
Endrin		4.1 UJ		5.9 UJ			20 UJ	150 UJ		60 U	61 U	59 U	85 U	140 UJ		4.2 U
Endrin aldehyde		4.1 UJ		5.9 UJ			20 UJ	150 UJ		60 U	61 U	59 U	85 U	140 UJ		4.2 U
Endrin ketone		R		R			20 UJ	150 UJ		60 U	61 U	59 U	85 U	140 UJ		4.2 U
gamma-BHC (Lindane)		2.1 UJ		3.0 UJ			10 UJ	78 UJ		31 U	31 U	30 U	44 U	72 UJ		2.2 U
gamma-Chlordane		2.1 UJ		3.0 UJ			10 UJ	78 UJ		31 U	31 U	30 U	44 U	72 UJ		2.2 U
Heptachlor		2.1 UJ		3.0 UJ			10 UJ	78 UJ		31 U	31 U	30 U	44 U	72 UJ		2.2 U
Heptachlor epoxide		2.1 UJ		3.0 UJ			10 UJ	78 UJ		31 U	31 U	4.8 J	44 U	72 UJ		0.49 J
Methoxychlor		21 UJ		30 UJ			350 J	780 UJ		7.7 J	10 J	12 J	440 U	720 UJ		22 U
PCBs (ug/kg)																
Aroclor-1260		17 J		29 J			260 J	1500 UJ		600 U	610 U	590 U	850 U	1400 UJ		42 U
Inorganics (mg/kg)																
Aluminum	3560 J		3570		5110 J	4580 J		5420 J	1640 J	7320	6960	10300	5480 J	6790 J	1990 J	6800
Antimony	0.22 UJ		0.20 UJ		3.3 UJ	0.25 J		0.58 J	0.25 J	0.40 UJ	0.26 UJ	0.47 UJ	0.51 J	0.57 J	1.9 J	0.14 UJ
Arsenic	2.2		1.5 J		1.8 UJ	1.8 J		5.6 J	1.2	4.8 J	4.0 J	7.7 J	3.8	4.4 J	0.54 J	0.73 J
Barium	15.6		15.1		74.2 J	34.2 J		87.6 J	21.2 J	56.0	52.2	66.3	161 J	194 J	48.9 J	23.0
Beryllium	0.64 U		0.67 U		0.92 UJ	0.50 UJ		0.56 J	0.50 U	1.0 U	0.99 U	1.0 U	1.5 U	0.89 J	0.040 J	0.69 U
Cadmium	0.13 U		0.084 J		1.1 J	0.49 J		1.1 J	0.50 UJ	1.3 J	0.92 J	3.2	2.0	9.5 J	4.5 J	0.22 J
Calcium	978 J		935		1950 J	2330 J		5280 J	1060 J	1360	1320	2220	2630 J	3430 J	871 J	953
Chromium	245		306 J		1830 J	55.5 J		18.2 J	4.7 J	28.2 J	27.2 J	388 J	345	732 J	246 J	24.8 J
Chromium, Hexavalent	6.49		20.1 J		27.3 J	1.6 UJ		1.9 UJ	1.7 UJ	0.05 J	0.06 J	0.07 J	1.2 UJ	1.8 UJ	17.4 J	0.08 J
Cobalt	2.9		2.3		7.4 J	6.0 J		13.4 J	3.0 J	4.4	3.7	5.2	7.8 J	11.5 J	4.4 J	4.6
Copper	11.6 J		10.2 J		54.0 JEB	27.0 J		62.2 J	32.5 J	263	238	245	210 J	647 J	277 J	17.3
Cyanide	0.064 UJ		0.36 JEB		0.92 U	0.17 UJ		0.22 UJ	0.14 J-	0.012 JEB	0.018 JEB	0.080 JEB	0.15 UJ	0.32 JEB	1.0 J-	0.069 UJ
Iron	10200 J		7880		14600	10300 J		16400 J	4260 J	11600	11200	17700	13300 J	14800 J	4020 J	11600
Lead	32.7		23.6		138 J	65.9 J		157 J	50.0 J	87.2	71.5	110	92.5 J	188 J	77.2 J	10.0
Magnesium	1410 J		1170 J-		1680 J	1500 J		1580 J	425 J	1530 J-	1480 J-	1630 J-	1480 UJ	1500 J	447 J	2420 J-
Manganese	156		102		180 J	336 J		572 J	236 J	327	312	424	585	571 J	95.0 J	215
Mercury	0.064 U		0.067 U		0.075 J-EB	0.15 J		0.31 J	0.26	2.1	1.8	0.64	1.1 J	2.4 J	3.1	0.069 U
Nickel	7.5 J		5.4		16.2 J	11.5 J		14.4 J	4.0 U	22.8	21.7	56.2	30.2 J	147 J	90.8	14.2
Potassium	326 J		669 U		919 U	500 UJ		518 J	123 J	1010 U	990 U	1000 U	1480 UJ	618 J	158 J	690 U
Selenium	3.2 U		3.3 UJ		1.7 J	0.86 J		1.6 J	3.5 U	0.59 J-	0.61 J-	0.82 J-	1.8 J	4.2 J	3.5 U	0.29 J-

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-217	SD-217	SD-218	SD-218	SD-218	SD-219	SD-219	SD-220	SD-220	SD-221	SD-221	SD-222	SD-223	SD-224	SD-224	SD-225
Sample ID:	WL-SD-217	WL-SD-217-2	WL-SD-218	WL-SD-218-2	WL-SD-3-218	WL-SD-219	WL-SD-219-2	WL-SD-220	WL-SD-3-220	WL-SD-221	WL-SD-221D	WL-SD-222	WL-SD-223	WL-SD-224	WL-SD-3-224	WL-SD-225
Sample Date:	6/24/2014	11/5/2014	6/27/2014	11/5/2014	7/27/2015	7/1/2014	10/29/2014	7/1/2014	7/23/2015	6/27/2014	6/27/2014	6/27/2014	7/1/2014	7/1/2014	7/23/2015	6/27/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter																
Silver	0.93		0.93		13.3 J	3.8 J		7.5 J	3.2 J	5.7	5.4	18.0	8.9 J	29.0 J	11.5 J	0.69 U
Sodium	69.3 J		669 U		919 U	500 UJ		499 UJ	93.3 J	1010 U	990 U	1000 U	1480 UJ	500 UJ	59.4 J	690 U
Thallium	0.64 UJ		0.67 U		4.6 UJ	0.50 UJ		0.50 UJ	2.5 U	1.0 U	0.99 U	1.0 U	1.5 U	3.0 J	2.5 U	0.69 U
Vanadium	2.7 J-		3.3 U		15.7 J	12.8 J		27.6 J	6.9 J	14.5	13.2	14.1	8.9 J	6.2 J	6.8 J	9.2
Zinc	33.9 J		32.1		153 JEB	52.5 J		109 J	31.1	139	104	111	159 J	327 J	161	41.8
AVS/SEM (umole/g dry wt)																
Acid Volatile Sulfide					0.24 J				9.1 J						19 J	
Cadmium, SEM					0.00878 J				0.0121 J						0.0343 J	
Copper, SEM					0.883 J				0.184 J						0.0179 J	
Lead, SEM					0.745 J				0.990 J						0.476 J	
Mercury, SEM					0.0000426 J				0.0000933 J						0.0000275 UJ	
Nickel, SEM					0.103 J				0.121 J						0.277 J	
Silver, SEM					0.0712 J				0.00819 J						0.00126 J	
Zinc, SEM					2.10 J				1.74 J						3.48 J	
Total SEM Metals (det only)					3.91 J				3.055 J						4.29 J	
AVS/SEM					0.0614 J				2.98 J						4.43 J	
TCLP metals (mg/L)																
Chromium																
Other																
Total Organic Carbon (avg., ug/g)	7400 J		4800 J		64000	140000 J		150000 J	150000 J	42000 J-	48000 J	34000	71000	120000 J	100000 J	7400 J

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-226	SD-226	SD-227	SD-228	SD-229	SD-229	SD-231	SD-231	SD-232	SD-233	SD-234	SD-235	SD-236
Sample ID:	WL-SD-226	WL-SD-3-226	WL-SD-227	WL-SD-228	WL-RSD-229	WL-SD-229	WL-SD-231-2	WL-SD-231D-2	WL-SD-232-2	WL-SD-233-2	WL-SD-234	WL-SD-235	WL-SD-236
Sample Date:	7/1/2014	7/22/2015	7/1/2014	6/27/2014	6/30/2014	6/20/2014	11/4/2014	11/4/2014	11/4/2014	11/4/2014	6/30/2014	6/30/2014	7/9/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter													
VOCs (ug/kg)													
1,1,1-Trichloroethane	35 UJ	30 UJ	7.0 U	8.3 U		12 U					31 UJ	27 UJ	27 UJ
1,1-Dichloroethane	35 UJ	30 UJ	7.0 U	8.3 U		12 U					31 UJ	27 UJ	27 UJ
1,1-Dichloroethene	35 UJ	30 UJ	7.0 U	8.3 U		12 U					31 UJ	27 UJ	27 UJ
1,2,3-Trichlorobenzene	35 UJ	30 UJ	7.0 U	8.3 U		12 U					R	R	R
2-Butanone	310 J	360 J	21	8.7 J		26					320 J	53 UJ	160 J
Acetone	790 J	1400 J	63	45		82					760 J	53 UJ	710 J
Carbon disulfide	40 J	41 J	0.80 J	8.3 U		2.8 J					4.0 J	3.5 J	7.3 JEB
Chloroform	35 UJ	30 UJ	7.0 U	8.3 U		12 U					31 UJ	27 UJ	27 UJ
cis-1,2-Dichloroethene	35 UJ	30 UJ	7.0 U	8.3 U		12 U					31 UJ	27 UJ	3.6 J
Cyclohexane	35 UJ	30 UJ	7.0 U	8.3 U		12 U					31 UJ	27 UJ	27 UJ
Ethylbenzene	35 UJ	30 UJ	7.0 U	8.3 U		12 U					31 UJ	0.56 J	27 UJ
Isopropylbenzene	35 UJ	30 UJ	7.0 U	8.3 U		0.24 J					31 UJ	27 UJ	27 UJ
m,p-Xylene	35 UJ	30 UJ	7.0 U	8.3 U		12 U					1.2 J	27 UJ	27 UJ
Methyl acetate	35 UJ	30 UJ	7.0 U	8.3 U		12 U					31 UJ	27 UJ	27 UJ
Methyl tert-butyl ether	35 UJ	30 UJ	7.0 U	8.3 U		12 U					31 UJ	27 UJ	27 UJ
Methylcyclohexane	35 UJ	30 UJ	7.0 U	8.3 U		12 U					31 UJ	27 UJ	27 UJ
Methylene chloride	35 UJ	30 UJ	7.0 U	8.3 U		12 U					31 UJ	27 UJ	27 UJ
o-Xylene	35 UJ	30 UJ	7.0 U	8.3 U		12 U					31 UJ	27 UJ	27 UJ
Toluene	35 UJ	30 UJ	7.0 U	8.3 U		12 U					31 UJ	27 UJ	27 UJ
Trichloroethene	35 UJ	30 UJ	7.0 U	8.3 U		12 U					31 UJ	0.89 J	2.8 J
SVOCs (ug/kg)													
2-Methylnaphthalene	440 UJ	54 J	45 U			130 J	4.1 J	8.8 J	4.1 J	4.1 U	650 UJ	510 UJ	2500 UJ
4-Chloroaniline	23000 UJ	1600 J	2300 U			8400 U	210 U	210 U	230 U	210 U	33000 UJ	26000 UJ	26000 UJ
4-Methylphenol	23000 UJ	2200 UJ	2300 U			8400 U	210 U	210 U	230 U	210 U	33000 UJ	26000 UJ	26000 UJ
Acenaphthene	440 UJ	88 J	45 U			160 U	95	83	48	22	650 UJ	510 UJ	2500 UJ
Acenaphthylene	440 UJ	260 J	45 U			160 U	4.0 U	3.3 J	4.4 U	4.1 U	130 J	130 J	2500 UJ
Anthracene	440 UJ	340 J	45 U			160 U	110 J	210 J	170	98	170 J	190 J	1200 J
Benzaldehyde	23000 UJ	2200 UJ	2300 U			8400 U	210 U	210 U	230 U	210 U	33000 UJ	26000 UJ	26000 UJ
Benzo(a)anthracene	440 UJ	1900 J	25 J			160 UJ	870	1300	1600	370	830 J	1200 J	7100 J
Benzo(a)pyrene	440 UJ	2900 J	31 J			160 U	940	1400	1800	280	1000 J	1200 J	5600 J
Benzo(b)fluoranthene	440 UJ	2800 J	60			100 J	1200	1900	2600	340	1700 J	1900 J	8700 J
Benzo(g,h,i)perylene	440 UJ	2600 J	29 J			160 U	760	1000	1600	140	950 J	980 J	3900 J
Benzo(k)fluoranthene	440 UJ	2700 J	16 J			160 U	930	1000	1600	290	600 J	650 J	3200 J
Bis(2-ethylhexyl)phthalate	4100 J	2500 J	2300 U			8400 U	89 J	210 U	210 J	210 U	33000 UJ	26000 UJ	26000 UJ
Butylbenzylphthalate	23000 UJ	1100 UJ	2300 U			8400 U	210 U	210 U	230 U	210 U	33000 UJ	26000 UJ	26000 UJ
Caprolactam	23000 UJ	860 J	2300 U			8400 U	210 U	210 U	230 U	210 U	33000 UJ	26000 UJ	26000 UJ
Carbazole	23000 UJ	2200 UJ	2300 U			8400 U	190 J	320	360	210 U	33000 UJ	26000 UJ	26000 UJ
Chrysene	440 UJ	2800 J	33 J			79 J	1200	1700	2400	490	1000 J	1300 J	6700 J
Dibenz(a,h)anthracene	440 UJ	1300 J	45 U			160 U	240	180	200	65	170 J	220 J	830 J
Dibenzofuran	23000 UJ	1100 UJ	2300 U			8400 U	210 U	210 U	230 U	210 U	33000 UJ	26000 UJ	26000 UJ
Diethylphthalate	23000 UJ	6700 J	2300 U			8400 U	210 U	210 U	230 U	210 U	33000 UJ	26000 UJ	26000 UJ
Dimethylphthalate	23000 UJ	1100 UJ	2300 U			8400 U	210 U	210 U	230 U	210 U	33000 UJ	26000 UJ	26000 UJ
Di-n-butylphthalate	2100 JEB	6000 J	2300 U			8400 U	210 U	140 J	230 U	210 U	33000 UJ	26000 UJ	26000 UJ
Fluoranthene	210 J	5000 J	68			150 J	2800	4100	5500	1200	2500 J	2500 J	12000 J
Fluorene	440 UJ	170 J	45 U			160 U	84	84	64	29	650 UJ	510 UJ	2500 UJ
Indeno(1,2,3-cd)pyrene	440 UJ	2000 J	40 J			160 U	770	1000	1500	170	1200 J	1300 J	5100 J

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-226	SD-226	SD-227	SD-228	SD-229	SD-229	SD-231	SD-231	SD-232	SD-233	SD-234	SD-235	SD-236
Sample ID:	WL-SD-226	WL-SD-3-226	WL-SD-227	WL-SD-228	WL-RSD-229	WL-SD-229	WL-SD-231-2	WL-SD-231D-2	WL-SD-232-2	WL-SD-233-2	WL-SD-234	WL-SD-235	WL-SD-236
Sample Date:	7/1/2014	7/22/2015	7/1/2014	6/27/2014	6/30/2014	6/20/2014	11/4/2014	11/4/2014	11/4/2014	11/4/2014	6/30/2014	6/30/2014	7/9/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter													
Naphthalene	440 UJ	65 J	45 U			160 U	4.0 J	8.7 J	4.8	4.1 U	650 UJ	510 UJ	2500 UJ
Pentachlorophenol	890 UJ	35 J	92 U			330 UJ	400 U	400 U	440 U	410 U	1300 UJ	210 J	5100 UJ
Phenanthrene	440 UJ	2100 J	23 J			180	1100	1600	2000	590	770 J	880 J	6600 J
Pyrene	440 UJ	3600 J	43 J			110 J	1900	2600	3400	840	1400 J	1800 J	11000 J
Pesticides (ug/kg)													
4,4'-DDD	220 UJ		4.5 U			220	4.0 UJ	4.0 U	4.4 U	24 J	220 UJ	170 UJ	240 J
4,4'-DDE	47 J		1.2 J			55 J	4.0 U	4.0 U	4.4 U	16 J	220 UJ	170 UJ	74 J
4,4'-DDT	220 UJ		4.5 U			24	4.0 U	4.0 U	4.4 U	23 J	220 UJ	170 UJ	72 J
Aldrin	110 UJ		2.3 U			4.2 U	2.1 U	2.1 U	2.3 U	2.1 UJ	110 UJ	88 UJ	87 UJ
alpha-BHC	7.2 J		2.3 U			4.2 U	2.1 U	2.1 U	2.3 U	2.1 UJ	110 UJ	88 UJ	87 UJ
beta-BHC	110 UJ		2.3 U			1.4 JEB	2.1 U	2.1 U	2.3 U	2.1 UJ	110 UJ	88 UJ	63 J
delta-BHC	110 UJ		2.3 U			4.2 U	2.1 U	2.1 U	2.3 U	2.1 UJ	110 UJ	88 UJ	87 UJ
Dieldrin	220 UJ		4.5 U			8.1 U	4.0 U	4.0 U	4.4 U	4.0 UJ	220 UJ	170 UJ	170 UJ
Endosulfan I	110 UJ		2.3 U			4.2 U	2.1 U	2.1 U	2.3 U	2.1 UJ	110 UJ	88 UJ	87 UJ
Endosulfan II	220 UJ		4.5 U			1.1 J	4.0 U	4.0 U	4.4 U	4.0 UJ	220 UJ	170 UJ	170 UJ
Endosulfan sulfate	220 UJ		4.5 U			1.6 J	4.0 U	4.0 U	4.4 U	4.0 UJ	220 UJ	170 UJ	170 UJ
Endrin	220 UJ		4.5 U			8.1 U	4.0 U	4.0 U	4.4 U	4.0 UJ	220 UJ	170 UJ	170 UJ
Endrin aldehyde	220 UJ		0.46 J			8.1 U	4.0 U	4.0 U	4.4 U	4.0 UJ	220 UJ	170 UJ	170 UJ
Endrin ketone	220 UJ		0.76 J			3.0 J	4.0 UJ	R	R	R	220 UJ	170 UJ	18 J
gamma-BHC (Lindane)	110 UJ		2.3 U			1.1 J	2.1 U	2.1 U	2.3 U	2.1 UJ	110 UJ	88 UJ	87 UJ
gamma-Chlordane	110 UJ		2.3 U			6.6 J	2.1 U	2.1 U	2.3 U	2.1 UJ	110 UJ	88 UJ	87 UJ
Heptachlor	110 UJ		2.3 U			4.2 U	2.1 U	2.1 U	2.3 U	2.1 UJ	110 UJ	88 UJ	87 UJ
Heptachlor epoxide	110 UJ		2.3 U			4.2 U	2.1 U	2.1 U	2.3 U	2.1 UJ	110 UJ	88 UJ	87 UJ
Methoxychlor	1100 UJ		23 U			5.1 J	21 U	21 U	23 U	21 UJ	1100 UJ	23 J	870 UJ
PCBs (ug/kg)													
Aroclor-1260	2200 UJ		45 U			81 U	40 U	8.3 J	44 U	41 U	2200 UJ	1700 UJ	1700 UJ
Inorganics (mg/kg)													
Aluminum	14800 J	2910 J	7010 J	7800	8960 J-		2580 J	3680 J	4340 J	5090 J	12400 J	8240 J	8130 J
Antimony	0.64 J	5.1 J	0.16 UJ	0.19 UJ	0.13 UJ		0.040 J	0.056 J	0.12 J	0.044 J	0.48 J	0.52 J	1.0 J
Arsenic	8.2 J	0.80 J	1.2	1.3 J	2.3 J-		1.5 J	1.2 J	1.4 J	1.7 J	5.6 J	4.0 J	6.9 J
Barium	409 J	62.2 J	30.9 J	30.1	35.6 J-		18.1 J	17.6 J	22.5 J	24.1 J	436 J	237 J	88.6 J
Beryllium	2.4 J	0.067 J	0.81 U	0.96 U	0.67 UJ		0.32 J	0.34 J	0.36 J	0.30 J	1.8 J	0.98 J	1.0 UJ
Cadmium	36.9 J	12.2 J	0.66	0.25 J	0.18 J		0.10 J	0.13	0.17	0.074 J	11.3 J	7.8 J	1.9 J
Calcium	6120 J	1010 J	1360 J	1460	1430 J-		643	832	1130	938	5520 J	4960 J	5030 J
Chromium	4870 J	706 J	36.3	11.3 J	12.2 J-		5.5 J	6.1 J	8.0 J	9.7 J	134 J	75.3 J	35.1 J
Chromium, Hexavalent	2.6 UJ	8.4 J	0.33 J	0.70 UJ	0.53 U		0.04 J	0.06 J	0.60 U	0.13 J	2.7 UJ	2.3 UJ	1.7 UJ
Cobalt	20.9 J	5.8 J	3.8 J	1.8	8.2 J-		3.0 J	2.8 J	3.4 J	5.5 J	16.1 J	13.3 J	10.2 J
Copper	2880 J	441 J	37.8 J	14.8 J	8.1 J		4.1 J	6.3 J	7.8 J	5.2 J	1140 J	608 J	242 J
Cyanide	0.83 JEB	4.1 J-	0.081 UJ	0.096 UJ	0.067 U		0.069 JEB	0.056 JEB	0.16 JEB	0.10 JEB	0.17 JEB	0.20 JEB	0.30 J
Iron	24100 J	4790 J	10200 J	4110	20500 J-		7210 J	9740 J	11000 J	12200 J	19800 J	18200 J	13400 J
Lead	579 J	87.4 J	16.7 J	12.7	14.6 J		12.3	14.2	23.2	12.8	116 J	86.7 J	571 JEB
Magnesium	3470 J	600 J	1940 J	988 J-	4260 J-		833	1250	1470	2030	2530 J	1880 J	1820 J
Manganese	729 J	114 J	228	98.9	448 J-		282 J	234 J	214 J	507 J	1150 J	927 J	459 JEB
Mercury	4.6 J	5.3	0.081 UJ	0.23	0.016 J		0.060 UJ	0.0073 J-	0.012 J-	0.063 UJ	3.9 J	4.0 J	1.9 J
Nickel	595 J	111	28.6 J	5.6	13.5 J-		4.9 J	4.5 J	5.2 J	7.8 J	102 J	87.0 J	34.8 JEB
Potassium	1480 J	254 J	806 UJ	963 U	668 UJ		596 U	581 U	682 U	627 U	1120 J	750 J	727 J
Selenium	6.4 J	3.5 U	0.55 J	0.74 J-	0.22 J-		0.23 J	0.28 J	0.31 J	0.27 J	6.8 J	2.8 J	1.9 J

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-226	SD-226	SD-227	SD-228	SD-229	SD-229	SD-231	SD-231	SD-232	SD-233	SD-234	SD-235	SD-236
Sample ID:	WL-SD-226	WL-SD-3-226	WL-SD-227	WL-SD-228	WL-RSD-229	WL-SD-229	WL-SD-231-2	WL-SD-231D-2	WL-SD-232-2	WL-SD-233-2	WL-SD-234	WL-SD-235	WL-SD-236
Sample Date:	7/1/2014	7/22/2015	7/1/2014	6/27/2014	6/30/2014	6/20/2014	11/4/2014	11/4/2014	11/4/2014	11/4/2014	6/30/2014	6/30/2014	7/9/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter													
Silver	174 J	22.2 J	1.7 J	1.5	0.67 UJ		0.12 UJ	0.12 UJ	0.17 J	0.13 UJ	40.4 J	17.5 J	41.4 J
Sodium	746 J	125 J	806 UJ	963 U	668 UJ		596 U	581 U	682 U	627 U	808 J	655 J	500 UJ
Thallium	2.3 J	2.5 U	0.81 U	0.96 U	0.67 UJ		0.12 U	0.12 U	0.14 U	0.13 U	3.9 J	1.7 UJ	0.50 UJ
Vanadium	2.5 UJ	8.6 J	10.1 J	13.6	24.9 J-		12.5 J	8.8 J	10.3 J	8.2 J	30.4 J	20.3 J	49.2 J
Zinc	1250 J	252	48.6 J	19.4	70.9 J		28.5 J	37.0 J	41.5 J	35.8 J	717 J	417 J	270 J
AVS/SEM (umole/g dry wt)													
Acid Volatile Sulfide		44 J											
Cadmium, SEM		1.04 J											
Copper, SEM		3.10 J											
Lead, SEM		2.69 J											
Mercury, SEM		0.000138 J											
Nickel, SEM		3.32 J											
Silver, SEM		0.0705 J											
Zinc, SEM		32.8 J											
Total SEM Metals (det only)		43.0 J											
AVS/SEM		1.023 J											
TCLP metals (mg/L)													
Chromium													
Other													
Total Organic Carbon (avg., ug/g)	120000 J	190000 J	8900 J	28000		18000	3900	3100	15000	2500	140000 J	160000 J	200000 J

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-237	SD-238	SD-239	SD-239	SD-240	SD-240	SD-242	SD-301	SD-301	SD-302	SD-303	SD-304	SD-305	SD-306	SD-307
Sample ID:	WL-SD-237	WL-SD-238	WL-RSD-239	WL-SD-239	WL-SD-240-2	WL-SD-3-240	WL-SD-242	WL-SD-301-2	WL-SD-3-301	WL-SD-302-2	WL-SD-303-2	WL-SD-304-2	WL-SD-305-2	WL-SD-306-2	WL-SD-307-2
Sample Date:	7/9/2014	7/9/2014	6/30/2014	6/20/2014	11/4/2014	7/27/2015	7/9/2014	11/3/2014	7/27/2015	11/3/2014	11/3/2014	11/3/2014	10/28/2014	10/28/2014	11/3/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter															
VOCs (ug/kg)															
1,1,1-Trichloroethane	31 UJ	R		R		16 UJ	R		5.0 U						
1,1-Dichloroethane	31 UJ	47 UJ		R		16 UJ	R		5.0 U						
1,1-Dichloroethene	31 UJ	47 UJ		R		16 UJ	R		5.0 U						
1,2,3-Trichlorobenzene	R	R		R		16 UJ	R		5.0 UJ						
2-Butanone	210 J	850 J		R		91 J	R		9.9 U						
Acetone	580 J	2200 J		R		350 J	580 J		47						
Carbon disulfide	58 JEB	13 JEB		8.4 J		16 UJ	R		5.0 U						
Chloroform	31 UJ	47 UJ		R		16 UJ	R		5.0 U						
cis-1,2-Dichloroethene	1.8 J	47 UJ		R		16 UJ	R		6.3						
Cyclohexane	31 UJ	400 J		R		16 UJ	R		5.0 U						
Ethylbenzene	31 UJ	R		R		16 UJ	R		5.0 U						
Isopropylbenzene	31 UJ	3.0 J		R		16 UJ	R		5.0 U						
m,p-Xylene	31 UJ	R		R		16 UJ	R		5.0 U						
Methyl acetate	31 UJ	47 UJ		R		16 UJ	R		5.0 U						
Methyl tert-butyl ether	31 UJ	47 UJ		R		16 UJ	R		5.0 U						
Methylcyclohexane	31 UJ	590 J		R		16 UJ	R		5.0 U						
Methylene chloride	31 UJ	47 UJ		R		16 UJ	R		5.0 U						
o-Xylene	31 UJ	3.6 J		R		16 UJ	R		5.0 U						
Toluene	31 UJ	R		R		16 UJ	R		5.0 U						
Trichloroethene	31 UJ	R		R		16 UJ	1.5 J		5.0 U						
SVOCs (ug/kg)															
2-Methylnaphthalene	400 UJ	580 UJ		R	30 UJ	11 UJ	R	4.1 U	3.8 U	3.9 U	19	4.2 U	33 J	22 UJ	9.6 U
4-Chloroaniline	20000 UJ	30000 UJ		R	1500 UJ	1100 UJ	R	210 U	380 U	200 U	440 U	210 U	1400 UJ	1100 UJ	500 U
4-Methylphenol	20000 UJ	30000 UJ		R	1500 UJ	1100 UJ	R	210 U	380 U	200 U	440 U	210 U	1400 UJ	1100 UJ	500 U
Acenaphthene	400 UJ	250 J		R	30 UJ	28 J	R	4.1 U	3.8 U	3.9 U	19	4.2 U	76 J	28 J	9.5 J
Acenaphthylene	170 J	230 J		R	30 UJ	63 J	R	4.1 U	5.6	3.9 U	63	4.2 U	28 J	22 UJ	9.6 U
Anthracene	140 J	320 J		R	32 J	90 J	370 J	4.5	9.4	3.9 U	94	4.2 U	210 J	69 J	22
Benzaldehyde	20000 UJ	30000 UJ		R	1500 UJ	1100 UJ	R	210 U	380 U	200 U	440 U	210 U	1400 UJ	1100 UJ	500 U
Benzo(a)anthracene	1000 J	1900 J		290 J	190 J	530 J	2500 J	27	47	3.9 U	670	3.5 J	1700 J	520 J	130
Benzo(a)pyrene	890 J	1500 J		400 J	250 J	590 J	2200 J	49 J	56	3.9 U	1200	4.2 U	1900 J	540 J	230
Benzo(b)fluoranthene	1400 J	2300 J		960 J	270 J	640 J	3600 J	47 J	44	3.9 U	1800	5.0	2100 J	670 J	180 J
Benzo(g,h,i)perylene	620 J	980 J		350 J	190 J	560 J	1600 J	36	60	3.9 U	860	4.2 U	1300 J	390 J	120
Benzo(k)fluoranthene	480 J	730 J		260 J	260 J	520 J	1100 J	55 J	51	3.9 U	960	5.6	2000 J	550 J	230
Bis(2-ethylhexyl)phthalate	20000 UJ	30000 UJ		R	1500 UJ	510 J	R	210 U	190 U	200 U	440 U	210 U	4000 J	2800 J	500 U
Butylbenzylphthalate	20000 UJ	30000 UJ		R	1500 UJ	590 UJ	R	210 U	190 U	200 U	440 U	210 U	550 J	1100 UJ	500 U
Caprolactam	20000 UJ	30000 UJ		R	1500 UJ	410 J	R	93 J	120 J	200 U	440 U	210 U	1500 J	1400 J	280 J
Carbazole	20000 UJ	30000 UJ		R	1500 UJ	1100 UJ	R	210 U	380 U	200 U	180 J	210 U	1400 UJ	1100 UJ	500 U
Chrysene	1000 J	1800 J		630 J	340 J	710 J	2400 J	38	58	3.2 J	1400	5.5	2600 J	820 J	220
Dibenz(a,h)anthracene	140 J	210 J		72 J	72 J	340 J	350 J	15	38	3.9 U	300	4.2 U	630 J	150 J	67
Dibenzofuran	20000 UJ	30000 UJ		R	1500 UJ	590 UJ	R	210 U	190 U	200 U	440 U	210 U	1400 UJ	1100 UJ	500 U
Diethylphthalate	20000 UJ	30000 UJ		R	1500 UJ	590 UJ	R	210 U	190 U	200 U	440 U	210 U	1400 UJ	1100 UJ	500 U
Dimethylphthalate	20000 UJ	30000 UJ		R	1500 UJ	590 UJ	R	210 U	190 U	200 U	440 U	210 U	1400 UJ	460 J	500 U
Di-n-butylphthalate	20000 UJ	30000 UJ		R	1500 UJ	590 UJ	R	210 U	190 U	200 U	440 U	210 U	1100 J	1000 J	500 U
Fluoranthene	1800 J	3700 J		1000 J	520 J	1400 J	4300 J	49	110	3.2 J	2000	7.8	4800 J	1300 J	280
Fluorene	400 UJ	230 J		R	35 J	53 J	R	4.1 U	5.5	3.9 U	50	4.2 U	110 J	54 J	12
Indeno(1,2,3-cd)pyrene	840 J	1400 J		530 J	170 J	470 J	2200 J	31	48	3.9 U	860	4.2 U	1300 J	350 J	140

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-237	SD-238	SD-239	SD-239	SD-240	SD-240	SD-242	SD-301	SD-301	SD-302	SD-303	SD-304	SD-305	SD-306	SD-307
Sample ID:	WL-SD-237	WL-SD-238	WL-RSD-239	WL-SD-239	WL-SD-240-2	WL-SD-3-240	WL-SD-242	WL-SD-301-2	WL-SD-3-301	WL-SD-302-2	WL-SD-303-2	WL-SD-304-2	WL-SD-305-2	WL-SD-306-2	WL-SD-307-2
Sample Date:	7/9/2014	7/9/2014	6/30/2014	6/20/2014	11/4/2014	7/27/2015	7/9/2014	11/3/2014	7/27/2015	11/3/2014	11/3/2014	11/3/2014	10/28/2014	10/28/2014	11/3/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter															
Naphthalene	400 UJ	580 UJ		R	30 UJ	11 UJ	R	4.1 U	3.8 U	3.9 U	25	4.2 U	50 J	20 J	9.6 U
Pentachlorophenol	800 UJ	1200 UJ		R	3000 UJ	23 UJ	R	410 U	7.7 U	390 U	8.5 J	420 U	55 UJ	45 UJ	960 U
Phenanthrene	680 J	1800 J		270 J	240 J	610 J	1800 J	27	44	3.9 U	730	4.2 U	1600 J	570 J	150
Pyrene	1700 J	3100 J		690 J	410 J	940 J	3800 J	44	70	3.9 U	1500	8.1	3500 J	1100 J	230
Pesticides (ug/kg)															
4,4'-DDD	200 UJ	44 J		38 J	39 J		R	4.2 U		3.9 U	8.6 U	11 J	24 J	26 J	9.6 U
4,4'-DDE	200 UJ	19 J		24 J	6.3 J		R	4.2 U		3.9 U	8.6 U	13 J	53 J	28 J	9.6 U
4,4'-DDT	200 UJ	29 UJ		3.1 J	3.2 J		63 J	4.2 U		3.9 U	8.6 U	17 J	13 J	12 J	9.6 U
Aldrin	100 UJ	15 UJ		R	15 UJ		R	2.1 U		2.0 U	4.4 U	0.52 J	14 UJ	11 UJ	4.9 U
alpha-BHC	100 UJ	15 UJ		R	15 UJ		R	2.1 U		2.0 U	4.4 U	2.1 UJ	14 UJ	11 UJ	4.9 U
beta-BHC	100 UJ	15 UJ		R	15 UJ		R	2.1 U		2.0 U	4.4 U	2.1 UJ	14 UJ	11 UJ	4.9 U
delta-BHC	100 UJ	15 UJ		R	15 UJ		R	2.1 U		2.0 U	4.4 U	2.1 UJ	14 UJ	11 UJ	4.9 U
Dieldrin	200 UJ	29 UJ		R	30 UJ		R	4.2 U		3.9 U	8.6 U	4.1 UJ	27 UJ	22 UJ	9.6 U
Endosulfan I	100 UJ	15 UJ		R	15 UJ		R	2.1 U		2.0 U	4.4 U	0.19 J	14 UJ	11 UJ	4.9 U
Endosulfan II	200 UJ	29 UJ		7.2 J	30 UJ		R	4.2 U		3.9 U	8.6 U	4.1 UJ	27 UJ	22 UJ	9.6 U
Endosulfan sulfate	200 UJ	29 UJ		R	30 UJ		R	4.2 U		3.9 U	8.6 U	4.1 UJ	27 UJ	22 UJ	9.6 U
Endrin	200 UJ	29 UJ		R	30 UJ		R	4.2 U		3.9 U	8.6 U	0.37 J	27 UJ	22 UJ	9.6 U
Endrin aldehyde	200 UJ	29 UJ		R	30 UJ		R	4.2 U		3.9 U	8.6 U	0.75 J	27 UJ	22 UJ	9.6 U
Endrin ketone	200 UJ	29 UJ		R	R		R	R		R	R	R	27 UJ	22 UJ	R
gamma-BHC (Lindane)	100 UJ	15 UJ		R	15 UJ		R	2.1 U		2.0 U	4.4 U	2.1 UJ	14 UJ	11 UJ	4.9 U
gamma-Chlordane	100 UJ	15 UJ		5.4 J	15 UJ		R	2.1 U		2.0 U	4.4 U	0.23 J	14 UJ	11 UJ	4.9 U
Heptachlor	100 UJ	15 UJ		R	15 UJ		R	2.1 U		2.0 U	4.4 U	2.1 UJ	14 UJ	11 UJ	4.9 U
Heptachlor epoxide	100 UJ	15 UJ		R	15 UJ		R	2.1 U		2.0 U	4.4 U	2.1 UJ	14 UJ	11 UJ	4.9 U
Methoxychlor	1000 UJ	13 J		R	150 UJ		R	21 U		20 U	44 U	21 UJ	26 J	16 J	49 U
PCBs (ug/kg)															
Aroclor-1260	2000 UJ	290 UJ		R	300 UJ		R	41 U		39 U	86 U	41 U	240 J	89 J	96 U
Inorganics (mg/kg)															
Aluminum	5660 J	5020 J	3350 J		1700 J	8140 J	7500 J	5920 J	6680 JEB	6980 J	17100 J	5700 J	6920 J	6160 J	7150 J
Antimony	1.1 J	1.2 J	1.0 J		0.13 J	6.2 UJ	0.58 J	0.82 J	3.9 UJ	0.12 UJ	0.31 J	0.037 J	1.3 J	1.1 J	0.098 J
Arsenic	10.6 J	6.0 J	4.3 J		1.1 J	4.7 J	4.0 J	0.98 J	0.63 J	1.4 J	3.9 J	2.1 J	6.1 J	3.6 J	1.5 J
Barium	59.3 J	143 J	98.5 J		15.4 J	70.8 J	44.3 J	30.6 J	37.6 J	32.4 J	49.0 J	22.8 J	117 J	111 J	74.7 J
Beryllium	0.65 J	1.0 UJ	0.58 J		0.18 J	1.9 J	1.2 J	0.21 J	0.77 UJ	0.29 J	0.76 J	0.38 J	0.69 J	0.47 J	0.28 J
Cadmium	1.6 J	1.9 J	2.8 J		0.52 J	1.1 J	2.1 J	0.082 J	1.3 UJ	0.13	0.21	0.029 J	2.4 J	3.5 J	1.1
Calcium	6610 J	8300 J	6970 J		1010 J	4580 J	7800 J	775	970 J	937	2390	641	9280 J	10700 J	3980
Chromium	24.8 J	29.5 J	12.3 J		4.2 J	14.8 J	34.1 J	1040 J	778 J	36.2 J	3220 J	45.2 J	400 J	322 J	164 J
Chromium, Hexavalent	1.8 UJ	0.09 J	2.5 UJ		2.9 UJ	1.9 UJ	R	48.4 J	15.1 J	2.71 J	3.0 J	1.33	14.0 J	10.2 J	1.1 J
Cobalt	8.6 J	7.5 J	11.8 J		1.3 J	3.4 J	5.7 J	4.6 J	6.6 J	2.5 J	14.3 J	4.2 J	7.6 J	7.0 J	3.5 J
Copper	339 J	399 J	34.7 J		8.3 J	16.3 J	111 J	11.3 J	15.0 J	1.4 J	98.5 J	1.6 J	87.3 J	133 J	78.4 J
Cyanide	0.47 UJ	1.2 J	0.20 JEB		R	0.50 U	1.8 J	0.46 JEB	2.1	R	0.96 JEB	0.014 JEB	0.45 UJ	0.37 UJ	0.071 JEB
Iron	13000 J	17100 J	12200 J		2470 J	5800	16300 J	7110 J	12000	9920 J	20000 J	15300 J	18000 J	14600 J	9780 J
Lead	315 JEB	283 JEB	72.3 J		32.9 J	62.9 J	304 JEB	153	220 J	7.4	76.7	8.5	262 J	70.8 J	35.5
Magnesium	1130 J	881 J	749 J		500 UJ	722 J	1830 J	1450	973 J	2250	3340	844	1590 J	1330 J	1600 U
Manganese	224 JEB	185 JEB	1090 J		69.1 J	349 J	198 JEB	111 J	104 J	215 J	260 J	167 J	340 J	575 J	266 J
Mercury	0.71 J	0.92 J	0.27 J		0.22 J	0.026 J-EB	0.73 J	0.019 J-	0.058 J-EB	0.0069 J-	0.94	0.062 UJ	0.31 J	0.52 J	0.47
Nickel	31.9 JEB	22.5 JEB	20.1 J		3.2 J	12.3 J	26.3 JEB	6.7 J	6.5 J	5.4 J	15.2 J	3.1 J	20.6 J	50.1 J	18.5 J
Potassium	500 UJ	499 UJ	500 UJ		500 UJ	480 U	709 J	640 U	767 U	614 U	1330 U	617 U	747 J	698 J	1600 U
Selenium	2.7 J	2.0 J	1.2 J		0.39 J	3.6 J	4.7 J	0.34 J	1.6 J	0.43 J	0.95 J	0.36 J	1.7 J	3.3 J	0.96 J

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-237	SD-238	SD-239	SD-239	SD-240	SD-240	SD-242	SD-301	SD-301	SD-302	SD-303	SD-304	SD-305	SD-306	SD-307
Sample ID:	WL-SD-237	WL-SD-238	WL-RSD-239	WL-SD-239	WL-SD-240-2	WL-SD-3-240	WL-SD-242	WL-SD-301-2	WL-SD-3-301	WL-SD-302-2	WL-SD-303-2	WL-SD-304-2	WL-SD-305-2	WL-SD-306-2	WL-SD-307-2
Sample Date:	7/9/2014	7/9/2014	6/30/2014	6/20/2014	11/4/2014	7/27/2015	7/9/2014	11/3/2014	7/27/2015	11/3/2014	11/3/2014	11/3/2014	10/28/2014	10/28/2014	11/3/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter															
Silver	35.6 J	94.3 J	0.76 J		0.31 J	0.37 J	16.1 J	4.2 J	8.5 J	0.55 J	2.9 J	0.33 J	41.4 J	9.9 J	4.2 J
Sodium	591 JEB	499 UJ	842 J		500 UJ	623	720 JEB	640 U	767 U	614 U	1330 U	617 U	651 J	1350 J	1600 U
Thallium	0.50 UJ	0.50 UJ	0.50 UJ		0.10 UJ	2.4 UJ	0.50 UJ	0.13 U	3.8 UJ	0.12 U	0.13	0.12 U	0.20 UJ	0.94 J	0.28
Vanadium	45.7 J	33.6 J	23.9 J		6.0 J	19.1 J	45.3 J	2.8 J	14.2 J	14.8 J	0.92 J	14.4 J	20.4 J	7.8 J	10.3 J
Zinc	209 J	235 J	270 J		66.2 J	135 JEB	96.8 J	22.9 J	31.9 J	14.9 J	80.1 J	12.8 J	286 JEB	221 JEB	58.9 J
AVS/SEM (umole/g dry wt)															
Acid Volatile Sulfide						0.44 UJ			0.69 J						
Cadmium, SEM						0.00495 J			0.00111 J						
Copper, SEM						0.0242 J			0.134 J						
Lead, SEM						0.0891 J			0.696 J						
Mercury, SEM						0.000013 UJ			0.0000072 UJ						
Nickel, SEM						0.104 J			0.0645 J						
Silver, SEM						0.00084 J			0.00921 J						
Zinc, SEM						0.207 J			0.152 J						
Total SEM Metals (det only)						0.430 J			1.057 J						
AVS/SEM						NC			0.653 J						
TCLP metals (mg/L)															
Chromium															
Other															
Total Organic Carbon (avg., ug/g)	290000 J	380000 J		410000 J	200000	190000 J	210000 J	7600	16000	1600	87000	3500	320000	340000	91000

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-308	SD-309	SD-310	SD-311	SD-312	SD-312	SD-313	SD-314
Sample ID:	WL-SD-308-2	WL-SD-309-2	WL-SD-310-2	WL-SD-311-2	WL-SD-312-2	WL-SD-3-312	WL-SD-313-2	WL-SD-314-2
Sample Date:	11/3/2014	10/29/2014	11/5/2014	10/29/2014	10/29/2014	7/22/2015	11/3/2014	11/3/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter								
VOCs (ug/kg)								
1,1,1-Trichloroethane						26 UJ		
1,1-Dichloroethane						26 UJ		
1,1-Dichloroethene						26 UJ		
1,2,3-Trichlorobenzene						26 UJ		
2-Butanone						53 UJ		
Acetone						53 UJ		
Carbon disulfide						26 UJ		
Chloroform						26 UJ		
cis-1,2-Dichloroethene						26 UJ		
Cyclohexane						26 UJ		
Ethylbenzene						26 UJ		
Isopropylbenzene						26 UJ		
m,p-Xylene						26 UJ		
Methyl acetate						260 J		
Methyl tert-butyl ether						26 UJ		
Methylcyclohexane						26 UJ		
Methylene chloride						26 UJ		
o-Xylene						26 UJ		
Toluene						26 UJ		
Trichloroethene						26 UJ		
SVOCs (ug/kg)								
2-Methylnaphthalene	4.0 U	56 J	7.5 U			71 J		
4-Chloroaniline	210 U	2300 J	390 U			1800 UJ		
4-Methylphenol	210 U	1100 UJ	390 U			1800 UJ		
Acenaphthene	4.0 U	68 J	7.5 U			94 J		
Acenaphthylene	4.0 U	40 J	7.5 U			320 J		
Anthracene	4.0 U	210 J	16			430 J		
Benzaldehyde	210 U	440 J	390 U			1800 UJ		
Benzo(a)anthracene	17	1300 J	100			2100 J		
Benzo(a)pyrene	27	1300 J	83			2600 J		
Benzo(b)fluoranthene	25	1500 J	68			2700 J		
Benzo(g,h,i)perylene	20	1000 J	56			2200 J		
Benzo(k)fluoranthene	29	1500 J	110			2300 J		
Bis(2-ethylhexyl)phthalate	210 U	4800 J	390 U			1500 J		
Butylbenzylphthalate	210 U	1100 UJ	390 U			910 UJ		
Caprolactam	210 U	650 J	390 U			720 J		
Carbazole	210 U	1100 UJ	390 U			1800 UJ		
Chrysene	24	1900 J	150			2900 J		
Dibenz(a,h)anthracene	4.0 U	210 J	39			1000 J		
Dibenzofuran	210 U	1100 UJ	390 U			910 UJ		
Diethylphthalate	210 U	1100 UJ	390 U			9300 J		
Dimethylphthalate	210 U	1100 UJ	390 U			910 UJ		
Di-n-butylphthalate	210 U	1000 J	170 J			14000 J		
Fluoranthene	35	3200 J	190			5100 J		
Fluorene	4.0 U	120 J	7.1 J			180 J		
Indeno(1,2,3-cd)pyrene	17	1000 J	55			2100 J		

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-308	SD-309	SD-310	SD-311	SD-312	SD-312	SD-313	SD-314
Sample ID:	WL-SD-308-2	WL-SD-309-2	WL-SD-310-2	WL-SD-311-2	WL-SD-312-2	WL-SD-3-312	WL-SD-313-2	WL-SD-314-2
Sample Date:	11/3/2014	10/29/2014	11/5/2014	10/29/2014	10/29/2014	7/22/2015	11/3/2014	11/3/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter								
Naphthalene	4.0 U	71 J	7.5 U			81 J		
Pentachlorophenol	400 U	42 UJ	750 U			29 J		
Phenanthrene	16	1000 J	100			2200 J		
Pyrene	31	2300 J	160			4200 J		
Pesticides (ug/kg)								
4,4'-DDD	4.1 U	16 J	7.4 UJ					
4,4'-DDE	4.1 U	31 J	7.4 UJ					
4,4'-DDT	4.1 U	11 J	7.4 UJ					
Aldrin	2.1 U	11 UJ	3.8 UJ					
alpha-BHC	2.1 U	11 UJ	3.8 UJ					
beta-BHC	2.1 U	11 UJ	3.8 UJ					
delta-BHC	2.1 U	11 UJ	3.8 UJ					
Dieldrin	4.1 U	21 UJ	7.4 UJ					
Endosulfan I	2.1 U	11 UJ	3.8 UJ					
Endosulfan II	4.1 U	21 UJ	7.4 UJ					
Endosulfan sulfate	4.1 U	21 UJ	7.4 UJ					
Endrin	4.1 U	21 UJ	7.4 UJ					
Endrin aldehyde	4.1 U	21 UJ	7.4 UJ					
Endrin ketone	R	21 UJ	R					
gamma-BHC (Lindane)	2.1 U	11 UJ	3.8 UJ					
gamma-Chlordane	2.1 U	11 UJ	3.8 UJ					
Heptachlor	2.1 U	11 UJ	3.8 UJ					
Heptachlor epoxide	2.1 U	11 UJ	3.8 UJ					
Methoxychlor	21 U	120 J	38 UJ					
PCBs (ug/kg)								
Aroclor-1260	41 U	190 J	75 U					
Inorganics (mg/kg)								
Aluminum	5340 J	11800 J	11700 J	12700 J	14200 J	2830 J	3980 J	5120 J
Antimony	0.040 J	0.62 UJ	0.047 J	0.82 J	1.2 J	3.8 J	0.33 J	0.20 J
Arsenic	0.88 J	6.5 J	0.92 J	5.6 J	10.7 J	1.2	31.0 J	1.7 J
Barium	13.0 J	351 J	50.7 J	275 J	381 J	60.8 J	193 J	41.6 J
Beryllium	0.25 J	1.7 J	0.55 J	1.6 J	2.2 J	0.052 J	0.36 J	0.31 J
Cadmium	0.097 J	23.7 J	1.8	31.7 J	82.0 J	18.2 J	1.5 J	1.4
Calcium	965	4520 J	2490	5070 J	5960 J	1100 J	6220 J	2650
Chromium	10.7 J	2460 J	628 J	1710 J	6540 J	549 J	100 J	153 J
Chromium, Hexavalent	0.28 J	16.6 J	0.92 U	13.0 J	19.8 J	11.2 J	2.8 UJ	3.3
Cobalt	2.8 J	15.3 J	3.0 J	18.8 J	27.1 J	5.9 J	1.9 J	4.2 J
Copper	6.2 J	2230 J	198 J	1380 J	3150 J	576 J	87.8 J	130 J
Cyanide	R	0.67 J	0.18 JEB	0.41 J	11.4 J	4.5 J-	3.1 JEB	0.069 JEB
Iron	9520 J	16500 J	7240 J	22200 J	22600 J	4710 J	302000 J	9780 J
Lead	10.1	148 J	95.7	121 J	291 J	101 J	85.8 J	51.7
Magnesium	2320	2390 J	1320	2620 J	3260 J	594 J	981 J	1520
Manganese	177 J	753 J	100 J	678 J	598 J	103 J	2100 J	432 J
Mercury	0.011 J-	3.3 J	0.60	3.0 J	4.0 J	6.3	0.38 J	0.31
Nickel	6.6 J	398 J	19.4 J	443 J	773 J	101	12.5 J	15.0 J
Potassium	629 U	960 J	1120 U	1190 J	1450 J	250 J	496 UJ	1120 U
Selenium	0.26 J	7.7 J	0.86 J	6.3 J	2.8 J	3.5 U	1.2 J	0.64 J

TABLE 4-5
RI SEDIMENT ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-308	SD-309	SD-310	SD-311	SD-312	SD-312	SD-313	SD-314
Sample ID:	WL-SD-308-2	WL-SD-309-2	WL-SD-310-2	WL-SD-311-2	WL-SD-312-2	WL-SD-3-312	WL-SD-313-2	WL-SD-314-2
Sample Date:	11/3/2014	10/29/2014	11/5/2014	10/29/2014	10/29/2014	7/22/2015	11/3/2014	11/3/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-0.5 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter								
Silver	0.19 J	139 J	8.2 J	70.7 J	178 J	30.0 J	25.1 J	5.1 J
Sodium	629 U	557 J	1120 U	639 J	870 J	150 J	688 J	1120 U
Thallium	0.13 U	1.3 J	0.14	3.3 J	0.30 UJ	2.5 U	0.13 J	0.29
Vanadium	11.0 J	2.0 UJ	0.50 UJ	1.0 UJ	3.0 UJ	8.7 J	30.5 J	8.0 J
Zinc	19.4 J	601 JEB	37.2 J	770 JEB	1530 JEB	247	107 J	54.6 J
AVS/SEM (umole/g dry wt)								
Acid Volatile Sulfide						7.1 J		
Cadmium, SEM						0.825 J		
Copper, SEM						0.139 J		
Lead, SEM						1.27 J		
Mercury, SEM						0.0000699 J		
Nickel, SEM						1.92 J		
Silver, SEM						0.00510 J		
Zinc, SEM						15.9 J		
Total SEM Metals (det only)						20.1 J		
AVS/SEM						0.354 J		
TCLP metals (mg/L)								
Chromium								
Other								
Total Organic Carbon (avg., ug/g)	3700	150000	62000	140000	150000	150000 J	140000	49000

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-201	SD-201	SD-201	SD-201	SD-201	SD-201	SD-201	SD-201	SD-202	SD-202
Sample ID:	WL-SW-201	WL-SW-201D	WL-SW-3-201	WL-SW-3-201D	WL-SWF-201	WL-SWF-201D	WL-SWF-3-201	WL-SWF-3-201D	WL-SW-202	WL-SWF-202
Sample Date:	6/18/2014	6/18/2014	7/21/2015	7/21/2015	6/18/2014	6/18/2014	7/21/2015	7/21/2015	7/1/2014	7/1/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.29 J	0.27 J	0.50 U	0.50 U					0.50 U	
1,1-Dichloroethane	0.48 J	0.46 J	0.50 U	0.50 U					0.50 U	
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U					0.50 U	
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U					5.0 U	
Acetone	5.0 U	5.6 U	5.0 U	5.0 U					1.9 J	
Benzene	0.50 U	0.50 U	0.50 U	0.50 U					0.50 U	
Bromodichloromethane	0.50 U	0.50 U	0.50 U	0.50 U					0.50 U	
Carbon disulfide	0.14 J	0.13 J	0.50 U	0.50 U					0.50 U	
Chloroform	0.50 U	0.50 U	0.50 U	0.50 U					0.50 U	
Chloromethane	0.50 U	0.50 U	0.50 U	0.50 U					0.50 U	
cis-1,2-Dichloroethene	0.38 J	0.31 J	0.50 U	0.50 U					0.50 U	
Dibromochloromethane	0.50 U	0.50 U	0.50 U	0.50 U					0.50 U	
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U	0.50 U					0.50 U	
m,p-Xylene	0.50 U	0.50 U	0.50 U	0.50 U					0.50 U	
Methyl acetate	0.50 U	0.50 U	0.50 U	0.50 U					0.50 U	
Tetrachloroethene	0.50 U	0.50 U	0.50 U	0.50 U					0.50 U	
Toluene	0.26 J	0.30 J	0.50 U	0.50 U					0.50 U	
Trichloroethene	0.18	0.17	0.50 U	0.50 U					0.086 J	
Vinyl chloride	0.0099 J	0.0095 J	0.50 U	0.50 U					0.015 U	
1,4-Dioxane (ug/L)										
1,4-Dioxane	0.44	0.45	0.10 U	0.10 U					0.22	
Inorganics, Dissolved (ug/L)										
Aluminum					396 J	2210 J	127 J	78.5 J		20.0 UJ
Antimony					1.9 J	3.2	2.0 U	2.0 U		1.4 J
Arsenic					1.0	2.2	1.4	1.3		0.74 J
Barium					47.2	64.7	10.0 U	10.0 U		57.4
Beryllium					1.0 U	0.092 J+	1.0 U	1.0 U		1.0 U
Cadmium					0.037 J	0.16 J	1.0 U	1.0 U		0.040 UJ
Calcium					16400	15900	8090	8120		22800
Chromium					130 J	742 J	20.8 J	10.4 J		4.8 J
Chromium, Hexavalent					0.146	0.152	0.50 U	0.50 U		0.50 UJ
Cobalt					3.2	6.8	1.3	1.3		2.3 J
Copper					4.6 J	19.7 J	3.4	3.0		7.2 J
Iron					1370	4190	2520	2460		396
Lead					17.5 J	90.6 J	8.2	6.1		0.91 J
Magnesium					3530	3760	1210	1210		4440
Manganese					476	707	244	237		579
Mercury					0.20 U	0.12 J	0.20 U	0.20 U		0.20 U
Nickel					4.8	7.7	2.2 J	2.2 J		4.2 J
Potassium					3010	3300	1680	1690		3300
Selenium					5.0 U	0.26 J	5.0 U	5.0 U		5.0 U
Silver					1.3 J	6.2 J	0.14 J	0.094 J		1.0 UJ
Sodium					105000	103000	37800	38100		153000 J
Vanadium					5.0 U	5.0 U	5.0 U	5.0 U		5.0 U
Zinc					9.2 J+	36.3 J+	11.4 J+	11.3 J+		8.6

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-201	SD-201	SD-201	SD-201	SD-201	SD-201	SD-201	SD-201	SD-202	SD-202
Sample ID:	WL-SW-201	WL-SW-201D	WL-SW-3-201	WL-SW-3-201D	WL-SWF-201	WL-SWF-201D	WL-SWF-3-201	WL-SWF-3-201D	WL-SW-202	WL-SWF-202
Sample Date:	6/18/2014	6/18/2014	7/21/2015	7/21/2015	6/18/2014	6/18/2014	7/21/2015	7/21/2015	7/1/2014	7/1/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum	438 J	257 J	455	360					42.2	
Antimony	2.0 U	2.0 U	2.0 U	2.0 U					1.3 J	
Arsenic	1.2	1.3	1.7	1.6					1.0 U	
Barium	56.4 J	64.8 J	58.1	49.2					61.5	
Beryllium	1.0 U	1.0 U	1.0 U	1.0 U					1.0 U	
Cadmium	0.037 J	0.063	1.0 U	1.0 U					0.040 U	
Calcium	19800 J	20900 J	10300	10400					22500	
Chromium	142 J	191 J	142 J	102 J					13.3	
Chromium, Hexavalent	0.281 J	0.194 J	0.50 U	0.75					0.50 UJ	
Cobalt	3.9 J	5.0 J	4.0	3.9					2.5	
Copper	5.8	11.4	8.7	8.1					2.0 U	
Cyanide	3.9 U	3.7 U	R	R					3.3 J	
Iron	2950 J	3050 J	3080	2910					2150	
Lead	22.8 J	17.2 J	22.7	25.6					4.9	
Magnesium	3970 J	4180 J	1860	1830					4780	
Manganese	731 J	1160 J	977	905					565	
Mercury	0.20 U	0.20 U	0.20 U	0.20 U					0.20 U	
Nickel	5.9	6.1	3.4 J	3.4 J					4.5	
Potassium	3230	3450	2460	2300					3310	
Selenium	5.0 U	0.29 J	5.0 U	5.0 U					5.0 U	
Silver	1.8	1.7	0.87 J	0.54 J					1.0 U	
Sodium	114000 J	118000 J	49200	49900					150000	
Thallium	1.0 U	1.0 U	1.0 U	1.0 U					1.0 U	
Vanadium	5.0 U	5.0 U	5.0 U	5.0 U					5.0 U	
Zinc	11.2 J+	11.1 J+	32.7	32.0					6.9 J+	
Other										
Alkalinity (mg/L)	27.5	34	11	12					32.1	
Dissolved Organic Carbon (mg/L)			12	13						
Dissolved oxygen, field (mg/L)	10.75		6.58						4.11	
Hardness as CaCO3, Calculated (mg/L)	65.8 J	69.4 J	33.4	33.5	55.5	55.2	25.2	25.3	75.8	75.2
ORP, field (mV)	71.9		115.2						240.5	
pH, field (S.U.)	7.11		7.51						6.6	
Spec. cond., field (umho/cm)	685		426.8						928	
Temperature, field (deg C)	27.61		25.6						25.84	
Turbidity, field (N.T.U.)	104		5.61						7.38	
Water Depth, field (in.)	16		12						24	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-203	SD-203	SD-203	SD-203	SD-203	SD-203	SD-203	SD-203	SD-203	SD-204
Sample ID:	WL-RSW-203	WL-RSW-203D	WL-RSWF-203	WL-RSWF-203D	WL-SW-203	WL-SW-203-2	WL-SW-203D-2	WL-SWF-203-2	WL-SWF-203D-2	WL-SW-204
Sample Date:	6/30/2014	6/30/2014	6/30/2014	6/30/2014	6/19/2014	10/30/2014	10/30/2014	10/30/2014	10/30/2014	6/25/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane					0.50 U	0.50 U	0.50 U			0.50 U
1,1-Dichloroethane					0.50 U	0.50 U	0.50 U			0.50 U
1,1-Dichloroethene					0.12 J	0.50 U	0.50 U			0.50 U
2-Butanone					5.0 U	5.0 U	5.0 U			0.97 J
Acetone					1.7 J	5.0 U	5.0 U			5.0 U
Benzene					0.50 U	0.50 U	0.50 U			0.50 U
Bromodichloromethane					0.50 U	0.50 U	0.50 U			0.50 U
Carbon disulfide					0.50 U	0.50 U	0.50 U			0.50 U
Chloroform					0.50 U	0.50 U	0.50 U			0.50 U
Chloromethane					0.50 U	0.50 U	0.50 U			0.13 J
cis-1,2-Dichloroethene					4.4	5.1	4.7			0.50 U
Dibromochloromethane					0.50 U	0.50 U	0.50 U			0.50 U
Dichlorodifluoromethane					0.50 U	0.50 U	0.50 U			0.50 U
m,p-Xylene					0.50 U	0.50 U	0.50 U			0.50 U
Methyl acetate					0.50 U	0.50 U	0.50 U			0.50 U
Tetrachloroethene					1.7	1.4	1.2			0.50 U
Toluene					0.50 U	0.12 J	0.50 U			1.8
Trichloroethene					4.0	2.0 J	3.3			0.15 U
Vinyl chloride					0.15	0.039	0.048			0.015 U
1,4-Dioxane (ug/L)										
1,4-Dioxane					0.10 U	0.38 J+	0.72 J			0.19
Inorganics, Dissolved (ug/L)										
Aluminum			20.0 UJ	20.0 UJ				20.8 U	44.5	
Antimony			2.0 UJ	0.47 J-				0.36 J	2.0 U	
Arsenic			0.24 J-	0.26 J-				1.0 U	1.0 U	
Barium			114 J-	116 J-				100	101	
Beryllium			1.0 UJ	1.0 UJ				1.0 U	1.0 U	
Cadmium			0.14 J-	0.12 UJ				0.40 U	0.40 U	
Calcium			27200 J-	27600 J-				28200	28100	
Chromium			0.51 J-	0.39 J-				2.6	3.9	
Chromium, Hexavalent			0.10 U	0.10 U				0.50 U	0.50 U	
Cobalt			10.4 J	10.7 J-				9.3 J	9.4 J	
Copper			2.0 UJ	2.0 UJ				2.0 U	2.0 U	
Iron			664 J-	626 J				1910	2080	
Lead			0.20 UJ	0.20 UJ				1.2 J	2.2 J	
Magnesium			6000 J-	5950 J-				6360	6340	
Manganese			699 J-	690 J-				1030	1040	
Mercury			0.20 UJ	0.20 UJ				R	R	
Nickel			3.8 J	3.9 J				5.1 J	5.3 J	
Potassium			2640 J-	2630 J-				2680	2660	
Selenium			5.0 UJ	5.0 UJ				5.0 U	5.0 U	
Silver			1.0 UJ	1.0 UJ				1.0 U	1.0 U	
Sodium			194000 J	179000 J-				160000	158000	
Vanadium			5.0 UJ	5.0 UJ				5.0 U	5.0 U	
Zinc			9.2 J-	9.0 J				32.6 J	18.0 J	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-203	SD-203	SD-203	SD-203	SD-203	SD-203	SD-203	SD-203	SD-203	SD-204
Sample ID:	WL-RSW-203	WL-RSW-203D	WL-RSWF-203	WL-RSWF-203D	WL-SW-203	WL-SW-203-2	WL-SW-203D-2	WL-SWF-203-2	WL-SWF-203D-2	WL-SW-204
Sample Date:	6/30/2014	6/30/2014	6/30/2014	6/30/2014	6/19/2014	10/30/2014	10/30/2014	10/30/2014	10/30/2014	6/25/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum	377 J-	329 J-				66.6 J	280 J			6900
Antimony	0.49 J-	0.50 J-				0.38 J	0.44 J			1.7 J
Arsenic	0.95 J-	0.54 J-				1.0 U	1.0 U			13.3
Barium	119 J-	117 J-				97.1	94.4			216 J
Beryllium	0.092 J	1.0 UJ				1.0 U	1.0 U			0.73 J+
Cadmium	0.24 J-	0.23 J-				0.40 U	0.40 U			0.61 J
Calcium	27600 J-	27200 J-				27400	27000			50500
Chromium	48.5 J-	44.2 J-				10.7 J	35.2 J			59.4
Chromium, Hexavalent	0.50 U	0.50 U				0.50 U	0.50 U			0.50 UJ
Cobalt	12.0 J-	11.2 J-				9.0 J	9.0 J			3.1 J
Copper	9.9 J	9.0 J				2.1 J	6.5 J			35.8 J
Cyanide	3.0 J	5.2 J				2.5 UJ	2.5 UJ			5.1 J
Iron	3830 J	2780 J				2560	3280			181000 J
Lead	6.9 J-	6.5 J-				3.6 J	9.0 J			84.8
Magnesium	6100 J-	5990 J-				5830	5680			10300
Manganese	728 J-	698 J-				967	940			2000 J
Mercury	0.20 UJ	0.20 UJ				R	0.20 UJ			0.14 J
Nickel	5.0 J	4.8 J				4.9 J	5.3 J			11.2 J
Potassium	2680 J-	2620 J-				2510	2520			1580
Selenium	5.0 UJ	5.0 UJ				5.0 U	5.0 U			1.9 J
Silver	5.6 J	5.3 J				1.0 UJ	3.5 J			1.6 J
Sodium	190000 J-	183000 J-				169000 J	162000 J			112000
Thallium	1.0 UJ	1.0 UJ				1.0 U	1.0 U			1.0 U
Vanadium	5.0 UJ	5.0 UJ				5.0 U	5.0 U			69.2
Zinc	18.3 J	13.6 J				21.3 J+	26.4 J+			46.8 J
Other										
Alkalinity (mg/L)					23.5	33.4	33.5			1 U
Dissolved Organic Carbon (mg/L)										
Dissolved oxygen, field (mg/L)					8.58	6.98				0.93
Hardness as CaCO3, Calculated (mg/L)	94.0 J-	92.5 J-	92.6 J-	93.4 J-		92.4	90.8	96.6	96.2	168
ORP, field (mV)					71.9	-2.3				NR
pH, field (S.U.)					6.64	6.60				6.49
Spec. cond., field (umho/cm)					1103	1087				1185
Temperature, field (deg C)					16.87	16.66				22.9
Turbidity, field (N.T.U.)					6.92	6.2				>200
Water Depth, field (in.)					6	5				8

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-204	SD-205	SD-205	SD-205	SD-205	SD-206	SD-206	SD-206	SD-207	SD-207
Sample ID:	WL-SWF-204	WL-SW-205	WL-SW-3-205	WL-SWF-205	WL-SWF-3-205	WL-RSW-206	WL-RSWF-206	WL-SW-206	WL-RSW-207	WL-RSWF-207
Sample Date:	6/25/2014	6/25/2014	7/21/2015	6/25/2014	7/21/2015	6/30/2014	6/30/2014	6/20/2014	6/30/2014	6/30/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane		0.50 U	0.50 U					0.50 U		
1,1-Dichloroethane		0.50 U	0.50 U					0.50 U		
1,1-Dichloroethene		0.50 U	0.50 U					0.50 U		
2-Butanone		5.0 U	5.0 U					5.0 U		
Acetone		5.0 U	5.0 U					2.0 J		
Benzene		0.50 U	0.50 U					0.50 U		
Bromodichloromethane		0.50 U	0.50 U					0.50 U		
Carbon disulfide		0.50 U	0.50 UJ					0.50 U		
Chloroform		0.50 U	0.50 U					0.50 U		
Chloromethane		0.50 U	0.50 U					0.50 U		
cis-1,2-Dichloroethene		1.1	0.50 U					0.50 U		
Dibromochloromethane		0.50 U	0.50 U					0.50 U		
Dichlorodifluoromethane		0.50 U	0.50 U					0.50 U		
m,p-Xylene		0.50 U	0.50 U					0.50 U		
Methyl acetate		0.50 U	0.50 U					0.50 U		
Tetrachloroethene		0.41 J	0.50 U					0.50 U		
Toluene		0.50 U	0.33 J					0.50 U		
Trichloroethene		0.85	0.50 U					0.0099 J		
Vinyl chloride		0.028 U	0.50 U					0.015 U		
1,4-Dioxane (ug/L)										
1,4-Dioxane		0.10 U	0.10 U					0.10 U		
Inorganics, Dissolved (ug/L)										
Aluminum	2030 J			20.0 UJ	50.5 J		20.0 UJ			20.0 UJ
Antimony	0.98 J			2.0 U	2.0 U		2.0 UJ			2.0 UJ
Arsenic	5.1			0.41 J	1.0 U		0.23 J-			0.32 J-
Barium	144			124	113		74.1 J-			70.9 J-
Beryllium	0.24 J+			1.0 U	1.0 U		1.0 UJ			1.0 UJ
Cadmium	0.23 J			0.040 UJ	1.0 U		0.057 UJ			0.040 UJ
Calcium	43000			27300	32200		33100 J-			32200 J-
Chromium	18.0 J			7.5 J	39.0 J		2.0 UJ			0.31 J-
Chromium, Hexavalent	0.10 U			0.10 U	0.50 U		0.10 U			0.50 U
Cobalt	2.2			12.2	4.2		1.1 J-			1.0 UJ
Copper	14.6 J			2.0 UJ	0.31 J		2.0 UJ			2.0 UJ
Iron	96600			2760	15700		200 UJ			367 J
Lead	22.0 J			0.20 UJ	1.0 U		0.20 UJ			0.20 UJ
Magnesium	9580			6070	5970		6260 J-			6100 J-
Manganese	1760			1640	1940		1730 J-			1450 J-
Mercury	0.20 U			0.20 U	0.20 U		0.20 UJ			0.20 UJ
Nickel	5.7			3.7	3.0 J		1.5 J			1.4 J
Potassium	1530			2490	2140		2200 J-			2250 J-
Selenium	5.0 U			5.0 U	5.0 U		5.0 UJ			5.0 UJ
Silver	2.0 UJ			1.0 UJ	1.0 U		1.0 UJ			1.0 UJ
Sodium	113000			206000	156000		135000 J-			144000 J-
Vanadium	20.7			5.0 U	5.0 U		5.0 UJ			5.0 UJ
Zinc	24.2 J+			4.4 J+	3.9 J+		9.0 J			9.0 J

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-204	SD-205	SD-205	SD-205	SD-205	SD-206	SD-206	SD-206	SD-207	SD-207
Sample ID:	WL-SWF-204	WL-SW-205	WL-SW-3-205	WL-SWF-205	WL-SWF-3-205	WL-RSW-206	WL-RSWF-206	WL-SW-206	WL-RSW-207	WL-RSWF-207
Sample Date:	6/25/2014	6/25/2014	7/21/2015	6/25/2014	7/21/2015	6/30/2014	6/30/2014	6/20/2014	6/30/2014	6/30/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum		80.7	105			57.0 J-			24.5 J-	
Antimony		2.0 U	2.0 U			2.0 UJ			2.0 UJ	
Arsenic		0.60 J	1.0 U			0.38 J-			0.42 J-	
Barium		134	150			78.1 J-			74.5 J-	
Beryllium		0.10 J+	1.0 U			1.0 UJ			1.0 UJ	
Cadmium		0.21	1.0 U			0.040 UJ			0.040 UJ	
Calcium		28700	36300			32700 J-			33400 J-	
Chromium		32.4	53.5 J			0.17 J-			0.064 J-	
Chromium, Hexavalent		0.10 UJ	0.50 U			0.50 U			0.10 U	
Cobalt		15.8 J	5.2			1.3 J-			1.0 UJ	
Copper		3.3 J	3.0			2.0 UJ			2.0 UJ	
Cyanide		3.2 J	R			2.9 J			21.6 J	
Iron		11100	15300			1930 J			1250 J	
Lead		1.8	2.3			0.81 J-			0.42 J-	
Magnesium		6190	7210			6240 J-			6290 J-	
Manganese		1820	1840			1800 J-			1610 J-	
Mercury		0.20 U	0.20 U			0.20 UJ			0.20 UJ	
Nickel		4.8	3.4 J			1.8 J			1.7 J	
Potassium		2480	2430			2170 J-			2480 J-	
Selenium		5.0 U	5.0 U			5.0 UJ			5.0 UJ	
Silver		1.3	1.4			1.0 UJ			1.0 UJ	
Sodium		210000	199000			127000 J-			133000 J-	
Thallium		1.0 U	1.0 U			1.0 UJ			1.0 UJ	
Vanadium		5.0 U	5.0 U			0.62 J-			0.60 J-	
Zinc		16.8 J	9.9 J+			10.0 J			6.4 J	
Other										
Alkalinity (mg/L)		32	22					26		
Dissolved Organic Carbon (mg/L)			18							
Dissolved oxygen, field (mg/L)		2.44	0.83			5.62		7.65	7.31	
Hardness as CaCO3, Calculated (mg/L)	147	97.1	120.3	93.1	105	107 J-	108 J-		109 J-	106 J-
ORP, field (mV)		15.3	-8.3			118.7		232.3	157.2	
pH, field (S.U.)		7.45	6.55			6.55		7.59	6.88	
Spec. cond., field (umho/cm)		1087	1515			1009		838	642	
Temperature, field (deg C)		18.23	20.7			25.5		22.93	25.9	
Turbidity, field (N.T.U.)		9.77	11.1			10.5		7.44	10.1	
Water Depth, field (in.)		4	4			6		6	4	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-207	SD-207	SD-207	SD-208	SD-208	SD-208	SD-208	SD-208	SD-209	SD-209
Sample ID:	WL-SW-207	WL-SW-3-207	WL-SWF-3-207	WL-RSW-208	WL-RSWF-208	WL-SW-208	WL-SW-208-2	WL-SWF-208-2	WL-RSW-209	WL-RSWF-209
Sample Date:	6/20/2014	7/21/2015	7/21/2015	7/1/2014	7/1/2014	6/20/2014	10/29/2014	10/29/2014	7/1/2014	7/1/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U	0.50 U				0.50 U	0.50 U			
1,1-Dichloroethane	0.50 U	0.50 U				0.50 U	0.50 U			
1,1-Dichloroethene	0.50 U	0.50 U				0.50 U	0.50 U			
2-Butanone	5.0 U	5.0 U				5.0 U	5.0 U			
Acetone	2.4 J	5.0 U				2.5 J	6.4			
Benzene	0.50 U	0.50 U				0.50 U	0.50 U			
Bromodichloromethane	0.50 U	0.50 U				0.50 U	0.50 U			
Carbon disulfide	0.50 U	0.50 UJ				0.50 U	0.50 U			
Chloroform	0.50 U	0.50 U				0.50 U	0.50 U			
Chloromethane	0.50 U	0.50 U				0.50 U	0.50 U			
cis-1,2-Dichloroethene	0.50 U	0.50 U				0.50 U	0.50 U			
Dibromochloromethane	0.50 U	0.50 U				0.50 U	0.50 U			
Dichlorodifluoromethane	0.50 U	0.50 U				0.50 U	0.50 U			
m,p-Xylene	0.50 U	0.50 U				0.50 U	0.50 U			
Methyl acetate	0.50 U	0.50 U				0.50 U	0.50 U			
Tetrachloroethene	0.50 U	0.50 U				0.50 U	0.50 U			
Toluene	0.50 U	0.50 U				0.50 U	0.50 U			
Trichloroethene	0.0062 J	0.50 U				0.0052 J	0.15 U			
Vinyl chloride	0.015 U	0.50 U				0.015 U	0.015 U			
1,4-Dioxane (ug/L)										
1,4-Dioxane	0.10 U	0.10 U				0.10 U	0.30 U			
Inorganics, Dissolved (ug/L)										
Aluminum			20.0 UJ		26.6 U			20.0 U		20.0 U
Antimony			2.0 U		0.36 J			2.0 U		0.53 J
Arsenic			1.0 U		1.2			1.0 U		0.60 J
Barium			72.6		79.9			76.2		70.0
Beryllium			1.0 U		1.0 U			1.0 U		1.0 U
Cadmium			1.0 U		0.040 U			0.40 U		0.017 J
Calcium			38800		34500			38100		35300
Chromium			2.0 UJ		2.9			2.0 U		81.6
Chromium, Hexavalent			0.50 U		0.50 U			0.50 U		59.2
Cobalt			1.0 U		1.0 U			1.1 J		1.0 UJ
Copper			0.52 J		2.0 U			2.0 U		2.0 U
Iron			299		383			276		200 U
Lead			1.0 U		0.22			0.20 UJ		0.037 J
Magnesium			7130		6770			7920		6560
Manganese			1230		1010			1080		1630
Mercury			0.20 U		0.20 U			R		0.20 U
Nickel			1.7 J		3.3			4.1 J		1.8 J
Potassium			2140		5830			5600		2730
Selenium			5.0 U		5.0 U			5.0 U		5.0 U
Silver			1.0 U		1.0 U			1.0 U		1.0 U
Sodium			140000		144000			140000		138000 J
Vanadium			5.0 U		5.0 U			5.0 U		5.0 U
Zinc			8.2 J+		6.8			26.9 J		7.6

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-207	SD-207	SD-207	SD-208	SD-208	SD-208	SD-208	SD-208	SD-209	SD-209
Sample ID:	WL-SW-207	WL-SW-3-207	WL-SWF-3-207	WL-RSW-208	WL-RSWF-208	WL-SW-208	WL-SW-208-2	WL-SWF-208-2	WL-RSW-209	WL-RSWF-209
Sample Date:	6/20/2014	7/21/2015	7/21/2015	7/1/2014	7/1/2014	6/20/2014	10/29/2014	10/29/2014	7/1/2014	7/1/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum		20 U		13900			1110 J		21.1 U	
Antimony		2.0 U		0.64 J			2.0 U		0.79 J	
Arsenic		1.0 U		18.3			2.1		1.0 U	
Barium		74.9		235 J			75.5		76.1	
Beryllium		1.0 U		2.0 J+			1.0 U		1.0 U	
Cadmium		1.0 U		2.6 J			0.40 U		0.040 U	
Calcium		39300		41000			29400		36000	
Chromium		2.0 UJ		1810			104 J		24.0	
Chromium, Hexavalent		0.50 U		0.50 U			0.50 U		18.2	
Cobalt		1.0 U		12.6 J			2.6 J		1.0 U	
Copper		0.57 J		28.1 J			5.5 J		2.0 U	
Cyanide		R		2.2 J			1.3 J-		1.9 J	
Iron		1250		30300 J			4640		1020	
Lead		1.0 U		114			12.3 J		0.35	
Magnesium		7380		11900			5860		7060	
Manganese		1130		4110 J			1020		1660	
Mercury		0.20 U		0.16 J			0.20 UJ		0.20 U	
Nickel		1.7 J		24.7 J			5.9 J		1.6	
Potassium		2140		6410			4310		2690	
Selenium		5.0 U		2.3 J			5.0 U		5.0 U	
Silver		1.0 U		1.0 U			1.0 UJ		1.0 U	
Sodium		134000		153000			100000 J		160000	
Thallium		1.0 U		1.0 U			1.0 U		1.0 U	
Vanadium		5.0 U		5.0 U			5.0 U		5.0 U	
Zinc		9.4 J+		183 J			65.2		6.3 J+	
Other										
Alkalinity (mg/L)	45	17				27.8	27.6			
Dissolved Organic Carbon (mg/L)		3.3								
Dissolved oxygen, field (mg/L)	8.33	2.40		4.91		8.93	7.56		6.78	
Hardness as CaCO3, Calculated (mg/L)		128.5	126.2	151	114		97.5	128	119	115
ORP, field (mV)	260.4	56.2		26		132.2	50.6		96.1	
pH, field (S.U.)	7.43	6.77		6.63		6.58	6.84		6.56	
Spec. cond., field (umho/cm)	825	1123		907		770	869		949	
Temperature, field (deg C)	22.22	23.8		22.79		18.8	17.26		21.57	
Turbidity, field (N.T.U.)	8.44	7.03		5.68		9.17	7.1		6.3	
Water Depth, field (in.)	12	12		4		12	5		8	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-209	SD-209	SD-209	SD-210	SD-210	SD-210	SD-210	SD-210	SD-210	SD-211
Sample ID:	WL-SW-209	WL-SW-209-2	WL-SWF-209-2	WL-SW-210	WL-SW-210-2	WL-SW-3-210	WL-SWF-210	WL-SWF-210-2	WL-SWF-3-210	WL-SW-211
Sample Date:	6/20/2014	10/29/2014	10/29/2014	6/25/2014	10/29/2014	7/21/2015	6/25/2014	10/29/2014	7/21/2015	6/25/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U				0.50 U
1,1-Dichloroethane	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U				0.50 U
1,1-Dichloroethene	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U				0.50 U
2-Butanone	5.0 U	5.0 U		5.0 U	5.0 U	5.0 U				5.0 U
Acetone	2.6 J	5.0 U		5.0 U	5.0 U	5.0 U				5.0 U
Benzene	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U				0.50 U
Bromodichloromethane	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U				0.50 U
Carbon disulfide	0.50 U	0.50 U		0.50 U	0.50 U	0.50 UJ				0.13 J
Chloroform	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U				0.50 U
Chloromethane	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U				0.50 U
cis-1,2-Dichloroethene	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U				0.50 U
Dibromochloromethane	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U				0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U				0.50 U
m,p-Xylene	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U				0.50 U
Methyl acetate	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U				0.50 U
Tetrachloroethene	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U				0.50 U
Toluene	0.50 U	0.50 U		0.50 U	0.50 U	0.50 U				0.50 U
Trichloroethene	0.0055 J	0.15 U		0.16	0.15 U	0.50 U				0.14 J
Vinyl chloride	0.015 U	0.015 U		0.015 U	0.015 U	0.50 U				0.015 U
1,4-Dioxane (ug/L)										
1,4-Dioxane	0.10 U	0.33 J+		0.10 U	0.30 U	0.10 U				0.10 U
Inorganics, Dissolved (ug/L)										
Aluminum			20.0 U				20.0 UJ	20.0 U	40.8 J	
Antimony			2.0 U				2.0 U	2.0 U	2.0 U	
Arsenic			1.0 U				0.47 J	1.0 U	1.0 U	
Barium			62.4				49.6	58.4	69.4	
Beryllium			1.0 U				1.0 U	1.0 U	1.0 U	
Cadmium			0.40 U				0.040 UJ	0.40 U	1.0 U	
Calcium			32100				30700	30800	38800	
Chromium			2.0 U				248 J	170	247 J	
Chromium, Hexavalent			0.90				223 J	158	166	
Cobalt			1.0 UJ				1.0 U	1.0 UJ	1.0 U	
Copper			2.0 U				2.0 UJ	2.0 U	1.1 J	
Iron			200 U				200 U	219	486	
Lead			0.20 UJ				0.20 UJ	0.20 UJ	1.0 U	
Magnesium			6930				6320	6810	7120	
Manganese			824				789	760	1610	
Mercury			R				0.20 U	R	0.20 U	
Nickel			2.4 J				1.4	2.0 J	2.6 J	
Potassium			3030				2470	2630	2430	
Selenium			5.0 U				5.0 U	5.0 U	5.0 U	
Silver			1.0 U				1.0 UJ	1.0 U	1.0 U	
Sodium			119000 J-				115000	110000	135000	
Vanadium			5.0 U				5.0 U	5.0 U	5.0 U	
Zinc			21.7 J				6.8 J+	23.0 J	13.8 J+	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-209	SD-209	SD-209	SD-210	SD-210	SD-210	SD-210	SD-210	SD-210	SD-211
Sample ID:	WL-SW-209	WL-SW-209-2	WL-SWF-209-2	WL-SW-210	WL-SW-210-2	WL-SW-3-210	WL-SWF-210	WL-SWF-210-2	WL-SWF-3-210	WL-SW-211
Sample Date:	6/20/2014	10/29/2014	10/29/2014	6/25/2014	10/29/2014	7/21/2015	6/25/2014	10/29/2014	7/21/2015	6/25/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum		28.2 UJ		239	20.3 UJ	21.8				30.4 U
Antimony		2.0 U		2.0 U	2.0 U	2.0 U				2.0 U
Arsenic		1.0 U		0.72 J	1.0 U	1.0 U				0.52 J
Barium		50.0		53.7	44.5	72.6				51.8
Beryllium		1.0 U		1.0 U	1.0 U	1.0 U				1.0 U
Cadmium		0.40 U		0.048	0.40 U	1.0 U				0.040 U
Calcium		26000		31300	24800	39600				32300
Chromium		26.7 J		273	161 J	180 J				219
Chromium, Hexavalent		14.3		211 J	198	136				213 J
Cobalt		1.0 UJ		1.0 UJ	1.0 UJ	1.0 U				1.0 UJ
Copper		2.0 UJ		2.0 UJ	2.0 UJ	0.53 J				5.3 J
Cyanide		2.5 UJ		3.0 J	1.4 J-	R				2.2 J
Iron		924		1600	595	1040				982
Lead		0.46 UJ		1.4	0.31 UJ	1.0 U				0.57
Magnesium		5100		6520	4950	7550				6680
Manganese		668		956	562	1700				899
Mercury		R		0.20 U	R	0.20 U				0.20 U
Nickel		1.9 J		1.8	2.2 J	1.9 J				1.9
Potassium		2210		2500	2150	2490				2520
Selenium		5.0 U		5.0 U	5.0 U	5.0 U				5.0 U
Silver		1.0 UJ		1.0 U	1.0 UJ	1.0 U				1.0 U
Sodium		94100 J		121000	87100 J	128000				123000
Thallium		1.0 U		1.0 U	1.0 U	1.0 U				1.0 U
Vanadium		5.0 U		5.0 U	5.0 U	5.0 U				5.0 U
Zinc		21.7 J+		8.2 J	17.2 J+	7.6 J+				7.9 J
Other										
Alkalinity (mg/L)	26	17.4		20	18.3	23				21
Dissolved Organic Carbon (mg/L)						3.8				
Dissolved oxygen, field (mg/L)	8.27	9.67		11.54	9.83	1.30				10.71
Hardness as CaCO3, Calculated (mg/L)		85.9	109	105	82.3	129.9	103	105	126.2	108
ORP, field (mV)	152	106.6		170.4	116.7	88.5				156.3
pH, field (S.U.)	6.6	6.56		6.57	6.59	7.51				6.71
Spec. cond., field (umho/cm)	872	858		887	845	1050				876
Temperature, field (deg C)	17.16	14.99		26.73	16.72	21.5				24.29
Turbidity, field (N.T.U.)	8.9	6.7		16.5	6.5	4.33				17.9
Water Depth, field (in.)	12	8		8	5	12				6

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-211	SD-211	SD-211	SD-212	SD-212	SD-212	SD-212	SD-212	SD-212	SD-213
Sample ID:	WL-SW-211-2	WL-SWF-211	WL-SWF-211-2	WL-SW-212	WL-SW-212-2	WL-SW-3-212	WL-SWF-212	WL-SWF-212-2	WL-SWF-3-212	WL-SW-213
Sample Date:	10/29/2014	6/25/2014	10/29/2014	6/24/2014	10/29/2014	7/21/2015	6/24/2014	10/29/2014	7/21/2015	6/24/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U			0.50 U	0.50 U	0.50 U				0.16 J
1,1-Dichloroethane	0.50 U			0.13 J	0.50 U	0.50 U				0.29 J
1,1-Dichloroethene	0.50 U			0.50 U	0.50 U	0.50 U				0.50 U
2-Butanone	5.0 U			5.0 U	5.0 U	5.0 U				5.0 U
Acetone	5.0 U			5.0 U	5.0 U	5.0 U				5.0 U
Benzene	0.50 U			0.50 U	0.50 U	0.50 U				0.50 U
Bromodichloromethane	0.50 U			0.50 U	0.50 U	0.50 U				0.50 U
Carbon disulfide	0.50 U			0.50 U	0.50 U	0.50 UJ				0.29 J
Chloroform	0.50 U			0.50 U	0.50 U	0.50 U				0.50 U
Chloromethane	0.50 U			0.50 U	0.50 U	0.50 U				0.50 U
cis-1,2-Dichloroethene	0.50 U			0.50 U	0.50 U	0.50 U				0.13 J
Dibromochloromethane	0.50 U			0.50 U	0.50 U	0.50 U				0.50 U
Dichlorodifluoromethane	0.50 U			0.50 U	0.50 U	0.50 U				0.50 U
m,p-Xylene	0.50 U			0.50 U	0.50 U	0.50 U				0.50 U
Methyl acetate	0.50 U			0.50 U	0.50 U	0.50 U				0.50 U
Tetrachloroethene	0.50 U			0.50 U	0.50 U	0.50 U				0.50 U
Toluene	0.50 U			0.50 U	0.50 U	0.50 U				0.50 U
Trichloroethene	0.15 U			0.26	0.16 U	0.50 U				0.45
Vinyl chloride	0.015 U			0.015 U	0.015 U	0.50 U				0.015 U
1,4-Dioxane (ug/L)										
1,4-Dioxane	0.41 J+			0.11	0.51 J+	0.16				0.18
Inorganics, Dissolved (ug/L)										
Aluminum		20.0 UJ	20.0 U				21.1 J	20.0 U	20.0 UJ	
Antimony		2.0 U	2.0 U				2.0 UJ	2.0 U	2.0 U	
Arsenic		0.44 J	1.0 U				0.48 J-	1.0 U	1.0 U	
Barium		50.3	74.0				54.1 J-	78.1	70.2	
Beryllium		1.0 U	1.0 U				1.0 UJ	1.0 U	1.0 U	
Cadmium		0.040 UJ	0.40 U				0.031 J	0.40 U	1.0 U	
Calcium		30300	38200				30300 J-	38700	37700	
Chromium		195 J	253				259 J	236	174 J	
Chromium, Hexavalent		177 J	181				238 J	163	132	
Cobalt		1.0 U	1.0 UJ				1.0 UJ	1.2 J	1.0 U	
Copper		2.0 UJ	2.0 U				2.0 UJ	2.0 U	0.65 J	
Iron		200 U	316				250 J-	445	384	
Lead		0.20 UJ	0.20 UJ				0.32 J	0.21 UJ	1.0 U	
Magnesium		6320	8060				6360 J-	8260	6970	
Manganese		917	1010				1080 J-	1100	1630	
Mercury		0.20 U	R				0.20 UJ	R	0.20 U	
Nickel		1.7	2.4 J				1.8 J-	2.9 J	2.0 J	
Potassium		2420	3390				2400 J-	3500	2470	
Selenium		5.0 U	5.0 U				5.0 UJ	5.0 U	5.0 U	
Silver		1.0 UJ	1.0 U				1.0 UJ	1.0 U	1.0 U	
Sodium		117000	128000				116000 J-	146000	123000	
Vanadium		5.0 U	5.0 U				5.0 UJ	5.0 U	5.0 U	
Zinc		6.3 J+	31.1 J				8.0 J	33.0 J	8.9 J+	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-211	SD-211	SD-211	SD-212	SD-212	SD-212	SD-212	SD-212	SD-212	SD-213
Sample ID:	WL-SW-211-2	WL-SWF-211	WL-SWF-211-2	WL-SW-212	WL-SW-212-2	WL-SW-3-212	WL-SWF-212	WL-SWF-212-2	WL-SWF-3-212	WL-SW-213
Sample Date:	10/29/2014	6/25/2014	10/29/2014	6/24/2014	10/29/2014	7/21/2015	6/24/2014	10/29/2014	7/21/2015	6/24/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum	20.0 UJ			60.7 J-	166 J	28.8				664 J-
Antimony	2.0 U			2.0 UJ	2.0 U	2.0 U				1.4 J-
Arsenic	1.0 U			1.0 UJ	1.0 U	1.0 U				1.6 J-
Barium	53.4			57.3 J-	55.5	70.9				80.6 J-
Beryllium	1.0 U			1.0 UJ	1.0 U	1.0 U				1.0 UJ
Cadmium	0.40 U			0.040 UJ	0.40 U	1.0 U				0.25 J-
Calcium	28600			31500 J-	27200	39500				32600 J-
Chromium	184 J			260 J-	271 J	267 J				262 J-
Chromium, Hexavalent	174			219 J	160	160				2.47 J
Cobalt	1.0 UJ			1.0 UJ	1.0 UJ	1.0 U				1.8 J-
Copper	2.0 UJ			2.0 UJ	2.0 UJ	0.77 J				4.7 J-
Cyanide	1.3 J-			1.8 J	1.5 J-	R				2.1 J
Iron	652			1360 J-	1590	1180				3720 J-
Lead	0.27 UJ			0.84 J-	2.2 J	1.0 U				6.0 J-
Magnesium	5670			6520 J-	5550	7470				6840 J-
Manganese	714			1250 J-	743	1530				1810 J-
Mercury	R			0.20 UJ	R	0.20 U				0.20 UJ
Nickel	2.0 J			1.6 J-	2.2 J	2.0 J				3.4 J-
Potassium	2460			2430 J-	2410	2470				2830 J-
Selenium	5.0 U			5.0 UJ	5.0 U	5.0 U				0.42 J-
Silver	1.0 UJ			1.0 UJ	1.0 UJ	1.0 U				1.0 UJ
Sodium	101000 J			119000 J-	97200 J	130000				118000 J-
Thallium	1.0 U			1.0 UJ	1.0 U	1.0 U				1.0 UJ
Vanadium	5.0 U			5.0 UJ	5.0 U	5.0 U				5.0 UJ
Zinc	22.6 J+			8.6 J	24.9 J+	8.7 J+				53.3 J
Other										
Alkalinity (mg/L)	19.6			22	19.5	24				22
Dissolved Organic Carbon (mg/L)						3.6				
Dissolved oxygen, field (mg/L)	7.63			10.57	2.53	2.79				2.45
Hardness as CaCO3, Calculated (mg/L)	94.7	102	129	105 J-	90.7	129.4	102 J-	131	122.8	110 J-
ORP, field (mV)	113.7			139.8	14.6	85.9				47
pH, field (S.U.)	6.38			6.9	6.40	6.62				6.81
Spec. cond., field (umho/cm)	824			811	830	1036				744
Temperature, field (deg C)	13.06			22.82	12.46	21.7				17.75
Turbidity, field (N.T.U.)	3.8			9.91	8.3	4.51				20.2
Water Depth, field (in.)	3			8	6	3				7

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-213	SD-213	SD-213	SD-214	SD-214	SD-214	SD-214	SD-215	SD-215	SD-215
Sample ID:	WL-SW-213-2	WL-SWF-213	WL-SWF-213-2	WL-SW-214	WL-SW-214-2	WL-SWF-214	WL-SWF-214-2	WL-SW-215	WL-SW-215-2	WL-SWF-215
Sample Date:	10/28/2014	6/24/2014	10/28/2014	6/24/2014	10/28/2014	6/24/2014	10/28/2014	6/24/2014	10/28/2014	6/24/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U			0.16 J	0.50 U			0.13 J	0.50 U	
1,1-Dichloroethane	0.50 U			0.30 J	0.50 U			0.27 J	0.50 U	
1,1-Dichloroethene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
2-Butanone	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	
Acetone	8.1			5.0 U	5.0 U			5.0 U	5.0 U	
Benzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Bromodichloromethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Carbon disulfide	0.50 U			0.50 U	0.50 U			0.20 J	0.50 U	
Chloroform	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Chloromethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
cis-1,2-Dichloroethene	0.50 U			0.15 J	0.50 U			0.10 J	0.50 U	
Dibromochloromethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Dichlorodifluoromethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
m,p-Xylene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Methyl acetate	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Tetrachloroethene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Toluene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Trichloroethene	0.19 U			0.47	0.26 U			0.40	0.24 U	
Vinyl chloride	0.015 U			0.015 U	0.015 U			0.015 U	0.015 U	
1,4-Dioxane (ug/L)										
1,4-Dioxane	1.0 J+			0.19	0.59 J+			0.17	0.51 J+	
Inorganics, Dissolved (ug/L)										
Aluminum		23.9 J	20.0 U			20.0 UJ	20.0 U			20.0 UJ
Antimony		2.0 UJ	2.0 U			2.0 UJ	2.0 U			2.0 UJ
Arsenic		0.50 J-	1.0 U			0.57 J-	1.0 U			0.39 J-
Barium		65.6 J-	76.7			64.4 J-	63.2			62.2 J-
Beryllium		1.0 UJ	1.0 U			1.0 UJ	1.0 U			1.0 UJ
Cadmium		0.040 UJ	0.40 U			0.040 UJ	0.40 U			0.042 J
Calcium		29900 J-	37800			30800 J-	32300			30400 J-
Chromium		16.8 J	73.8			17.4 J	119			9.7 J
Chromium, Hexavalent		2.3 J	31.0			1.4 J	79.5			0.50 J
Cobalt		1.0 UJ	1.0 UJ			1.2 J-	1.0 UJ			1.2 J-
Copper		2.0 UJ	2.0 U			2.0 UJ	2.0 U			2.0 UJ
Iron		2260 J-	2450			706 J-	361			434 J-
Lead		0.25 UJ	0.20 UJ			0.20 UJ	0.20 UJ			0.20 UJ
Magnesium		6380 J-	8520			6510 J-	7300			6500 J-
Manganese		1460 J-	1200			1620 J-	798			1570 J-
Mercury		0.20 UJ	R			0.20 UJ	R			0.20 UJ
Nickel		1.6 J-	2.6 J			1.6 J-	2.3 J			2.8 J-
Potassium		2650 J-	3860			2690 J-	3110			2650 J-
Selenium		5.0 UJ	5.0 U			5.0 UJ	5.0 U			5.0 UJ
Silver		1.0 UJ	1.0 U			1.0 UJ	1.0 U			1.0 UJ
Sodium		114000 J-	139000			113000 J-	111000			113000 J-
Vanadium		5.0 UJ	5.0 U			5.0 UJ	5.0 U			5.0 UJ
Zinc		9.6 J	19.1 J			14.3 J	24.7 J			11.2 J

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-213	SD-213	SD-213	SD-214	SD-214	SD-214	SD-214	SD-215	SD-215	SD-215
Sample ID:	WL-SW-213-2	WL-SWF-213	WL-SWF-213-2	WL-SW-214	WL-SW-214-2	WL-SWF-214	WL-SWF-214-2	WL-SW-215	WL-SW-215-2	WL-SWF-215
Sample Date:	10/28/2014	6/24/2014	10/28/2014	6/24/2014	10/28/2014	6/24/2014	10/28/2014	6/24/2014	10/28/2014	6/24/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum	3140 J			83.2 J-	28.0 UJ			216 J-	70.8 J	
Antimony	0.45 J			2.0 UJ	2.0 U			0.48 J-	2.0 U	
Arsenic	3.7			1.0 UJ	1.0 U			1.0 UJ	1.0 U	
Barium	131 J			65.6 J-	55.4			71.3 J-	36.8	
Beryllium	1.0 U			1.0 UJ	1.0 U			0.090 J	1.0 U	
Cadmium	1.0 J			0.042 UJ	0.40 U			0.053 UJ	0.40 U	
Calcium	30000			32300 J-	28100			33000 J-	17900	
Chromium	2270 J			153 J-	156 J			209 J-	140 J	
Chromium, Hexavalent	78.0			1.37 J	79.1			0.50 UJ	91.4	
Cobalt	4.3 J			1.3 J-	1.0 UJ			1.8 J-	1.0 UJ	
Copper	27.5 J			2.0 UJ	2.0 UJ			2.9 J-	2.0 UJ	
Cyanide	3.1 J-			2.2 J	1.5 J-			1.6 J	2.5 UJ	
Iron	13900 J			2270 J-	1060			4250 J-	1240	
Lead	58.1 J			1.4 J-	0.60 UJ			4.8 J-	3.7 J	
Magnesium	6430			6770 J-	5860			6990 J-	3660	
Manganese	1150			1600 J-	760			1760 J-	483	
Mercury	0.20 UJ			0.20 UJ	R			0.20 UJ	R	
Nickel	9.6 J			1.9 J-	2.1 J			2.5 J-	1.4 J	
Potassium	2920			2750 J-	2810			2840 J-	1670	
Selenium	5.0 U			5.0 UJ	5.0 U			5.0 UJ	5.0 U	
Silver	1.0 UJ			1.0 UJ	1.0 UJ			1.0 UJ	1.0 UJ	
Sodium	92000 J			118000 J-	98100 J			122000 J-	60200 J	
Thallium	1.0 U			1.0 UJ	1.0 U			1.0 UJ	1.0 U	
Vanadium	5.0 U			5.0 UJ	5.0 U			5.0 UJ	5.0 U	
Zinc	152			10.6 J	30.5 J+			18.6 J	20.7 J+	
Other										
Alkalinity (mg/L)	13.7			32	16.6			26	19.4	
Dissolved Organic Carbon (mg/L)										
Dissolved oxygen, field (mg/L)	6.11			5.94	5.91			3.48	5.90	
Hardness as CaCO3, Calculated (mg/L)	101	101 J-	129	108 J-	94.3	104 J-	111	111 J-	59.8	103 J-
ORP, field (mV)	77			45.4	84.4			73	105.9	
pH, field (S.U.)	6.63			6.94	7.10			6.71	6.83	
Spec. cond., field (umho/cm)	817			737	802			713	791	
Temperature, field (deg C)	12.93			17.2	11.71			17.66	10.10	
Turbidity, field (N.T.U.)	125			6.71	4.96			20.8	50.7	
Water Depth, field (in.)	6			12	14			8	6	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-215	SD-216	SD-216	SD-217	SD-217	SD-217	SD-217	SD-218	SD-218	SD-218
Sample ID:	WL-SWF-215-2	WL-SW-216	WL-SWF-216	WL-SW-217	WL-SW-217-2	WL-SWF-217	WL-SWF-217-2	WL-SW-218	WL-SW-218-2	WL-SW-3-218
Sample Date:	10/28/2014	6/24/2014	6/24/2014	6/24/2014	11/5/2014	6/24/2014	11/5/2014	6/27/2014	11/5/2014	7/21/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane		0.50 U		0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
1,1-Dichloroethane		0.19 J		0.17 J	0.50 U			0.13 J	0.50 U	0.50 U
1,1-Dichloroethene		0.50 U		0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
2-Butanone		5.0 U		5.0 U	5.0 U			5.0 U	5.0 U	5.0 U
Acetone		5.0 U		5.0 U	5.0 U			5.0 U	2.1 J	5.0 U
Benzene		0.50 U		0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Bromodichloromethane		0.50 U		0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Carbon disulfide		0.50 U		0.14 J	0.50 U			0.50 U	0.50 U	0.50 UJ
Chloroform		0.50 U		0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Chloromethane		0.50 U		0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
cis-1,2-Dichloroethene		0.32 J		0.18 J	0.50 U			0.14 J	0.50 U	0.50 U
Dibromochloromethane		0.50 U		0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Dichlorodifluoromethane		0.50 U		0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
m,p-Xylene		0.50 U		0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Methyl acetate		0.50 U		0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Tetrachloroethene		0.10 J		0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Toluene		0.50 U		0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Trichloroethene		0.40		0.35	0.20			0.26	0.19 J	0.50 U
Vinyl chloride		0.015 U		0.015 U	0.015 U			0.015 U	0.015 U	0.50 U
1,4-Dioxane (ug/L)										
1,4-Dioxane		0.14		0.14	0.98 J			0.12	0.74	0.21
Inorganics, Dissolved (ug/L)										
Aluminum	20.0 U		20.0 UJ			20.0 UJ	20.0 U			
Antimony	2.0 U		2.0 UJ			2.0 UJ	2.0 U			
Arsenic	1.0 U		0.29 J-			0.37 J	0.36 J			
Barium	65.4		101 J-			75.8 J	52.3			
Beryllium	1.0 U		1.0 UJ			1.0 UJ	1.0 U			
Cadmium	0.40 U		0.069 J			0.053 UJ	0.033 J			
Calcium	33100		28200 J-			32400 J	26900			
Chromium	131		7.4 J			13.2 J	67.3			
Chromium, Hexavalent	82.4		0.08 J			0.60 J	38.9			
Cobalt	1.0 UJ		8.1 J-			2.7 J	1.0 U			
Copper	2.0 U		2.0 UJ			2.0 UJ	2.0 UJ			
Iron	461		1040 J-			666 J	443			
Lead	0.20 UJ		0.20 UJ			0.25 J	0.34			
Magnesium	7540		6160 J-			6890 J	5850			
Manganese	827		1400 J-			1430 J	537			
Mercury	R		0.20 UJ			0.20 UJ	0.20 UJ			
Nickel	2.3 J		3.1 J-			2.2 J	1.8			
Potassium	3250		2460 J-			2790 J	2630			
Selenium	5.0 U		5.0 UJ			5.0 UJ	5.0 U			
Silver	1.0 U		1.0 UJ			1.0 UJ	1.0 U			
Sodium	115000		192000 J-			142000 UJ	105000			
Vanadium	5.0 U		5.0 UJ			5.0 UJ	5.0 U			
Zinc	30.3 J		9.6 J			11.5 J	17.2 J			

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-215	SD-216	SD-216	SD-217	SD-217	SD-217	SD-217	SD-218	SD-218	SD-218
Sample ID:	WL-SWF-215-2	WL-SW-216	WL-SWF-216	WL-SW-217	WL-SW-217-2	WL-SWF-217	WL-SWF-217-2	WL-SW-218	WL-SW-218-2	WL-SW-3-218
Sample Date:	10/28/2014	6/24/2014	6/24/2014	6/24/2014	11/5/2014	6/24/2014	11/5/2014	6/27/2014	11/5/2014	7/21/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum		20.0 UJ		47.1 J-	60.7			136 J	66.4	20 U
Antimony		2.0 UJ		2.0 UJ	2.0 U			2.0 U	2.0 U	2.0 U
Arsenic		1.0 UJ		1.0 UJ	1.0 U			0.50 J	1.0 U	1.0 U
Barium		70.3 J-		70.5 J-	58.9 J			67.4	58.6 J	87.7
Beryllium		1.0 UJ		1.0 UJ	1.0 U			1.0 U	1.0 U	1.0 U
Cadmium		0.040 UJ		0.042 UJ	0.40 U			0.035 J	0.40 U	1.0 U
Calcium		31500 J-		30900 J-	27000 J			30000	27000 J	37600
Chromium		68.2 J-		81.8 J-	123 J			52.6	115 J	72.6 J
Chromium, Hexavalent		0.50 UJ		0.50 J	44.1			0.37	29.4	0.47 J
Cobalt		2.7 J-		2.9 J-	1.1			2.3	1.1	2.0
Copper		2.0 UJ		2.0 UJ	2.0 UJ			2.0 UJ	2.0 UJ	0.67 J
Cyanide		2.4 J		2.3 J	1.7 J			2.5 J	7.8	R
Iron		1720 J-		2210 J-	1060			1500	1120	1580
Lead		0.47 J-		1.3 J-	1.1			0.36	1.4	1.0 U
Magnesium		6690 J-		6500 J-	6190 J			6060	6270 J	7620
Manganese		1370 J-		1360 J-	571 J			1440	587 J	1590
Mercury		0.20 UJ		0.20 UJ	0.20 UJ			0.20 U	0.20 UJ	0.20 U
Nickel		1.9 J-		2.0 J-	2.1			2.3	2.2	2.2 J
Potassium		2690 J-		2660 J-	2730			2590	2750	2780
Selenium		5.0 UJ		5.0 UJ	5.0 U			5.0 U	5.0 U	5.0 U
Silver		1.0 UJ		1.0 UJ	1.0 U			1.0 U	1.0 U	0.018 J
Sodium		148000 J-		135000 J-	106000 J			139000	107000 J	138000
Thallium		1.0 UJ		1.0 UJ	1.0 U			1.0 U	1.0 U	1.0 U
Vanadium		5.0 UJ		5.0 UJ	5.0 U			5.0 U	5.0 U	5.0 U
Zinc		8.9 J		9.0 J	24.2			11.5 J	21.1	6.8 J+
Other										
Alkalinity (mg/L)		39		28	16			29.4	16	25
Dissolved Organic Carbon (mg/L)										3.4
Dissolved oxygen, field (mg/L)		5.64		6.02	6.60			6.54	6.33	3.95
Hardness as CaCO3, Calculated (mg/L)	114	106 J-	95.7 J-	104 J-	92.9 J	109 J	91.2	99.8	93.2 J	125.2
ORP, field (mV)		125.6		128.5	100.5			109	101.4	59.6
pH, field (S.U.)		7.04		7.13	6.65			6.85	6.56	7.01
Spec. cond., field (umho/cm)		755		755	772			851	767	1093
Temperature, field (deg C)		17.16		17.16	9.61			18.95	10.19	22.4
Turbidity, field (N.T.U.)		6.45		6.28	2.17			7.18	13.2	10.4
Water Depth, field (in.)		5		10	11			8	12	14

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-218	SD-218	SD-218	SD-219	SD-219	SD-219	SD-219	SD-220	SD-220	SD-220
Sample ID:	WL-SWF-218	WL-SWF-218-2	WL-SWF-3-218	WL-SW-219	WL-SW-219-2	WL-SWF-219	WL-SWF-219-2	WL-SW-220	WL-SW-3-220	WL-SWF-220
Sample Date:	6/27/2014	11/5/2014	7/21/2015	7/1/2014	10/29/2014	7/1/2014	10/29/2014	7/1/2014	7/21/2015	7/1/2014
Sample Type:	Field Sample	Field sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane				0.50 U	0.50 U			0.50 U	0.50 U	
1,1-Dichloroethane				0.50 U	0.50 U			0.50 U	0.50 U	
1,1-Dichloroethene				0.50 U	0.50 U			0.50 U	0.50 U	
2-Butanone				5.0 U	5.0 U			5.0 U	5.0 U	
Acetone				5.0 U	5.0 U			2.0 J	5.0 U	
Benzene				0.50 U	0.50 U			0.50 U	0.50 U	
Bromodichloromethane				0.50 U	0.50 U			0.50 U	0.50 U	
Carbon disulfide				0.50 U	0.50 U			0.50 U	0.50 UJ	
Chloroform				0.50 U	0.50 U			0.50 U	0.50 U	
Chloromethane				0.50 U	0.50 U			0.50 U	0.50 U	
cis-1,2-Dichloroethene				0.50 U	0.50 U			0.50 U	0.50 U	
Dibromochloromethane				0.50 U	0.50 U			0.50 U	0.50 U	
Dichlorodifluoromethane				0.50 U	0.50 U			0.50 U	0.50 U	
m,p-Xylene				0.50 U	0.50 U			0.50 U	0.50 U	
Methyl acetate				0.50 U	0.50 U			0.50 U	0.50 U	
Tetrachloroethene				0.50 U	0.50 U			0.50 U	0.50 U	
Toluene				0.50 U	0.50 U			0.50 U	0.50 U	
Trichloroethene				0.15 U	0.15 U			0.15 U	0.50 U	
Vinyl chloride				0.015 U	0.015 U			0.015 U	0.50 U	
1,4-Dioxane (ug/L)										
1,4-Dioxane				0.10 U	R			0.10 U	0.10 U	
Inorganics, Dissolved (ug/L)										
Aluminum	20.0 U	20.0 U	20.0 UJ			20.0 UJ	44.6			20.0 UJ
Antimony	2.0 U	2.0 U	2.0 U			2.0 UJ	2.0 U			2.0 UJ
Arsenic	0.37 J	0.35 J	1.0 U			0.28 J	1.0 U			0.28 J
Barium	67.9	53.1	82.7			27.6	66.7			27.8
Beryllium	1.0 U	1.0 U	1.0 U			1.0 U	1.0 U			1.0 U
Cadmium	0.045 U	0.032 J	1.0 U			0.038 J	0.40 U			0.012 J
Calcium	30000 J	26800	35900			18700	36500			19000
Chromium	9.4	47.8	7.8 J			0.077 J	2.0 U			0.10 J
Chromium, Hexavalent	0.27	27.6	0.45 J			0.50 U	0.50 U			0.50 U
Cobalt	2.4	1.0 U	1.8			1.0 U	1.0 UJ			1.0 U
Copper	2.0 UJ	2.0 UJ	0.74 J			2.0 UJ	2.0 U			2.0 UJ
Iron	416	330	246			200 U	520			200 U
Lead	0.29	0.21	1.0 U			0.070 J	0.46 J			0.16 J
Magnesium	6130 J	5920	7050			3580 J	7780			3650 J
Manganese	1460	550	1560			199	707			195
Mercury	0.20 U	0.20 UJ	0.20 U			0.20 U	R			0.20 U
Nickel	2.3	1.9	2.2 J			1.0 U	2.8 J			1.0 U
Potassium	2640	2650	2650			2080	2900			2090
Selenium	5.0 UJ	5.0 U	5.0 U			5.0 U	5.0 U			5.0 U
Silver	1.0 U	1.0 U	1.0 U			1.0 UJ	1.0 U			1.0 UJ
Sodium	143000	106000	136000			61400	73900			62300
Vanadium	5.0 UJ	5.0 U	5.0 U			5.0 U	5.0 U			5.0 U
Zinc	9.8 J+	17.2 J	9.7 J+			6.3 J	41.3 J			5.9 J

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-218	SD-218	SD-218	SD-219	SD-219	SD-219	SD-219	SD-220	SD-220	SD-220
Sample ID:	WL-SWF-218	WL-SWF-218-2	WL-SWF-3-218	WL-SW-219	WL-SW-219-2	WL-SWF-219	WL-SWF-219-2	WL-SW-220	WL-SW-3-220	WL-SWF-220
Sample Date:	6/27/2014	11/5/2014	7/21/2015	7/1/2014	10/29/2014	7/1/2014	10/29/2014	7/1/2014	7/21/2015	7/1/2014
Sample Type:	Field Sample	Field sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum				32.3	41.1 UJ			21.1 J	22.2	
Antimony				2.0 UJ	2.0 U			2.0 UJ	2.0 U	
Arsenic				0.41 J	1.0 U			0.35 J	1.0 U	
Barium				29.9	44.7			29.3	38.1	
Beryllium				1.0 U	1.0 U			1.0 U	1.0 U	
Cadmium				0.019 J	0.40 U			0.015 J	1.0 U	
Calcium				18800	25600			19500	20800	
Chromium				0.31 J-	2.2 J			0.17 J-	2.0 UJ	
Chromium, Hexavalent				0.50 UJ	0.50 U			0.50 UJ	0.50 U	
Cobalt				1.0 U	1.0 UJ			1.0 U	1.0 U	
Copper				2.0 UJ	2.0 UJ			2.0 UJ	0.49 J	
Cyanide				2.4 J	2.5 UJ			2.5 UJ	R	
Iron				1080	675			882	910	
Lead				1.2	0.93 J			0.94	1.0	
Magnesium				3570	5170			3710	4170	
Manganese				277	471			211	249	
Mercury				0.20 U	R			0.20 U	0.20 U	
Nickel				0.78 J	2.0 J			0.65 J	1.0 UJ	
Potassium				2070	2000			2140	2060	
Selenium				5.0 U	5.0 U			5.0 U	5.0 U	
Silver				1.0 U	1.0 UJ			1.0 U	1.0 U	
Sodium				60500	51600 J			62500	66000	
Thallium				1.0 U	1.0 U			1.0 U	1.0 U	
Vanadium				0.59 J	5.0 U			0.60 J	5.0 U	
Zinc				11.4 J+	35.2 J+			6.4 J+	7.2 J+	
Other										
Alkalinity (mg/L)				37.2	12.1			34.3	17	
Dissolved Organic Carbon (mg/L)									4.3	
Dissolved oxygen, field (mg/L)				6.95	6.44			6.48	4.54	
Hardness as CaCO3, Calculated (mg/L)	100 J	91.3	118.6	61.6	85.2	61.4 J	123	64.0	69.1	62.5 J
ORP, field (mV)				NR	190.1			NR	97.4	
pH, field (S.U.)				7.79	6.29			7.66	6.48	
Spec. cond., field (umho/cm)				509	484			509	512	
Temperature, field (deg C)				27.03	11.88			26.99	25.39	
Turbidity, field (N.T.U.)				NR	3.58			NR	6.17	
Water Depth, field (in.)				NR	18			NR	12	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-220	SD-221	SD-221	SD-221	SD-221	SD-222	SD-222	SD-223	SD-223	SD-224
Sample ID:	WL-SWF-3-220	WL-SW-221	WL-SW-221D	WL-SWF-221	WL-SWF-221D	WL-SW-222	WL-SWF-222	WL-SW-223	WL-SWF-223	WL-SW-224
Sample Date:	7/21/2015	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014	7/1/2014	7/1/2014	7/1/2014
Sample Type:	Field Sample	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane		0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
1,1-Dichloroethane		0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
1,1-Dichloroethene		0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
2-Butanone		5.0 U	5.0 U			5.0 U		5.0 U		5.0 U
Acetone		5.0 U	5.0 U			5.0 U		1.0 J		1.5 J
Benzene		0.50 U	0.50 U			0.50 U		0.18 J		0.50 U
Bromodichloromethane		0.88	0.88			0.44 J		0.54		0.42 J
Carbon disulfide		0.50 U	0.50 U			0.11 J		0.50 U		0.50 U
Chloroform		4.2 J	4.0 J			2.2		2.3 U		2.2 U
Chloromethane		0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
cis-1,2-Dichloroethene		0.23 J	0.22 J			0.15 J		0.15 J		0.50 U
Dibromochloromethane		0.26 J	0.20 J			0.12 J		0.50 U		0.50 U
Dichlorodifluoromethane		0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
m,p-Xylene		0.50 U	0.50 U			0.50 U		0.15 J		0.50 U
Methyl acetate		0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
Tetrachloroethene		0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
Toluene		0.50 U	0.50 U			0.50 U		0.32 J		0.50 U
Trichloroethene		0.077 J	0.080 J			0.051 J		0.051 J		0.045 J
Vinyl chloride		0.027 U	0.026 U			0.015 U		0.016 U		0.015 U
1,4-Dioxane (ug/L)										
1,4-Dioxane		0.18	0.20			0.11		0.18		0.36
Inorganics, Dissolved (ug/L)										
Aluminum	20.0 UJ			20.0 U	20.0 U		20.0 U		20.0 U	
Antimony	2.0 U			2.0 U	2.0 U		2.0 U		0.65 J	
Arsenic	1.0 U			0.30 J	0.28 J		0.27 J		0.34 J	
Barium	36.4			34.3	33.2		27.3		26.7	
Beryllium	1.0 U			1.0 U	1.0 U		1.0 U		1.0 U	
Cadmium	1.0 U			0.040 U	0.040 U		0.047 U		0.021 J	
Calcium	20000			27500 J	25600 J		21700 J		24200	
Chromium	2.0 UJ			2 U	2.0 U		2.0 U		2.0 U	
Chromium, Hexavalent	0.50 U			0.10 U	0.10 U		0.10 U		0.50 U	
Cobalt	1.0 U			1.0 U	1.0 U		1.0 U		1.0 UJ	
Copper	0.49 J			2.8 J	2.7 J		2.1 J		2.2	
Iron	713			202	239		200 U		200 U	
Lead	1.0 U			0.20 U	0.20 U		0.20 U		0.14 J	
Magnesium	3900			4730 J	4410 J		4020 J		4090	
Manganese	249			199	227		204		149	
Mercury	0.20 U			0.20 U	0.20 U		0.20 U		0.20 U	
Nickel	1.0 UJ			2.8	2.6		1.7		2.0 J	
Potassium	1950			14600	13900		8030		10100	
Selenium	5.0 U			0.36 J-	5.0 UJ		5.0 UJ		5.0 U	
Silver	1.0 U			1.0 U	1.0 U		1.0 U		1.0 U	
Sodium	61800			118000	113000		88000		93600 J	
Vanadium	5.0 U			5.0 UJ	5.0 UJ		5.0 UJ		5.0 U	
Zinc	6.1 J+			11.6 J+	12.1 J+		8.7 J+		8.2	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-220	SD-221	SD-221	SD-221	SD-221	SD-222	SD-222	SD-223	SD-223	SD-224
Sample ID:	WL-SWF-3-220	WL-SW-221	WL-SW-221D	WL-SWF-221	WL-SWF-221D	WL-SW-222	WL-SWF-222	WL-SW-223	WL-SWF-223	WL-SW-224
Sample Date:	7/21/2015	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014	6/27/2014	7/1/2014	7/1/2014	7/1/2014
Sample Type:	Field Sample	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum		87.8 J	248 J			76.5 J		235		220
Antimony		2.0 U	0.54 J			2.0 U		0.38 J		0.41 J
Arsenic		0.36 J	0.37 J			0.37 J		1.0 U		1.0 U
Barium		31.7	33.4			28.1		59.2		39.1
Beryllium		1.0 U	1.0 U			1.0 U		1.0 U		1.0 U
Cadmium		0.045	0.044			0.030 J		0.26		0.23
Calcium		25300	25600			21800		25500		25000
Chromium		0.32 J-	0.46 J-			2.7		15.6		13.5
Chromium, Hexavalent		0.10 U	0.10 U			0.10 U		0.50 U		0.50 U
Cobalt		1.0 U	1.0 U			1.0 U		1.0 U		1.0 U
Copper		3.2 J	4.1 J			2.4 J		12.0		12.9
Cyanide		4.0 J	6.3 J			4.2 J		2.5 J		1.3 J
Iron		319	465			691		2110		1510
Lead		0.45	1.2			0.79		6.2		5.9
Magnesium		4320	4490			4140		4610		4500
Manganese		108	136			197		737		400
Mercury		0.20 U	0.20 U			0.20 U		0.20 U		0.20 U
Nickel		3.0	3.2			1.9		3.4		3.5
Potassium		13600	13800			7850		10600		10500
Selenium		0.39 J	0.49 J			0.36 J		0.32 J		0.33 J
Silver		1.0 U	1.0 U			1.0 U		1.0 U		1.0 U
Sodium		112000	114000			89500		99500		100000
Thallium		1.0 U	1.0 U			1.0 U		1.0 U		1.0 U
Vanadium		0.54 J	0.56 J			0.54 J		0.72 J		0.52 J
Zinc		15.1 J	28.5 J			42.9 J		24.0 J+		23.9 J+
Other										
Alkalinity (mg/L)		67.3	67.5			42.6		49.5		54.3
Dissolved Organic Carbon (mg/L)										
Dissolved oxygen, field (mg/L)		8.93				11.35		10.20		16.16
Hardness as CaCO3, Calculated (mg/L)	66	81.0	82.4	88.1 J	82.1 J	71.5	70.7 J	82.6	77.3	80.9
ORP, field (mV)		157.9				182.7		266.9		NR
pH, field (S.U.)		7.27				7.45		7.60		8.6
Spec. cond., field (umho/cm)		703				649		691		720
Temperature, field (deg C)		19.69				22.81		24.24		25.88
Turbidity, field (N.T.U.)		2.68				9.63		9.41		NR
Water Depth, field (in.)		15				9		12		12

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-224	SD-225	SD-225	SD-226	SD-226	SD-227	SD-227	SD-228	SD-228	SD-229
Sample ID:	WL-SWF-224	WL-SW-225	WL-SWF-225	WL-SW-226	WL-SWF-226	WL-SW-227	WL-SWF-227	WL-SW-228	WL-SWF-228	WL-RSW-229
Sample Date:	7/1/2014	6/27/2014	6/27/2014	7/1/2014	7/1/2014	7/1/2014	7/1/2014	6/27/2014	6/27/2014	6/30/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane		0.50 U		0.50 U		0.50 U		0.50 U		
1,1-Dichloroethane		0.50 U		0.50 U		0.50 U		0.50 U		
1,1-Dichloroethene		0.50 U		0.50 U		0.50 U		0.50 U		
2-Butanone		5.0 U		5.0 U		5.0 U		5.0 U		
Acetone		5.0 U		2.2 J		1.8 J		5.0 U		
Benzene		0.50 U		0.50 U		0.50 U		0.50 U		
Bromodichloromethane		0.47 J		0.20 J		0.25 J		0.36 J		
Carbon disulfide		0.50 U		0.50 U		0.50 U		0.50 U		
Chloroform		2.2 J		1.1 U		1.3 U		1.9 J		
Chloromethane		0.50 U		0.50 U		0.50 U		0.50 U		
cis-1,2-Dichloroethene		0.16 J		0.50 U		0.50 U		0.17 J		
Dibromochloromethane		0.12 J		0.50 U		0.50 U		0.50 U		
Dichlorodifluoromethane		0.50 U		0.50 U		0.50 U		0.50 U		
m,p-Xylene		0.50 U		0.50 U		0.50 U		0.50 U		
Methyl acetate		0.50 U		0.50 U		0.50 U		0.50 U		
Tetrachloroethene		0.50 U		0.50 U		0.50 U		0.50 U		
Toluene		0.50 U		0.50 U		0.50 U		0.50 U		
Trichloroethene		0.051 J		0.029 J		0.032 J		0.075 J		
Vinyl chloride		0.015 U		0.015 U		0.015 U		0.015 U		
1,4-Dioxane (ug/L)										
1,4-Dioxane		0.17		0.19		0.11		0.13		
Inorganics, Dissolved (ug/L)										
Aluminum	20.0 U		20.0 U		20.0 U		20.0 U		20.0 U	
Antimony	0.63 J		2.0 U		0.65 J		0.77 J		2.0 U	
Arsenic	0.47 J		0.29 J		0.47 J		0.45 J		0.33 J	
Barium	24.0		29.7		23.6		24.3		27.9	
Beryllium	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U	
Cadmium	0.034 J		0.040 U		0.035 J		0.033 J		0.11 U	
Calcium	24500		22700 J		23800		24000		23600 J	
Chromium	2.0 U		2.0 U		2.0 U		2.0 U		2.0 U	
Chromium, Hexavalent	0.50 U		0.10 U		0.50 U		0.60 J		0.15	
Cobalt	1.0 UJ		1.0 U		1.0 UJ		1.0 UJ		1.0 U	
Copper	2.1		2.1 J		2.5		2.2		2.0 UJ	
Iron	322		200 U		200 U		200 U		200 U	
Lead	0.27		0.20 U		0.28		0.24		0.20 U	
Magnesium	4090		4180 J		4030		4090		4280 J	
Manganese	108		146		23.2		16.8		106	
Mercury	0.20 U		0.20 U		0.20 U		0.20 U		0.20 U	
Nickel	1.9 J		1.9		2.8 J		2.7 J		1.8	
Potassium	10200		9040		9250		9280		9350	
Selenium	5.0 U		5.0 UJ		0.37 J		0.31 J		5.0 UJ	
Silver	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U	
Sodium	97000 J		93100		102000 J		103000 J		96100	
Vanadium	0.71 J		5.0 UJ		0.66 J		0.58 J		5.0 UJ	
Zinc	5.2		8.6 J+		5.6		3.8		10.6 J+	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-224	SD-225	SD-225	SD-226	SD-226	SD-227	SD-227	SD-228	SD-228	SD-229
Sample ID:	WL-SWF-224	WL-SW-225	WL-SWF-225	WL-SW-226	WL-SWF-226	WL-SW-227	WL-SWF-227	WL-SW-228	WL-SWF-228	WL-RSW-229
Sample Date:	7/1/2014	6/27/2014	6/27/2014	7/1/2014	7/1/2014	7/1/2014	7/1/2014	6/27/2014	6/27/2014	6/30/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum		53.3 J		20.0 U		1160		29.5 J		825 J-
Antimony		2.0 U		0.40 J		0.69 J		2.0 U		2.0 UJ
Arsenic		0.38 J		1.0 U		1.0 U		0.37 J		1.2 J-
Barium		31.0		26.4		51.0		28.0		135 J-
Beryllium		1.0 U		1.0 U		0.12 J+		1.0 U		0.23 J
Cadmium		0.027 J		0.047 U		0.49		0.10		0.79 J-
Calcium		22700		23800		25100		22600		37700 J-
Chromium		3.1		2.0 U		34.5		2.1		2.3 J-
Chromium, Hexavalent		0.10 U		0.40 J		0.40 J		0.13		0.10 U
Cobalt		1.0 U		1.0 U		1.3		1.0 U		3.4 J-
Copper		2.9 J		2.6		20.8		2.5 J		9.5 J
Cyanide		4.4 J		3.1 J		2.5 UJ		4.5 J		4.2 J
Iron		669		272		2230		582		8520 J
Lead		0.99		0.79		10.3		0.61		13.7 J-
Magnesium		4250		4290		4720		4190		6510 J-
Manganese		157		66.4		472		134		2630 J-
Mercury		0.20 U		0.20 U		0.20 U		0.20 U		0.20 UJ
Nickel		2.1		2.8		6.5		2.1		6.1 J
Potassium		8860		9380		9870		8780		2390 J-
Selenium		0.27 J		0.52 J		0.72 J		0.26 J		0.31 J-
Silver		1.0 U		1.0 U		1.0		1.0 U		1.0 UJ
Sodium		93800		106000		110000		93800		145000 J-
Thallium		1.0 U		1.0 U		1.0 U		1.0 U		1.0 UJ
Vanadium		0.50 J		0.67 J		1.3 J		5.0 U		4.9 J-
Zinc		10.1 J		8.9 J+		43.8 J+		11.1 J		91.2 J
Other										
Alkalinity (mg/L)		49		56.2		52.7		50		
Dissolved Organic Carbon (mg/L)										
Dissolved oxygen, field (mg/L)		12.8		12.18		7.94		12.58		3.59
Hardness as CaCO3, Calculated (mg/L)	78.0	74.2	73.9 J	77.1	76.0	82.1	76.8	73.7	76.5 J	121
ORP, field (mV)		212		211		212.5		151.6		102.6
pH, field (S.U.)		7.16		8.38		7.35		7.31		6.36
Spec. cond., field (umho/cm)		656		757		601		700		1006
Temperature, field (deg C)		22.23		26.37		23.66		22.8		24.8
Turbidity, field (N.T.U.)		7.84		3.69		13.7		14.3		12.2
Water Depth, field (in.)		36		48-60		14		12		12

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-229	SD-229	SD-231	SD-231	SD-232	SD-232	SD-233	SD-233	SD-234	SD-234
Sample ID:	WL-RSWF-229	WL-SW-229	WL-SW-231-2	WL-SWF-231-2	WL-SW-232-2	WL-SWF-232-2	WL-SW-233-2	WL-SWF-233-2	WL-SW-234	WL-SWF-234
Sample Date:	6/30/2014	6/20/2014	11/4/2014	11/4/2014	11/4/2014	11/4/2014	11/4/2014	11/4/2014	6/30/2014	6/30/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field sample	Field Sample	Field sample	Field Sample	Field sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U	
1,1-Dichloroethane		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U	
1,1-Dichloroethene		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U	
2-Butanone		5.0 U	5.0 U		5.0 U		5.0 U		5.0 U	
Acetone		1.4 J	5.0 U		5.0 U		5.0 U		5.0 U	
Benzene		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U	
Bromodichloromethane		0.10 J	0.50 U		0.50 U		0.50 U		0.98	
Carbon disulfide		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U	
Chloroform		0.50 U	0.50 U		0.50 U		0.50 U		4.1	
Chloromethane		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U	
cis-1,2-Dichloroethene		0.50 U	0.50 U		0.50 U		0.13 J		0.50 U	
Dibromochloromethane		0.50 U	0.50 U		0.50 U		0.50 U		0.25 J	
Dichlorodifluoromethane		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U	
m,p-Xylene		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U	
Methyl acetate		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U	
Tetrachloroethene		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U	
Toluene		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U	
Trichloroethene		0.15 U	0.15		0.15		0.91		0.12 J	
Vinyl chloride		0.015 U	0.015 U		0.015 U		0.015 U		0.015 U	
1,4-Dioxane (ug/L)										
1,4-Dioxane		0.10 U	0.10 UJ		0.10 UJ		0.10 UJ		0.21	
Inorganics, Dissolved (ug/L)										
Aluminum	20.0 UJ			20.0 U		20.0 U		20.0 U		20.0 UJ
Antimony	0.45 J-			2.0 U		2.0 U		2.0 U		0.45 J-
Arsenic	0.34 J-			0.22 J		0.25 J		0.32 J		0.34 J-
Barium	78.5 J-			65.3		66.8		67.5		27.4 J-
Beryllium	1.0 UJ			1.0 U		1.0 U		1.0 U		1.0 UJ
Cadmium	0.040 UJ			0.081 J		0.10 J		0.14 J		0.041 J-
Calcium	32900 J-			39300		39600		38100		24200 J-
Chromium	0.35 J-			0.12 J-		0.088 J-		0.14 J-		0.19 J-
Chromium, Hexavalent	0.10 UJ			0.50 U		0.50 U		0.50 U		0.10 U
Cobalt	1.3 J			1.0 U		1.0 U		2.3		1.0 UJ
Copper	2.0 UJ			2.0 UJ		2.0 UJ		2.0 UJ		3.2 J
Iron	510 J-			200 U		200 U		423		200 UJ
Lead	0.20 UJ			0.20 U		0.20 U		0.20 U		0.20 UJ
Magnesium	6300 J-			7400		7400		6480		4290 J-
Manganese	1910 J-			315		508		999		146 J-
Mercury	0.20 UJ			0.20 UJ		0.20 UJ		0.20 UJ		0.20 UJ
Nickel	1.5 J			3.1		3.2		4.4		2.6 J
Potassium	2160 J-			2140		2090		1990		11700 J-
Selenium	5.0 UJ			5.0 U		5.0 U		5.0 U		0.28 J-
Silver	1.0 UJ			1.0 U		1.0 U		1.0 U		1.0 UJ
Sodium	128000 J			55500		53300		53000		107000 J
Vanadium	5.0 UJ			5.0 U		5.0 U		5.0 U		0.48 J-
Zinc	9.4 J-			29.2 J		28.0 J		33.4 J		13.0 J-

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-229	SD-229	SD-231	SD-231	SD-232	SD-232	SD-233	SD-233	SD-234	SD-234
Sample ID:	WL-RSWF-229	WL-SW-229	WL-SW-231-2	WL-SWF-231-2	WL-SW-232-2	WL-SWF-232-2	WL-SW-233-2	WL-SWF-233-2	WL-SW-234	WL-SWF-234
Sample Date:	6/30/2014	6/20/2014	11/4/2014	11/4/2014	11/4/2014	11/4/2014	11/4/2014	11/4/2014	6/30/2014	6/30/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field sample	Field Sample	Field sample	Field Sample	Field sample	Field Sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum			436		20.0 U		26.1 U		71.6 J-	
Antimony			2.0 U		2.0 U		2.0 U		0.36 J-	
Arsenic			1.0 U		1.0 U		1.0 U		0.38 J-	
Barium			73.1 J		79.7 J		77.1 J		29.2 J-	
Beryllium			1.0 U		1.0 U		1.0 U		1.0 UJ	
Cadmium			0.40 U		0.40 U		0.40 U		0.062 UJ	
Calcium			38400 J		43400 J		40300 J		24200 J-	
Chromium			2.0 UJ		2.0 UJ		2.0 UJ		0.59 J-	
Chromium, Hexavalent			0.50 U		0.50 U		0.50 U		0.10 U	
Cobalt			1.0 U		1.1		2.8		1.0 UJ	
Copper			2.9 J		2.0 UJ		2.0 UJ		5.8 J	
Cyanide			2.7		2.5		4.3		3.8 J	
Iron			1310		301		645		417 J	
Lead			5.8		0.21 U		0.30 U		1.1 J-	
Magnesium			7710 J		8300 J		7270 J		4180 J-	
Manganese			408 J		596 J		1120 J		152 J-	
Mercury			0.20 UJ		0.20 UJ		0.20 UJ		0.20 UJ	
Nickel			3.6		3.8		5.0		2.6 J	
Potassium			2240		2340		2170		12000 J-	
Selenium			5.0 U		5.0 U		5.0 U		5.0 UJ	
Silver			1.0 U		1.0 U		1.0 U		1.0 UJ	
Sodium			163000 J		157000 J		155000 J		107000 J-	
Thallium			1.0 U		1.0 U		1.0 U		1.0 UJ	
Vanadium			1.3 J		5.0 U		5.0 U		0.59 J-	
Zinc			34.1		37.4		38.3		16.9 J	
Other										
Alkalinity (mg/L)		20	15		14		15		59.6	
Dissolved Organic Carbon (mg/L)										
Dissolved oxygen, field (mg/L)		6.81	8.33		7.69		8.67		11.39	
Hardness as CaCO3, Calculated (mg/L)	108		128 J	129	143 J	129	131 J	122	77.6 J-	78.1 J-
ORP, field (mV)		266.7	93.1		101.4		82.6		NR	
pH, field (S.U.)		7.29	6.41		6.50		6.48		6.89	
Spec. cond., field (umho/cm)		873	1123		1160		1137		759	
Temperature, field (deg C)		22.25	9.62		10.44		11.41		22.05	
Turbidity, field (N.T.U.)		7.75	0.4		0.6		0.4		3.63	
Water Depth, field (in.)		12	8		5		8		24	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-235	SD-235	SD-236	SD-236	SD-237	SD-237	SD-238	SD-238	SD-239	SD-239
Sample ID:	WL-SW-235	WL-SWF-235	WL-SW-236	WL-SWF-236	WL-SW-237	WL-SWF-237	WL-SW-238	WL-SWF-238	WL-RSW-239	WL-RSWF-239
Sample Date:	6/30/2014	6/30/2014	7/9/2014	7/9/2014	7/9/2014	7/9/2014	7/1/2014	7/1/2014	6/30/2014	6/30/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U		0.50 U		0.50 U		0.50 U			
1,1-Dichloroethane	0.50 U		0.50 U		0.50 U		0.50 U			
1,1-Dichloroethene	0.50 U		0.50 U		0.50 U		0.50 U			
2-Butanone	5.0 U		5.0 U		5.0 U		5.0 U			
Acetone	5.0 U		1.8 J		1.4 J		1.2 J			
Benzene	0.50 U		0.50 U		0.50 U		0.50 U			
Bromodichloromethane	0.87		0.50 U		0.50 U		0.50 U			
Carbon disulfide	0.50 U		0.50 U		0.50 U		0.50 U			
Chloroform	3.9		0.50 U		0.50 U		0.50 U			
Chloromethane	0.50 U		0.50 U		0.50 U		0.50 U			
cis-1,2-Dichloroethene	0.50 U		0.50 U		0.50 U		0.50 U			
Dibromochloromethane	0.21 J		0.50 U		0.50 U		0.50 U			
Dichlorodifluoromethane	0.50 U		0.50 U		0.50 U		0.50 U			
m,p-Xylene	0.50 U		0.50 U		0.50 U		0.50 U			
Methyl acetate	0.50 U		0.50 U		0.50 U		0.50 U			
Tetrachloroethene	0.50 U		0.50 U		0.50 U		0.50 U			
Toluene	0.50 U		0.50 U		0.50 U		0.50 U			
Trichloroethene	0.13 J		0.0057 J		0.15 U		0.15 U			
Vinyl chloride	0.015 U		0.010 J		0.015 U		0.015 U			
1,4-Dioxane (ug/L)										
1,4-Dioxane	0.25		0.10 U		0.10 U		0.10 U			
Inorganics, Dissolved (ug/L)										
Aluminum		20.0 U		20.3		20.0 U		20.0 U		20.0 UJ
Antimony		0.61 J		2.0 U		2.0 U		0.47 J		0.46 J-
Arsenic		0.40 J		0.38 J		0.40 J		0.31 J		0.31 J-
Barium		36.6		26.5		32.6		32.2		79.6 J-
Beryllium		1.0 U		1.0 U		1.0 U		1.0 U		1.0 UJ
Cadmium		0.037 J		0.040 U		0.040 U		2.0		0.040 UJ
Calcium		25700		17200 J		18000 J		18800		32800 J-
Chromium		2.0 U		2.0 U		2.0 U		2.0 U		0.060 J-
Chromium, Hexavalent		0.10 U		0.50 U		0.50 U		0.50 U		0.10 UJ
Cobalt		1.0 UJ		1.0 U		1.0 U		1.0 UJ		1.2 J
Copper		3.0		2.0 UJ		2.0 UJ		2.0 U		2.0 UJ
Iron		393		371		310		200 U		705 J-
Lead		0.23		0.46		0.20 U		0.12 J		0.20 UJ
Magnesium		4100		3260 J		3340 J		3550		6320 J-
Manganese		202		227		318		317		1870 J-
Mercury		0.20 U		0.20 U		0.20 U		0.20 U		0.20 UJ
Nickel		3.2 J		1.0 U		1.0 U		0.64 J		1.5 J
Potassium		12700		1880		1970		2020		2210 J-
Selenium		0.28 J		5.0 U		5.0 U		5.0 U		5.0 UJ
Silver		1.0 U		1.0 U		1.0 U		1.0 U		1.0 UJ
Sodium		108000 J		51600		54500		60400 J		139000 J
Vanadium		0.90 J		0.69 J		0.55 J		0.52 J		5.0 UJ
Zinc		12.5		13.4 J+		5.9 J+		6.0		9.2 J-

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-235	SD-235	SD-236	SD-236	SD-237	SD-237	SD-238	SD-238	SD-239	SD-239
Sample ID:	WL-SW-235	WL-SWF-235	WL-SW-236	WL-SWF-236	WL-SW-237	WL-SWF-237	WL-SW-238	WL-SWF-238	WL-RSW-239	WL-RSWF-239
Sample Date:	6/30/2014	6/30/2014	7/9/2014	7/9/2014	7/9/2014	7/9/2014	7/1/2014	7/1/2014	6/30/2014	6/30/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum	78.2		216 J		53.9 J		29.4 U		20.0 UJ	
Antimony	0.41 J		2.0 U		2.0 U		0.42 J		2.0 UJ	
Arsenic	1.0 U		0.83 J		0.55 J		1.0 U		0.34 J-	
Barium	33.0		38.4		34.0		35.4		79.6 J-	
Beryllium	1.0 U		1.0 U		1.0 U		1.0 U		1.0 UJ	
Cadmium	0.091 U		0.067		0.040 U		0.040 U		0.040 UJ	
Calcium	26100		19400		18000		19400		32700 J-	
Chromium	2.0 U		2.0 U		2.0 U		2.0 U		2.0 UJ	
Chromium, Hexavalent	0.10 U		0.50 U		0.50 U		0.50 UJ		0.10 U	
Cobalt	1.0 U		1.0 U		1.0 U		1.0 U		1.3 J-	
Copper	6.3		3.5 J		2.0 UJ		2.0 U		2.0 UJ	
Cyanide	2.6 J		3.1 U		2.5 U		2.0 J		2.7 J	
Iron	618		2450		1170		1150		1690 J	
Lead	1.3		7.0		1.3		1.1		0.42 J-	
Magnesium	4420		3630		3400		3890		6230 J-	
Manganese	158		596		371		325		1810 J-	
Mercury	0.20 U		0.20 U		0.20 U		0.20 U		0.20 UJ	
Nickel	3.2		1.6		1.0 U		1.0 U		1.6 J	
Potassium	12700		2060		1970		2120		2180 J-	
Selenium	0.34 J		5.0 U		5.0 U		5.0 U		5.0 UJ	
Silver	1.0 U		1.0 U		1.0 U		1.0 U		1.0 UJ	
Sodium	114000		56000		53500		64000		131000 J-	
Thallium	1.0 U		1.0 U		1.0 U		1.0 U		1.0 UJ	
Vanadium	0.72 J		2.1 J		0.96 J		0.82 J		5.0 UJ	
Zinc	16.8 J+		8.7 J		5.3 J		13.8 J+		8.2 J	
Other										
Alkalinity (mg/L)	57.1		20		21.1		38.1			
Dissolved Organic Carbon (mg/L)										
Dissolved oxygen, field (mg/L)	10.15		6.22		3.8		6.18		4.11	
Hardness as CaCO3, Calculated (mg/L)	83.4	81.1	63.4	56.4 J	58.9	58.7 J	64.4	61.5	107 J-	108 J-
ORP, field (mV)	NR		NR		NR		153.6		101.7	
pH, field (S.U.)	6.83		6.57		6.61		6.57		6.39	
Spec. cond., field (umho/cm)	764		430		435		457		1008	
Temperature, field (deg C)	22.39		26.01		26.18		23.88		24.71	
Turbidity, field (N.T.U.)	3.53		20.4		NR		8.6		11.7	
Water Depth, field (in.)	18		18		24		18		6	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-239	SD-240	SD-240	SD-240	SD-240	SD-242	SD-242	SD-301	SD-301	SD-302
Sample ID:	WL-SW-239	WL-SW-240-2	WL-SW-3-240	WL-SWF-240-2	WL-SWF-3-240	WL-SW-242	WL-SWF-242	WL-SW-301-2	WL-SWF-301-2	WL-SW-302-2
Sample Date:	6/20/2014	11/4/2014	7/21/2015	11/4/2014	7/21/2015	7/9/2014	7/9/2014	11/3/2014	11/3/2014	11/3/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field sample	Field Sample	Field Sample	Field Sample	Field Sample	Field sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U			0.50 U		0.17 J		0.50 U
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
2-Butanone	5.0 U	5.0 U	5.0 U			5.0 U		5.0 U		5.0 U
Acetone	1.1 J	5.0	9.1			5.0 U		7.5		5.0 U
Benzene	0.50 U	0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
Bromodichloromethane	0.10 J	0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
Carbon disulfide	0.50 U	0.50 U	0.50 UJ			0.50 U		0.50 U		0.50 U
Chloroform	0.50 U	0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
Chloromethane	0.50 U	0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
cis-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U			0.50 U		1.9		0.33 J
Dibromochloromethane	0.50 U	0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
Dichlorodifluoromethane	0.50 U	0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
m,p-Xylene	0.50 U	0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
Methyl acetate	0.50 U	0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
Tetrachloroethene	0.50 U	0.50 U	0.50 U			0.50 U		0.50 U		0.50 U
Toluene	0.50 U	1.2	19			0.50 U		0.18 J		0.50 U
Trichloroethene	0.0044 J	0.15 U	0.50 U			0.15 U		0.98		0.17
Vinyl chloride	0.012 J	0.015 U	0.50 U			0.015 U		0.015 U		0.015 U
1,4-Dioxane (ug/L)										
1,4-Dioxane	0.10 U	0.10 UJ	0.10 U			0.10 U		1.0 J		0.10 UJ
Inorganics, Dissolved (ug/L)										
Aluminum				47.1	196 J		20.0 U		103	
Antimony				2.0 U	2.0 U		2.0 U		2.0 U	
Arsenic				0.31 J	1.0 U		0.38 J		0.72 J	
Barium				40.6	76.1		29.8		51.3	
Beryllium				1.0 U	1.0 U		1.0 U		1.0 U	
Cadmium				0.40 U	1.0 U		0.040 U		0.049 J	
Calcium				18200	26000		17400 J		14900	
Chromium				1.1 J	2.0 UJ		2.0 U		44.0	
Chromium, Hexavalent				0.50 U	0.50 U		0.50 U		1.04	
Cobalt				1.0 U	1.1		1.0 U		9.6	
Copper				2.0 UJ	1.9 J		2.0 UJ		5.0 J	
Iron				1280	3330		320		1500	
Lead				0.21	3.6		0.30		4.3	
Magnesium				4560	4890		3330 J		2640	
Manganese				664	962		271		384	
Mercury				0.20 UJ	0.20 U		0.20 U		0.20 UJ	
Nickel				1.8	1.8 J		1.0 U		6.7	
Potassium				2650	3440		1910		6930	
Selenium				5.0 U	5.0 U		5.0 U		5.0 U	
Silver				1.0 U	0.036 J		1.0 U		1.0 U	
Sodium				75100	99000		52100		48200	
Vanadium				5.0 U	5.0 U		0.64 J		5.0 U	
Zinc				14.0 J	15.1 J+		7.9 J+		16.5 J	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-239	SD-240	SD-240	SD-240	SD-240	SD-242	SD-242	SD-301	SD-301	SD-302
Sample ID:	WL-SW-239	WL-SW-240-2	WL-SW-3-240	WL-SWF-240-2	WL-SWF-3-240	WL-SW-242	WL-SWF-242	WL-SW-301-2	WL-SWF-301-2	WL-SW-302-2
Sample Date:	6/20/2014	11/4/2014	7/21/2015	11/4/2014	7/21/2015	7/9/2014	7/9/2014	11/3/2014	11/3/2014	11/3/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field sample	Field Sample	Field Sample	Field Sample	Field Sample	Field sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum		13900	1460			39.9 J		3840		194
Antimony		1.3 J	2.0 U			2.0 U		2.1		1.1 J
Arsenic		10.0	1.4			0.54 J		1.9		1.0 U
Barium		254 J	95.6			31.2		95.2 J		57.0 J
Beryllium		2.7	1.0 U			1.0 U		1.0 U		1.0 U
Cadmium		4.2 J	1.0 U			0.040 U		0.40 U		0.40 U
Calcium		40700 J	26600			17600		17000 J		17100 J
Chromium		40.0 J	3.1 J			2.0 U		551 J		22.2 J
Chromium, Hexavalent		0.50 U	0.50 U			0.50 U		1.55		0.50 U
Cobalt		11.5 J	2.1			1.0 U		19.9		3.8
Copper		86.7 J	10.5			2.0 UJ		22.1 J		2.6 J
Cyanide		1.8 J	R			2.5 U		2.1 J		2.5 U
Iron		23100 J	5670			1050		7240		1650
Lead		417	34.6			1.3		107		7.9
Magnesium		7800 J	5050			3320		3610 J		3380 J
Manganese		2790 J	996			289		528 J		910 J
Mercury		0.41 J-	0.20 U			0.20 U		0.20 UJ		0.20 UJ
Nickel		44.8 J	5.1 J			1.0 U		13.2		6.3
Potassium		4780	2810			1910		7740		3790
Selenium		4.1 J	0.47 J			5.0 U		0.62 J		5.0 U
Silver		2.0 J	0.25 J			1.0 U		9.7		1.1
Sodium		61000 J	97900			51900		49900 J		74900 J
Thallium		2.0 U	1.0 U			1.0 U		1.0 U		1.0 U
Vanadium		58.1	6.4			0.89 J		5.0 U		5.0 U
Zinc		377 J	81.1			6.7 J		52.6		13.2
Other										
Alkalinity (mg/L)	18	6.3	8.3 U			19.6		12.8		15.5
Dissolved Organic Carbon (mg/L)			12							
Dissolved oxygen, field (mg/L)	6.91	3.30	0.62			4.55		9.77		9.74
Hardness as CaCO3, Calculated (mg/L)		134 J	87.2	64.2	85	57.6	57.1 J	57.3 J	48.1	56.6 J
ORP, field (mV)	279.4	-24.6	44.7			NR		112.7		55.2
pH, field (S.U.)	7.1	6.04	5.65			6.8		6.63		7.38
Spec. cond., field (umho/cm)	749	588	752			424		366		529
Temperature, field (deg C)	22.06	16.29	23.9			24.57		6.98		6.84
Turbidity, field (N.T.U.)	10.1	434	321			4.92		63.3		9.87
Water Depth, field (in.)	12	10	8			12		5		10

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-302	SD-303	SD-303	SD-304	SD-304	SD-305	SD-305	SD-305	SD-305	SD-306
Sample ID:	WL-SWF-302-2	WL-SW-303-2	WL-SWF-303-2	WL-SW-304-2	WL-SWF-304-2	WL-SW-305-2	WL-SW-3-305	WL-SWF-305-2	WL-SWF-3-305	WL-SW-306-2
Sample Date:	11/3/2014	11/3/2014	11/3/2014	11/3/2014	11/3/2014	10/28/2014	7/21/2015	10/28/2014	7/21/2015	10/28/2014
Sample Type:	Field sample	Field Sample	Field sample	Field Sample	Field sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane		0.50 U		0.50 U		0.50 U	0.50 U			0.50 U
1,1-Dichloroethane		0.50 U		0.50 U		0.50 U	0.50 U			0.50 U
1,1-Dichloroethene		0.50 U		0.50 U		0.50 U	0.50 U			0.50 U
2-Butanone		5.0 U		5.0 U		5.0 U	5.0 U			5.0 U
Acetone		3.1 J		5.0 U		13	5.0 U			5.0 U
Benzene		0.50 U		0.50 U		0.50 U	0.50 U			0.50 U
Bromodichloromethane		0.50 U		0.50 U		0.50 U	0.50 U			0.50 U
Carbon disulfide		0.50 U		0.50 U		0.50 U	0.50 UJ			0.50 U
Chloroform		0.50 U		0.50 U		0.50 U	0.50 U			1.3 U
Chloromethane		0.20 J		0.50 U		0.50 U	0.50 U			0.50 U
cis-1,2-Dichloroethene		0.19 J		0.14 J		0.50 U	0.50 U			0.50 U
Dibromochloromethane		0.50 U		0.50 U		0.50 U	0.50 U			0.50 U
Dichlorodifluoromethane		0.50 U		0.50 U		0.50 U	0.50 U			0.50 U
m,p-Xylene		0.50 U		0.50 U		0.50 U	0.50 U			0.50 U
Methyl acetate		0.50 U		0.50 U		1.6	0.50 U			0.50 U
Tetrachloroethene		0.50 U		0.50 U		0.50 U	0.50 U			0.50 U
Toluene		0.50 U		0.50 U		4.4	0.50 U			0.50 U
Trichloroethene		0.17		0.15 U		0.15 U	0.50 U			0.15 UJ
Vinyl chloride		0.015 U		0.015 U		0.015 U	0.50 U			0.015 UJ
1,4-Dioxane (ug/L)										
1,4-Dioxane		0.10 UJ		1.0 J		0.72 J+	0.10 U			0.10 U
Inorganics, Dissolved (ug/L)										
Aluminum	105		20.0 U		432			134	20.0 UJ	
Antimony	2.0 U		2.0 U		2.0 U			2.0 U	2.0 U	
Arsenic	0.45 J		0.47 J		1.4			1.2	1.0 U	
Barium	49.2		43.3		45.5			54.1	39.9	
Beryllium	1.0 U		1.0 U		1.0 U			1.0 U	1.0 U	
Cadmium	0.40 U		0.40 U		0.042 J			0.40 U	1.0 U	
Calcium	15600		15900		14500			19200	20900	
Chromium	11.2		12.4		69.4			10.6	5.1 J	
Chromium, Hexavalent	0.50 U		0.50 U		0.50 U			0.50 U	0.50 U	
Cobalt	3.2		2.8		5.9			1.0 UJ	1.0 U	
Copper	2.0 UJ		2.0 UJ		4.2 J			2.5	0.52 J	
Iron	573		474		3210			13100	827	
Lead	2.1		0.88		14.6			4.9 J	1.0 U	
Magnesium	3010		3130		2780			3830	4100	
Manganese	912		694		531			768	334	
Mercury	0.20 UJ		0.20 UJ		0.20 UJ			R	0.20 U	
Nickel	5.2		5.1		6.2			2.0 J	1.0 UJ	
Potassium	3480		3580		5150			3000	1970	
Selenium	5.0 U		5.0 U		5.0 U			5.0 U	5.0 U	
Silver	1.0 U		1.0 U		3.0			1.0 U	1.0 U	
Sodium	71700		72200		58100			40600	67000	
Vanadium	5.0 U		5.0 U		5.0 U			1.1 J	5.0 U	
Zinc	11.9 J		11.9 J		14.5 J			13.5 J	5.4 J+	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-302	SD-303	SD-303	SD-304	SD-304	SD-305	SD-305	SD-305	SD-305	SD-306
Sample ID:	WL-SWF-302-2	WL-SW-303-2	WL-SWF-303-2	WL-SW-304-2	WL-SWF-304-2	WL-SW-305-2	WL-SW-3-305	WL-SWF-305-2	WL-SWF-3-305	WL-SW-306-2
Sample Date:	11/3/2014	11/3/2014	11/3/2014	11/3/2014	11/3/2014	10/28/2014	7/21/2015	10/28/2014	7/21/2015	10/28/2014
Sample Type:	Field sample	Field Sample	Field sample	Field Sample	Field sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum		736		3130		92.6 J	128			27.5 UJ
Antimony		2.3		2.3		2.0 U	2.0 U			2.0 U
Arsenic		1.1		2.3		1.0 U	1.0 U			1.0 U
Barium		62.4 J		82.4 J		25.0	49.5			35.1
Beryllium		1.0 U		1.0 U		1.0 U	1.0 U			1.0 U
Cadmium		0.40 U		0.40 U		0.40 U	1.0 U			0.40 U
Calcium		17800 J		16600 J		8450	22100			25400
Chromium		446 J		489 J		8.1 J	19.9 J			2.5 J
Chromium, Hexavalent		0.52		0.60		0.50 U	0.50 U			0.30 J
Cobalt		5.0		13.9		1.0 UJ	1.0 U			1.0 UJ
Copper		10.2 J		23.8 J		2.7 J	1.9 J			3.0 J
Cyanide		3.1		4.1		1.6 J-	R			2.5 UJ
Iron		2890		7920		7130	2130			351
Lead		36.8		105		3.9 J	4.4			0.54 UJ
Magnesium		3690 J		3800 J		1590	4460			4720
Manganese		856 J		752 J		323	553			171
Mercury		0.20 UJ		0.20 UJ		R	0.20 U			R
Nickel		8.0		12.7		1.1 J	1.1 J			2.6 J
Potassium		3900		5720		1230	2120			8340
Selenium		5.0 U		0.38 J		5.0 U	5.0 U			5.0 U
Silver		8.4		17.3		1.3 J	0.21 J			1.0 UJ
Sodium		75900 J		59000 J		17000 J	71800			78200 J
Thallium		1.0 U		1.0 U		1.0 U	1.0 U			1.0 U
Vanadium		5.0 U		5.0 U		0.83 J	5.0 U			5.0 U
Zinc		30.0		62.3		13.6 J+	12.6 J+			21.9 J+
Other										
Alkalinity (mg/L)		15.7		22.7		54.4	18			39.6
Dissolved Organic Carbon (mg/L)							4.1			
Dissolved oxygen, field (mg/L)		7.25		6.02		0.75	4.57			4.25
Hardness as CaCO3, Calculated (mg/L)	51.3	59.6 J	52.6	57.1 J	47.6	27.6	73.5	63.7	69.1	82.8
ORP, field (mV)		59.1		-45		-6.3	98.6			124.5
pH, field (S.U.)		6.35		6.45		6.28	6.61			7.08
Spec. cond., field (umho/cm)		555		444		289	553			615
Temperature, field (deg C)		4.19		9.18		11.58	25.87			15.40
Turbidity, field (N.T.U.)		7.18		31.5		58	5.89			7.3
Water Depth, field (in.)		12		5		6	6			10

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-306	SD-307	SD-307	SD-308	SD-308	SD-309	SD-309	SD-310	SD-310	SD-311
Sample ID:	WL-SWF-306-2	WL-SW-307-2	WL-SWF-307-2	WL-SW-308-2	WL-SWF-308-2	WL-SW-309-2	WL-SWF-309-2	WL-SW-310-2	WL-SWF-310-2	WL-SW-311-2
Sample Date:	10/28/2014	11/3/2014	11/3/2014	11/3/2014	11/3/2014	10/29/2014	10/29/2014	11/5/2014	11/5/2014	10/29/2014
Sample Type:	Field Sample	Field Sample	Field sample	Field Sample	Field sample	Field Sample	Field Sample	Field Sample	Field sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U
1,1-Dichloroethane		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U
1,1-Dichloroethene		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U
2-Butanone		5.0 U		5.0 U		5.0 U		5.0 U		5.0 U
Acetone		5.0 U		5.0 U		5.0 U		5.0 U		5.0 U
Benzene		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U
Bromodichloromethane		0.24 J		0.50 U		0.24 J		0.22 J		0.28 J
Carbon disulfide		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U
Chloroform		0.50 U		0.50 U		1.3 U		0.93 U		1.3 U
Chloromethane		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U
cis-1,2-Dichloroethene		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U
Dibromochloromethane		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U
Dichlorodifluoromethane		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U
m,p-Xylene		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U
Methyl acetate		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U
Tetrachloroethene		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U
Toluene		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U
Trichloroethene		0.15 U		0.15 U		0.15 U		0.15 U		0.15 U
Vinyl chloride		0.015 U		0.015 U		0.015 U		0.015 U		0.015 U
1,4-Dioxane (ug/L)										
1,4-Dioxane		0.90 J		0.10 UJ		0.63 J+		0.79 J		0.52 J+
Inorganics, Dissolved (ug/L)										
Aluminum	20.0 U		20.0 U		20.0 U		20.0 U		20.0 U	
Antimony	2.0 U		2.0 U		2.0 U		2.0 U		2.0 U	
Arsenic	1.0 U		0.35 J		0.30 J		1.0 U		0.32 J	
Barium	35.2		25.9		25.8		39.2		27.0	
Beryllium	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U	
Cadmium	0.40 U		0.035 J		0.038 J		0.40 U		0.40 U	
Calcium	25800		22100		22900		32100		22600	
Chromium	2.0 U		1.7 J		1.1 J		2.0 U		0.91 J	
Chromium, Hexavalent	0.50 U		0.92		0.43 J		0.50 U		0.50 U	
Cobalt	1.0 UJ		1.0 U		1.0 U		1.0 UJ		1.0 U	
Copper	2.2		2.3 J		2.6 J		3.4		2.0 UJ	
Iron	200 U		200 U		200 U		200 U		200 U	
Lead	0.23 UJ		0.20 U		0.21		0.22 UJ		0.20 U	
Magnesium	5220		4290		4340		6300		4400	
Manganese	181		97.5		22.7		166		81.7	
Mercury	R		0.20 UJ		0.20 UJ		R		0.20 UJ	
Nickel	2.5 J		1.9		2.5		3.4 J		1.9	
Potassium	8530		6790		8990		10600		6960	
Selenium	5.0 U		5.0 U		5.0 U		0.27		5.0 U	
Silver	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U	
Sodium	79400		78300		86500		106000		78500	
Vanadium	5.0 U		5.0 U		5.0 U		5.0 U		5.0 U	
Zinc	17.0 J		10.5 J		10.5 J		19.3 J		10.7 J	

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-306	SD-307	SD-307	SD-308	SD-308	SD-309	SD-309	SD-310	SD-310	SD-311
Sample ID:	WL-SWF-306-2	WL-SW-307-2	WL-SWF-307-2	WL-SW-308-2	WL-SWF-308-2	WL-SW-309-2	WL-SWF-309-2	WL-SW-310-2	WL-SWF-310-2	WL-SW-311-2
Sample Date:	10/28/2014	11/3/2014	11/3/2014	11/3/2014	11/3/2014	10/29/2014	10/29/2014	11/5/2014	11/5/2014	10/29/2014
Sample Type:	Field Sample	Field Sample	Field sample	Field Sample	Field sample	Field Sample	Field Sample	Field Sample	Field sample	Field Sample
Parameter										
Inorganics (ug/L)										
Aluminum		25.5 U		20.0 U		29.2 UJ		520		20.5 UJ
Antimony		2.0 U		2.0 U		2.0 U		2.0 U		2.0 U
Arsenic		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U
Barium		30.8 J		31.0 J		28.9		41.5 J		30.3
Beryllium		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U
Cadmium		0.40 U		0.40 U		0.40 U		0.42 U		0.40 U
Calcium		24700 J		25300 J		24100		25300 J		24000
Chromium		2.6 J		2.0 UJ		6.2 J		20.7 J		2.2 J
Chromium, Hexavalent		0.86		0.35 J		0.50 U		0.50 U		0.50 U
Cobalt		1.0 U		1.0 U		1.0 UJ		1.0 U		1.0 UJ
Copper		3.0 J		3.4 J		6.3 J		14.7 J		3.3 J
Cyanide		2.4 J		1.8 J		2.5 UJ		2.5 U		1.6 J-
Iron		463		200 U		317		1040		380
Lead		0.47		0.46		1.0 J		9.2		0.45 UJ
Magnesium		4990 J		4950 J		4240		4900 J		4270
Manganese		116 J		31.2 J		135		217 J		169
Mercury		0.20 UJ		0.20 UJ		R		0.20 UJ		0.20 UJ
Nickel		2.8		2.8		3.4 J		4.8		2.5 J
Potassium		7590		9940		7960		7450		7170
Selenium		5.0 U		5.0 U		5.0 U		0.56 J		5.0 U
Silver		1.0 U		1.0 U		1.0 UJ		1.0 U		1.0 UJ
Sodium		86300 J		93900 J		79800 J		79200 J		80600 J
Thallium		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U
Vanadium		5.0 U		5.0 U		5.0 U		1.2 J		5.0 U
Zinc		20.1		19.2		23.1 J+		40.0		20.4 J+
Other										
Alkalinity (mg/L)		34.9		45.5		43.4		35		40.2
Dissolved Organic Carbon (mg/L)										
Dissolved oxygen, field (mg/L)		10.51		9.26		8.54		4.04		7.59
Hardness as CaCO3, Calculated (mg/L)	85.9	82.2 J	72.8	83.5 J	75.0	77.6	106.1	83.3 J	74.5	77.5
ORP, field (mV)		191		219		15		199.6		90.6
pH, field (S.U.)		7.18		7.23		7.07		6.78		6.89
Spec. cond., field (umho/cm)		579		621		620		588		603
Temperature, field (deg C)		8.53		9.25		15.81		10.38		14.53
Turbidity, field (N.T.U.)		3.3		3.5		1.79		3.26		1.91
Water Depth, field (in.)		8		10		12		6		12

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-311	SD-312	SD-312	SD-312	SD-312	SD-313	SD-313	SD-314	SD-314	SD-314
Sample ID:	WL-SWF-311-2	WL-SW-312-2	WL-SW-3-312	WL-SWF-312-2	WL-SWF-3-312	WL-SW-313-2	WL-SWF-313-2	WL-SW-314-2	WL-SW-314D-2	WL-SWF-314-2
Sample Date:	10/29/2014	10/29/2014	7/21/2015	10/29/2014	7/21/2015	11/3/2014	11/3/2014	11/3/2014	11/3/2014	11/3/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field sample	Field Duplicate	Field Duplicate	Field Duplicate
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane		0.50 U	0.50 U			0.50 U		0.50 U	0.50 U	
1,1-Dichloroethane		0.50 U	0.50 U			0.50 U		0.50 U	0.50 U	
1,1-Dichloroethene		0.50 U	0.50 U			0.50 U		0.50 U	0.50 U	
2-Butanone		5.0 U	5.0 U			5.0 U		5.0 U	5.0 U	
Acetone		5.0 U	5.0 U			5.0 U		5.0 U	5.0 U	
Benzene		0.50 U	0.50 U			0.50 U		0.50 U	0.50 U	
Bromodichloromethane		0.50 U	0.50 U			0.50 U		0.23 J	0.23 J	
Carbon disulfide		0.50 U	0.50 UJ			0.50 U		0.50 U	0.50 U	
Chloroform		0.50 U	0.50 U			0.50 U		0.89 U	0.50 U	
Chloromethane		0.50 U	0.50 U			0.50 U		0.50 U	0.50 U	
cis-1,2-Dichloroethene		0.50 U	0.50 U			0.70 J		0.18 J	0.18 J	
Dibromochloromethane		0.50 U	0.50 U			0.50 U		0.50 U	0.50 U	
Dichlorodifluoromethane		0.50 U	0.50 U			0.50 U		0.26 J	0.50 U	
m,p-Xylene		0.50 U	0.50 U			0.50 U		0.50 U	0.50 U	
Methyl acetate		0.50 U	0.50 U			0.50 U		0.50 U	0.50 U	
Tetrachloroethene		0.50 U	0.50 U			0.50 U		0.50 U	0.50 U	
Toluene		0.50 U	0.50 U			0.50 U		0.50 U	0.50 U	
Trichloroethene		0.15 UJ	0.50 U			0.15 U		0.15 U	0.15 U	
Vinyl chloride		0.015 U	0.50 U			0.015 U		0.015 U	0.015 U	
1,4-Dioxane (ug/L)										
1,4-Dioxane		0.64 J+	0.12			0.76 J		0.90 J	0.10 UJ	
Inorganics, Dissolved (ug/L)										
Aluminum	20.0 U			20.0 U	20.0 UJ		20.0 U			20.0 U
Antimony	2.0 U			2.0 U	2.0 U		2.0 U			2.0 U
Arsenic	1.0 U			1.0 U	1.0 U		0.45 J			0.33 J
Barium	40.1			32.3	30.7		45.6			26.7
Beryllium	1.0 U			1.0 U	1.0 U		1.0 U			1.0 U
Cadmium	0.40 U			0.40 U	1.0 U		0.40 U			0.40 U
Calcium	30900			24900	22000		22500			22000
Chromium	2.0 U			2.0 U	2.0 UJ		0.23 J			1.7 J
Chromium, Hexavalent	0.50 U			0.50 U	0.50 U		0.50 U			1.09
Cobalt	1.0 UJ			1.0 UJ	1.0 U		1.0 U			1.0 U
Copper	3.6			3.0	0.95 J		2.0 UJ			2.2 J
Iron	200 U			200 U	200 U		1270			200 U
Lead	0.22 UJ			0.24 UJ	1.0 U		0.20 U			0.20 U
Magnesium	6030			4870	4130		4010			4230
Manganese	223			112	9.2 J+		1150			110
Mercury	R			R	0.20 U		0.20 UJ			0.20 UJ
Nickel	3.2 J			2.8 J	2.0 J		1.5			2.0
Potassium	9180			10400	6660		6300			6720
Selenium	5.0 U			5.0 U	5.0 U		5.0 U			5.0 U
Silver	1.0 U			1.0 U	1.0 U		1.0 U			1.0 U
Sodium	104000			91600	92500		73500			77500
Vanadium	5.0 U			5.0 U	5.0 U		5.0 U			5.0 U
Zinc	22.6 J			16.1 J	2.7 J+		5.6 UJ			10.7 J

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-311	SD-312	SD-312	SD-312	SD-312	SD-313	SD-313	SD-314	SD-314	SD-314
Sample ID:	WL-SWF-311-2	WL-SW-312-2	WL-SW-3-312	WL-SWF-312-2	WL-SWF-3-312	WL-SW-313-2	WL-SWF-313-2	WL-SW-314-2	WL-SW-314D-2	WL-SWF-314-2
Sample Date:	10/29/2014	10/29/2014	7/21/2015	10/29/2014	7/21/2015	11/3/2014	11/3/2014	11/3/2014	11/3/2014	11/3/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field sample	Field Duplicate	Field Duplicate	Field Duplicate
Parameter										
Inorganics (ug/L)										
Aluminum		20.0 UJ	20 U			20.0 U		20.8 U	21.8 U	
Antimony		2.0 U	2.0 U			2.0 U		2.0 U	2.0 U	
Arsenic		1.0 U	1.0 U			1.0 U		1.0 U	1.0 U	
Barium		26.1	31.5			48.8 J		29.8 J	30.7 J	
Beryllium		1.0 U	1.0 U			1.0 U		1.0 U	1.0 U	
Cadmium		0.40 U	1.0 U			0.40 U		0.40 U	0.40 U	
Calcium		20300	22300			22800 J		22800 J	23800 J	
Chromium		2.0 UJ	2.0 UJ			2.0 UJ		2.6 J	2.4 J	
Chromium, Hexavalent		0.50 U	0.50 U			0.50 U		1.15	1.10	
Cobalt		1.0 UJ	1.0 U			1.0 U		1.0 U	1.0 U	
Copper		2.9 J	0.91 J			2.0 UJ		2.9 J	3.0 J	
Cyanide			R			2.7		1.5 J	3.8	
Iron		200 U	200 U			3290		424	444	
Lead		0.39 UJ	1.0 U			0.20 U		0.41 U	0.42 U	
Magnesium		3620	4330			4110 J		4550 J	4690 J	
Manganese		87.5	21.6			1140 J		122 J	126 J	
Mercury		R	0.20 U			0.20 UJ		0.20 UJ	0.20 UJ	
Nickel		2.4 J	1.8 J			1.6		2.1	2.3	
Potassium		8470	6720			6380		7040	7280	
Selenium		5.0 U	5.0 U			5.0 U		5.0 U	5.0 U	
Silver		1.0 UJ	1.0 U			1.0 U		1.0 U	1.0 U	
Sodium		75600 J	95600			72900 J		79600 J	82000 J	
Thallium		1.0 U	1.0 U			1.0 U		1.0 U	1.0 U	
Vanadium		5.0 U	5.0 U			5.0 U		5.0 U	5.0 U	
Zinc		17.0 J+	7.4 J+			6.9 U		14.0	15.0	
Other										
Alkalinity (mg/L)		47.5	46			43.3		36.5	36.8	
Dissolved Organic Carbon (mg/L)			8.3							
Dissolved oxygen, field (mg/L)		8.87	4.48			3.64		11.36		
Hardness as CaCO3, Calculated (mg/L)	102	65.6	73.5	82.2	71.9	73.8 J	72.7	75.6 J	78.7 J	72.3
ORP, field (mV)		137.7	186.0			58.6		105		
pH, field (S.U.)		7.17	7.23			6.55		7.02		
Spec. cond., field (umho/cm)		638	695			567		578		
Temperature, field (deg C)		14.59	25.03			5.33		6.78		
Turbidity, field (N.T.U.)		2.24	1.62			29		5.3		
Water Depth, field (in.)		84	72			5		6		

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-314
Sample ID:	WL-SWF-314D-2
Sample Date:	11/3/2014
Sample Type:	Field Duplicate
Parameter	
VOCs (ug/L)	
1,1,1-Trichloroethane	
1,1-Dichloroethane	
1,1-Dichloroethene	
2-Butanone	
Acetone	
Benzene	
Bromodichloromethane	
Carbon disulfide	
Chloroform	
Chloromethane	
cis-1,2-Dichloroethene	
Dibromochloromethane	
Dichlorodifluoromethane	
m,p-Xylene	
Methyl acetate	
Tetrachloroethene	
Toluene	
Trichloroethene	
Vinyl chloride	
1,4-Dioxane (ug/L)	
1,4-Dioxane	
Inorganics, Dissolved (ug/L)	
Aluminum	20.0 U
Antimony	2.0 U
Arsenic	0.30 J
Barium	26.4
Beryllium	1.0 U
Cadmium	0.032 J
Calcium	22000
Chromium	1.7 J
Chromium, Hexavalent	1.07
Cobalt	1.0 U
Copper	2.1 J
Iron	200 U
Lead	0.20 U
Magnesium	4310
Manganese	110
Mercury	0.20 UJ
Nickel	2.0
Potassium	6720
Selenium	5.0 U
Silver	1.0 U
Sodium	77600
Vanadium	5.0 U
Zinc	10.9 J

TABLE 4-6
RI SURFACE WATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-314
Sample ID:	WL-SWF-314D-2
Sample Date:	11/3/2014
Sample Type:	Field Duplicate
Parameter	
Inorganics (ug/L)	
Aluminum	
Antimony	
Arsenic	
Barium	
Beryllium	
Cadmium	
Calcium	
Chromium	
Chromium, Hexavalent	
Cobalt	
Copper	
Cyanide	
Iron	
Lead	
Magnesium	
Manganese	
Mercury	
Nickel	
Potassium	
Selenium	
Silver	
Sodium	
Thallium	
Vanadium	
Zinc	
Other	
Alkalinity (mg/L)	
Dissolved Organic Carbon (mg/L)	
Dissolved oxygen, field (mg/L)	
Hardness as CaCO3, Calculated (mg/L)	72.7
ORP, field (mV)	
pH, field (S.U.)	
Spec. cond., field (umho/cm)	
Temperature, field (deg C)	
Turbidity, field (N.T.U.)	
Water Depth, field (in.)	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-01B	AE-01B	AE-01B	AE-01B	AE-01B	AE-01B	AE-01D	AE-01D	AE-01D	AE-01D
Sample ID:	WL-GW-AE-01B-1	WL-GW-AE-01BD-1	WL-GW-AE-01B-2	WL-GWF-AE-01B-1	WL-GWF-AE-01BD-1	WL-GWF-AE-01B-2	WL-GW-AE-01D-1	WL-GW-AE-01D-2	WL-GWF-AE-01D-1	WL-GWF-AE-01D-2
Sample Date:	8/18/2014	8/18/2014	12/16/2014	8/18/2014	8/18/2014	12/16/2014	8/19/2014	12/16/2014	8/19/2014	12/16/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
1,1-Dichloroethane	0.50 U	0.19 J	0.19 J				0.50 U	0.13 J		
1,1-Dichloroethene	0.25 J	0.30 J	0.50 U				0.25 J	0.50 U		
1,2-Dibromo-3-chloropropane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
2-Butanone	5.0 U	5.0 U	5.0 U				5.0 U	5.0 U		
Acetone	5.0 U	5.0 U	5.0 U				5.0 U	5.0 U		
Benzene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Bromodichloromethane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Bromoform	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Carbon disulfide	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Chloroethane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Chloroform	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
cis-1,2-Dichloroethene	2.5 J	3.5 J	3.0				3.5	3.6		
Cyclohexane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Ethylbenzene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Isopropylbenzene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
m,p-Xylene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Methyl tert-butyl ether	0.20 J	0.32 J	0.37 J				0.50 U	0.12 J		
Methylcyclohexane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Methylene chloride	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
o-Xylene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Tetrachloroethene	0.68	0.92	0.78				1.2	1.1		
Toluene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Trichloroethene	4.7	6.0	6.2				6.3	6.9		
Vinyl chloride	0.75	0.93	0.44 J				0.75	0.49 J		
1,4-Dioxane (ug/L)										
1,4-Dioxane	0.10	0.097 J					0.044 J			
Inorganics, Dissolved (ug/L)										
Aluminum				20.0 U	20.0 U	20.0 U			20.0 U	20.0 U
Antimony				2.0 U	2.0 U	2.0 U			2.0 U	2.0 U
Arsenic				2.2	2.2	1.1			0.63 J	0.38
Barium				44.0	45.2	46.7			36.1	35.4
Beryllium				1.0 U	1.0 U	1.0 U			1.0 U	1.0 U
Cadmium				0.040 U	0.040 U	0.40 U			0.12 U	0.40 U
Calcium				52100	53000	55100			32300	32800
Chromium				8.5 J-	8.3 J-	14.4			0.68 J-	8.7
Chromium, Hexavalent				5.10 J	0.30 J	7.10 J+			0.50 UJ	3.20 J+
Cobalt				4.8	4.8	4.0			9.2	8.0
Copper				2.0 UJ	2.0 UJ	2.0 UJ			2.0 UJ	2.0 UJ
Iron				222	229	206			1080	1090
Lead				0.16 J	0.052 J	0.20 U			0.17 J	0.21 U
Magnesium				5930	5950	5720			5730	5510
Manganese				1300	1300	1290			796	758

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-01B	AE-01B	AE-01B	AE-01B	AE-01B	AE-01B	AE-01D	AE-01D	AE-01D	AE-01D
Sample ID:	WL-GW-AE-01B-1	WL-GW-AE-01BD-1	WL-GW-AE-01B-2	WL-GWF-AE-01B-1	WL-GWF-AE-01BD-1	WL-GWF-AE-01B-2	WL-GW-AE-01D-1	WL-GW-AE-01D-2	WL-GWF-AE-01D-1	WL-GWF-AE-01D-2
Sample Date:	8/18/2014	8/18/2014	12/16/2014	8/18/2014	8/18/2014	12/16/2014	8/19/2014	12/16/2014	8/19/2014	12/16/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury				0.20 UJ	0.20 UJ	0.20 UJ			0.20 UJ	0.20 UJ
Nickel				1.9	1.8	2.3			2.6	2.6
Potassium				1510	1530	1520			1290	1340
Selenium				5.0 U	5.0 U	5.0 U			5.0 U	5.0 U
Silver				1.0 UJ	1.0 UJ	1.0 U			1.0 UJ	1.0 U
Sodium				51500	51900	51000			57700	59500
Vanadium				5.0 U	5.0 U	5.0 U			5.0 U	5.0 U
Zinc				3.0 U	3.3	2.5 U			4.9	4.9 U
Inorganics (ug/L)										
Aluminum	118	115	272				20.0 U	51.5		
Antimony	2.0 U	2.0 U	2.0 U				2.0 U	2.0 U		
Arsenic	2.4 J-	2.5 J-	1.3				0.80 J-	0.49 J		
Barium	44.0	44.5	48.0				35.1	34.3		
Beryllium	1.0 U	1.0 U	1.0 UJ				1.0 U	0.088 J		
Cadmium	0.039 J	0.024 J	0.40 UJ				0.096	0.40 UJ		
Calcium	50600	51500	57000				31700	32500		
Chromium	19.7 J-	20.1	21.9				1.9 J-	21.5		
Chromium, Hexavalent	1.70	1.60	10.3 J+				0.50 U	2.90 J+		
Cobalt	4.2	4.2	4.2				9.0	7.5		
Copper	2.0 UJ	2.0 UJ	0.26 J				2.0 UJ	0.49 J		
Cyanide	2.5 U	3.3 J+	2.8				2.5 U	2.5 U		
Iron	405	395	579				1100	1670		
Lead	0.33	0.27	1.0				0.22	0.87		
Magnesium	5550	5660	6290				5670	5650		
Manganese	1280	1310	1330				777	743		
Mercury	0.20 U	0.20 U	0.20 UJ				0.20 U	0.20 UJ		
Nickel	2.0	1.9	2.0				2.5	2.5		
Potassium	1510	1520	1560				1250	1270		
Selenium	5.0 U	5.0 U	5.0 U				5.0 U	5.0 U		
Silver	1.0 U	1.0 U	0.012 J				1.0 U	1.0 UJ		
Sodium	51800	52100	53300				57900	58300		
Vanadium	5.0 U	5.0 U	5.0 U				5.0 U	5.0 U		
Zinc	3.8 U	4.4 J+	3.4				4.4 J+	4.3		
Other										
Dissolved oxygen, field (mg/L)	0.21		0.48				0.16	0.35		
ORP, field (mV)	-5.8		40.7				63.2	80.4		
pH, field (S.U.)	6.51		6.44				5.86	5.97		
Spec. cond., field (umho/cm)	617		650				572.5	585		
Temperature, field (deg C)	14.0		12.44				15.1	12.71		
Turbidity, field (N.T.U.)	4.31		6.97				0.68	7.44		

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-01S	AE-01S	AE-01S	AE-01S	AE-02B	AE-02B	AE-02B	AE-02B	AE-03B	AE-03B
Sample ID:	WL-GW-AE-01S-1	WL-GW-AE-01S-2	WL-GWF-AE-01S-1	WL-GWF-AE-01S-2	WL-GW-AE-02B-1	WL-GW-AE-02B-2	WL-GWF-AE-02B-1	WL-GWF-AE-02B-2	WL-GW-AE-03B-1	WL-GW-AE-03B-2
Sample Date:	8/19/2014	12/16/2014	8/19/2014	12/16/2014	8/13/2014	12/11/2014	8/13/2014	12/11/2014	8/19/2014	12/9/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U	0.50 U			0.50 U	0.50 U			6.1	7.2
1,1,2-Trichloroethane	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.50 U			0.18 J	0.13 J			1.6	1.9
1,1-Dichloroethene	0.50 U	0.50 U			0.30 J	0.50 U			0.88	0.80 U
1,2-Dibromo-3-chloropropane	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
2-Butanone	5.0 U	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U
Acetone	5.0 U	11			5.0 U	5.0 U			5.0 U	5.0 U
Benzene	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Bromoform	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Carbon disulfide	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Chloroform	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
cis-1,2-Dichloroethene	0.78	0.19 J			4.6	3.1			0.62	1.1
Cyclohexane	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Isopropylbenzene	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
m,p-Xylene	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Methyl tert-butyl ether	0.50 U	0.50 U			0.20 J	0.11 J			0.29 J	0.23 J
Methylcyclohexane	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Methylene chloride	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
o-Xylene	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Tetrachloroethene	0.26 J	0.50 U			1.2	0.93			0.50 U	0.50 U
Toluene	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
trans-1,2-Dichloroethene	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Trichloroethene	1.3 J	0.84			6.0	5.5			3.3	5.9
Vinyl chloride	0.12	0.50 U			1.3	0.32 J			4.4	4.1
1,4-Dioxane (ug/L)										
1,4-Dioxane	0.11 J				0.082 J				0.34	
Inorganics, Dissolved (ug/L)										
Aluminum			690	791			35.8	249		
Antimony			4.0 U	2.0 U			2.0 U	2.0 U		
Arsenic			0.20 J	0.17 J			4.1	3.0		
Barium			48.2	30.7			32.6	43.6		
Beryllium			0.57 J	1.0 U			1.0 U	1.0 U		
Cadmium			0.42	0.49			0.053	0.40 U		
Calcium			13700	12300			39700	32900		
Chromium			24200	37300			2.0 UJ	13.1		
Chromium, Hexavalent			23700 J	35100			0.50 U	0.50 U		
Cobalt			5.0	5.5			7.2	6.1		
Copper			231	257			2.0 UJ	2.0 UJ		
Iron			5280	9800			2040 J	1770		
Lead			0.10 J	0.20 U			0.11 J	0.20 U		
Magnesium			2080	1880			6750	5730		
Manganese			419	791			1330 J	1000		

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-01S	AE-01S	AE-01S	AE-01S	AE-02B	AE-02B	AE-02B	AE-02B	AE-03B	AE-03B
Sample ID:	WL-GW-AE-01S-1	WL-GW-AE-01S-2	WL-GWF-AE-01S-1	WL-GWF-AE-01S-2	WL-GW-AE-02B-1	WL-GW-AE-02B-2	WL-GWF-AE-02B-1	WL-GWF-AE-02B-2	WL-GW-AE-03B-1	WL-GW-AE-03B-2
Sample Date:	8/19/2014	12/16/2014	8/19/2014	12/16/2014	8/13/2014	12/11/2014	8/13/2014	12/11/2014	8/19/2014	12/9/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury			0.20 UJ	0.014 J			0.20 UJ	0.036 J		
Nickel			14.2	16.4			2.4	2.5		
Potassium			1510	947			1620	1310		
Selenium			5.0 U	5.0 U			5.0 U	5.0 U		
Silver			2.0 UJ	1.0 U			1.0 U	1.0 U		
Sodium			46000	36100			60400	57200		
Vanadium			5.0 U	5.0 U			5.0 U	5.0 UJ		
Zinc			181	200			2.5	3.3 U		
Inorganics (ug/L)										
Aluminum	1080	765			698 J	1630			104	73.1
Antimony	4.0 U	2.0 U			2.0 U	2.0 U			2.0 U	2.0 U
Arsenic	0.31 J-	0.12 J			4.4	5.1			4.4 J-	5.9
Barium	46.6	27.0			37.1	39.4			48.7	51.6
Beryllium	0.48 J	0.41 J			0.11 J	1.0 U			1.0 U	1.0 U
Cadmium	0.44	0.40 UJ			0.052	0.40 UJ			0.069	0.40 U
Calcium	12900	11800			37800	31300 J			43500	45300
Chromium	22900	34600			5.0 UJ	14.1			0.19 J-	2.0 U
Chromium, Hexavalent	23000	36800			0.50 U	0.50 U			0.50 U	0.50 U
Cobalt	5.0	4.7			7.9	7.6			6.4	6.8
Copper	207	230			2.0 UJ	3.3 J-			2.0 UJ	0.77 J
Cyanide	3.4 J+	1.4 J			3.2 J+	3.0			2.8 J+	2.5 U
Iron	5980	9210			3090	4190			6020	6270
Lead	1.4	0.22 U			0.81	2.3			0.31	0.34 U
Magnesium	2080	1840			7110 J	6070 J			7580	7990
Manganese	413	721			1430	1020			1870	1770
Mercury	0.20 U	0.20 UJ			0.20 UJ	0.20 UJ			0.20 U	0.20 UJ
Nickel	13.4	14.2			3.5	5.1			2.0	2.1
Potassium	1480	877			1630	1540			1270	1310
Selenium	5.0 U	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U
Silver	2.0 U	0.016 J			1.0 U	1.0 U			1.0 U	1.0 UJ
Sodium	43400	33800			58400	58000			67600	73400
Vanadium	5.0 U	5.0 U			0.95 J	5.0 UJ			5.0 U	5.0 U
Zinc	178	178			5.3 J+	8.8			2.7 U	3.4 J
Other										
Dissolved oxygen, field (mg/L)	0.30	2.07			0.04	0.35			3.92	1.19
ORP, field (mV)	261.0	102.0			2.8	70.6			35.9	-132.2
pH, field (S.U.)	4.61	4.53			6.11	6.18			5.80	6.32
Spec. cond., field (umho/cm)	372	192			632.5	592			752	785
Temperature, field (deg C)	19.0	10.61			13.9	11.77			12.7	9.84
Turbidity, field (N.T.U.)	13.1	4.52			17.1	10.1			4.4	4.89

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-03B	AE-03B	AE-04B	AE-04B	AE-04B	AE-04B	AE-04B	AE-04B	AE-04D	AE-04D
Sample ID:	WL-GWF-AE-03B-1	WL-GWF-AE-03B-2	WL-GW-AE-04B-1	WL-GW-AE-04B-2	WL-GW-AE-04B-3	WL-GWF-AE-04B-1	WL-GWF-AE-04B-2	WL-GWF-AE-04B-3	WL-GW-AE-04D-1	WL-GW-AE-04D-2
Sample Date:	8/19/2014	12/9/2014	8/12/2014	12/11/2014	9/22/2015	8/12/2014	12/11/2014	9/22/2015	8/12/2014	12/15/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane			93	53	11				100	58
1,1,2-Trichloroethane			0.50 U	0.50 U	0.50 U				0.50 U	0.50 U
1,1-Dichloroethane			9.0	8.9	8.0				5.8	6.9
1,1-Dichloroethene			12 J	4.8	2.0				12 J	4.4
1,2-Dibromo-3-chloropropane			0.11 J	0.50 U	0.50 U				0.50 U	0.50 U
1,2-Dichloroethane			0.50 U	0.50 U	0.50 U				0.50 U	0.50 U
2-Butanone			7.4	5.0 U	5.0 U				7.7	4.4 J
Acetone			22	16	5.0 U				22	28
Benzene			0.50 U	0.50 U	0.50 U				0.50 U	0.50 U
Bromodichloromethane			R	0.50 U	0.50 U				R	0.50 U
Bromoform			0.13 J-	0.50 U	0.50 U				R	0.50 U
Carbon disulfide			0.50 U	0.50 U	0.50 U				0.50 U	0.50 U
Chloroethane			0.84	0.50 U	0.50 U				0.98	0.63
Chloroform			0.50 U	0.50 U	0.50 U				0.50 U	0.50 U
cis-1,2-Dichloroethene			4.6 J	13	0.73				5.5 J	15
Cyclohexane			0.50 U	0.50 U	0.50 U				0.50 U	0.50 U
Ethylbenzene			0.50 U	0.50 U	0.50 U				0.50 U	0.50 U
Isopropylbenzene			0.50 U	0.50 U	0.50 U				0.50 U	0.50 U
m,p-Xylene			0.12 J	0.50 U	0.50 U				0.12 J	0.50 U
Methyl tert-butyl ether			0.27 J	0.31 J	0.50 U				0.17 J	0.31 J
Methylcyclohexane			0.50 U	0.50 U	0.50 U				0.50 U	0.50 U
Methylene chloride			0.50 U	0.50 U	0.50 U				0.50 U	0.50 U
o-Xylene			0.50 U	0.50 U	0.50 U				0.50 U	0.50 U
Tetrachloroethene			1.7	0.98	0.39 J				2.0	1.2
Toluene			0.41 J	0.27 J	0.50 U				0.46 J	0.35 J
trans-1,2-Dichloroethene			0.11 J	0.12 J	0.50 U				0.13 J	0.19 J
Trichloroethene			20	46	17				23	62
Vinyl chloride			1.4	2.1	0.50 U				1.6	3.5
1,4-Dioxane (ug/L)										
1,4-Dioxane			5.0		0.41				3.5	
Inorganics, Dissolved (ug/L)										
Aluminum	20.0 U	20.0 U				608	661	359		
Antimony	2.0 U	2.0 U				2.0 U	2.0 U	2.0 U		
Arsenic	4.4	5.7				0.56 J	1.0 U	0.38 J		
Barium	50.0	49.7				90.9	102	73.7		
Beryllium	1.0 U	1.0 U				0.93 J	1.1	0.47 J		
Cadmium	0.047 U	0.40 U				1.6	1.6	1.0 J		
Calcium	44500	43900				34100	33000	56600		
Chromium	2.0 UJ	2.0 U				73000 J	51000	14100		
Chromium, Hexavalent	0.50 UJ	0.50 U				72000		13500		
Cobalt	6.5	6.6				25.6	24.0	10.9 J		
Copper	2.0 UJ	2.0 UJ				238	283	119		
Iron	5940	5850				12300 J	16000	4570 J		
Lead	0.094 J	0.20 U				0.084 J	0.20 U	1.0 U		
Magnesium	7780	7690				7410	7100	11700 J		
Manganese	1900	1700				1370 J	1170	4590		

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-03B	AE-03B	AE-04B	AE-04B	AE-04B	AE-04B	AE-04B	AE-04B	AE-04D	AE-04D
Sample ID:	WL-GWF-AE-03B-1	WL-GWF-AE-03B-2	WL-GW-AE-04B-1	WL-GW-AE-04B-2	WL-GW-AE-04B-3	WL-GWF-AE-04B-1	WL-GWF-AE-04B-2	WL-GWF-AE-04B-3	WL-GW-AE-04D-1	WL-GW-AE-04D-2
Sample Date:	8/19/2014	12/9/2014	8/12/2014	12/11/2014	9/22/2015	8/12/2014	12/11/2014	9/22/2015	8/12/2014	12/15/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury	0.20 UJ	0.20 UJ				0.20 UJ	0.019 J	0.20 U		
Nickel	2.0	1.8				29.0	28.1	12.2		
Potassium	1280	1260				4380	4740	3100 J		
Selenium	5.0 U	5.0 U				5.0 U	5.0 U	5.0 U		
Silver	1.0 UJ	1.0 UJ				1.0 U	1.0 U	1.0 U		
Sodium	69100	71100				60300	59900	61700 J		
Vanadium	5.0 U	5.0 U				5.0 U	5.0 UJ	5.0 U		
Zinc	3.4	2.8				202	188	76.9 J		
Inorganics (ug/L)										
Aluminum			873 J	704	996 J				2180 J	2100
Antimony			2.0 U	2.0 U	2.0 U				2.0 U	2.0 UJ
Arsenic			1.0 U	1.0 U	0.92 J				1.0 U	0.31 J
Barium			96.0	102	71.7				121	102 J
Beryllium			0.91 J	1.0 U	0.43 J				1.4	1.5
Cadmium			1.5	1.6	1.0				2.4	1.9 J
Calcium			32300	30900 J	52500				23900	24800
Chromium			72800	56400	13800				86400	71300
Chromium, Hexavalent			71600	53200	14100				83000	64500
Cobalt			26.9	25.3	10.8 J				38.7	26.6 J
Copper			242	296	112				777	592 J
Cyanide			4.2 J+	2.1 J	10.0 U				5.2 J+	2.0 J
Iron			19100	14800	5040 J				22300	17100 J
Lead			0.78	0.34	1.7				0.88	0.90
Magnesium			7350 J	6620 J	11400 J				5650 J	5040
Manganese			1490	1100	4990				1100	947
Mercury			0.20 UJ	0.20 UJ	0.20 U				0.040 J-	0.20 UJ
Nickel			29.7	28.2	11.7 J				42.4	32.0 J
Potassium			4360	4740	3040				3840	4340
Selenium			0.50 J	0.43	0.39 J				0.42 J	5.0 U
Silver			1.0 U	1.0 U	1.0 U				1.0 U	0.038 J
Sodium			60900	58100	58500				53500	51800
Vanadium			5.0 U	R	5.0 U				5.0 U	5.0 U
Zinc			207	201	73.0 J				363	263 J
Other										
Dissolved oxygen, field (mg/L)			0.29	1.27	0.31				0.26	2.42
ORP, field (mV)			293.0	-47.2	167.0				459.9	-9.1
pH, field (S.U.)			5.15	5.30	5.92				4.11	4.49
Spec. cond., field (umho/cm)			585.0	623	659				529	585
Temperature, field (deg C)			14.0	11.58	13.96				13.4	12.90
Turbidity, field (N.T.U.)			13.7	4.54	54.7				3.71	4.69

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-04D	AE-04D	AE-04S	AE-04S	AE-04S	AE-04S	AE-05B	AE-05B	AE-05B	AE-05B
Sample ID:	WL-GWF-AE-04D-1	WL-GWF-AE-04D-2	WL-GW-AE-04S-1	WL-GW-AE-04S-2	WL-GWF-AE-04S-1	WL-GWF-AE-04S-2	WL-GW-AE-05B-1	WL-GW-AE-05B-2	WL-GWF-AE-05B-1	WL-GWF-AE-05B-2
Sample Date:	8/12/2014	12/15/2014	8/12/2014	12/11/2014	8/12/2014	12/11/2014	8/6/2014	12/10/2014	8/6/2014	12/10/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane			52	0.50 U			0.17 J	0.21 J		
1,1,2-Trichloroethane			0.50 U	0.50 U			0.50 U	0.50 U		
1,1-Dichloroethane			14	0.50 U			0.63	0.55		
1,1-Dichloroethene			8.8 J	0.50 U			0.50 U	0.50 U		
1,2-Dibromo-3-chloropropane			0.50 U	0.50 U			0.50 U	0.50 U		
1,2-Dichloroethane			0.50 U	0.50 U			0.50 U	0.50 U		
2-Butanone			2.5 J	5.0 U			5.0 U	5.0 U		
Acetone			10 U	5.0 U			5.0 U	5.0 U		
Benzene			0.50 U	0.50 U			0.50 U	0.50 U		
Bromodichloromethane			R	0.50 U			0.50 U	0.50 U		
Bromoform			R	0.50 U			0.50 U	0.50 U		
Carbon disulfide			0.50 U	0.50 U			0.50 U	0.50 U		
Chloroethane			1.6	0.50 U			0.50 U	0.50 U		
Chloroform			0.50 U	0.50 U			1.2 U	1.6 U		
cis-1,2-Dichloroethene			16 J	0.50 U			0.50 U	0.50 U		
Cyclohexane			0.50 U	0.50 U			0.50 U	0.50 U		
Ethylbenzene			0.50 U	0.50 U			0.50 U	0.50 U		
Isopropylbenzene			0.50 U	0.50 U			0.50 U	0.50 U		
m,p-Xylene			0.50 U	0.50 U			0.50 U	0.50 U		
Methyl tert-butyl ether			0.50 U	0.50 U			0.50 U	0.50 U		
Methylcyclohexane			0.50 U	0.50 U			0.50 U	0.50 U		
Methylene chloride			0.50 U	0.50 U			0.50 U	0.50 U		
o-Xylene			0.50 U	0.50 U			0.50 U	0.50 U		
Tetrachloroethene			2.1	0.50 U			0.50 U	0.50 U		
Toluene			0.36 J	0.50 U			0.50 U	0.50 U		
trans-1,2-Dichloroethene			0.28 J	0.50 U			0.50 U	0.50 U		
Trichloroethene			19	0.50 U			1.4	1.8		
Vinyl chloride			2.6	0.50 U			0.012 J	0.50 U		
1,4-Dioxane (ug/L)										
1,4-Dioxane			1.7				1.7			
Inorganics, Dissolved (ug/L)										
Aluminum	2090	2030			50.6	281			20.0 U	55.7 J+
Antimony	2.0 U	2.0 U			2.0 U	2.0 U			2.0 U	2.0 U
Arsenic	0.57 J	0.32 J			1.1	1.0 U			0.26 J	1.0 U
Barium	117	119			207	86.1			27.4	24.6
Beryllium	1.4	1.3			1.0 U	1.0 U			1.0 U	1.0 U
Cadmium	2.6	2.4			0.024 J	2.0			0.052	0.40 U
Calcium	25000	25000			27500	7070			35400	32100
Chromium	87900 J	70400			105 J	15.6			7860	7960
Chromium, Hexavalent	86500	65000			0.50 U	0.50 U			7550	7510
Cobalt	36.7	32.0			2.6	14.5			1.0 U	1.0 U
Copper	772	713			2.0 UJ	15.0			2.0 UJ	2.0 UJ
Iron	14800 J	18300			47300 J	200 U			2230	2060
Lead	0.64	0.57			1.2	5.0			0.31	0.20 U
Magnesium	5540	5020			4210	960			8290	7420
Manganese	1080 J	1000			1890 J	304			32.2	24.2

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-04D	AE-04D	AE-04S	AE-04S	AE-04S	AE-04S	AE-05B	AE-05B	AE-05B	AE-05B
Sample ID:	WL-GWF-AE-04D-1	WL-GWF-AE-04D-2	WL-GW-AE-04S-1	WL-GW-AE-04S-2	WL-GWF-AE-04S-1	WL-GWF-AE-04S-2	WL-GW-AE-05B-1	WL-GW-AE-05B-2	WL-GWF-AE-05B-1	WL-GWF-AE-05B-2
Sample Date:	8/12/2014	12/15/2014	8/12/2014	12/11/2014	8/12/2014	12/11/2014	8/6/2014	12/10/2014	8/6/2014	12/10/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury	0.20 UJ	0.030 J			0.20 UJ	0.20 UJ			0.20 UJ	0.20 UJ
Nickel	43.0	36.8			1.8	10.3			2.3	1.8
Potassium	3940	4510			2900	500 U			3580	3620
Selenium	5.0 U	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U
Silver	1.0 U	1.0 U			1.0 U	1.0 U			1.0 U	1.0 U
Sodium	54900	53600			178000	33200			140000	122000
Vanadium	5.0 U	5.0 U			5.0 U	5.0 UJ			5.0 UJ	5.0 UJ
Zinc	355	315			25.8	315			4.4 U	255
Inorganics (ug/L)										
Aluminum			207 J	306			124	463		
Antimony			2.0 U	2.0 U			2.0 U	2.0 U		
Arsenic			1.0 U	1.0 U			0.30 J	1.0 U		
Barium			217	89.2			28.5	27.0		
Beryllium			1.0 U	1.0 U			1.0 U	1.0 U		
Cadmium			0.011 J	1.9			0.075	0.40 UJ		
Calcium			22600	7470 J			36800	32100 J		
Chromium			271	19.1			8070	8290		
Chromium, Hexavalent			0.50 U	0.50 U			7250	8130		
Cobalt			2.7	15.1			1.0 U	1.0 U		
Copper			2.0 UJ	14.2			2.0 U	2.0 UJ		
Cyanide			5.9 J+	2.8			5.1 J	2.6 U		
Iron			46500	200 U			2410	2880		
Lead			0.47	5.1			0.20 U	0.49		
Magnesium			4360 J	1050 J			8960	7720 J		
Manganese			2010	295			38.0	35.9		
Mercury			0.20 UJ	0.20 UJ			0.20 UJ	0.20 UJ		
Nickel			0.94 J	9.8			1.8	1.9		
Potassium			2860	500 UJ			3750	3620		
Selenium			0.36 J	5.0 U			0.28 J	5.0 U		
Silver			1.0 U	1.0 U			1.0 UJ	1.0 U		
Sodium			166000	32800			137000	130000		
Vanadium			5.0 U	R			5.0 UJ	R		
Zinc			3.2 J+	318			2.9 U	123		
Other										
Dissolved oxygen, field (mg/L)			0.15	8.17			3.45	1.68		
ORP, field (mV)			57.6	5.0			272.6	262.5		
pH, field (S.U.)			5.71	5.19			5.85	5.90		
Spec. cond., field (umho/cm)			1425	287			886	983		
Temperature, field (deg C)			15.4	8.78			13.2	11.67		
Turbidity, field (N.T.U.)			13.8	0.87			6.57	2.69		

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-06B	AE-06B	AE-06B	AE-06B	AE-06B	AE-06B	AE-07B	AE-07B	AE-07B	AE-07B
Sample ID:	WL-GW-AE-06B-1	WL-GW-AE-06B-2	WL-GW-AE-06B-3	WL-GWF-AE-06B-1	WL-GWF-AE-06B-2	WL-GWF-AE-06B-3	WL-GW-AE-07B-1	WL-GW-AE-07B-2	WL-GWF-AE-07B-1	WL-GWF-AE-07B-2
Sample Date:	8/6/2014	12/11/2014	9/22/2015	8/6/2014	12/11/2014	9/22/2015	8/4/2014	12/2/2014	8/4/2014	12/2/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	12	15	23				1.5	1.5		
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
1,1-Dichloroethane	20	15	36				2.5	5.9		
1,1-Dichloroethene	5.3 J	6.0	3.7				0.65	0.50 U		
1,2-Dibromo-3-chloropropane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
2-Butanone	5.0 U	5.0 U	5.0 U				5.0 U	5.0 U		
Acetone	5.0 U	5.0 U	5.6				5.0 U	5.0 U		
Benzene	0.50 U	0.27 J	0.50 U				0.50 U	0.50 U		
Bromodichloromethane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Bromoform	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Carbon disulfide	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Chloroethane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Chloroform	0.50 U	1.6 U	0.50 U				0.50 U	0.50 U		
cis-1,2-Dichloroethene	0.79 J	1.0	3.4				0.69	0.57		
Cyclohexane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Ethylbenzene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Isopropylbenzene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
m,p-Xylene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Methyl tert-butyl ether	0.80	0.70	0.49 J				0.50 U	0.24 J		
Methylcyclohexane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Methylene chloride	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
o-Xylene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Tetrachloroethene	0.71	0.95	0.50 U				0.50 U	0.50 U		
Toluene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Trichloroethene	20	30	20				5.4	4.8		
Vinyl chloride	0.22	0.50 U	0.70				0.012 J	0.50 U		
1,4-Dioxane (ug/L)										
1,4-Dioxane	23		9.4				1.5			
Inorganics, Dissolved (ug/L)										
Aluminum				20.0 U	20.0 U	27.5			20.0 U	20.0 U
Antimony				0.78 J	2.0 U	2.0 U			2.0 U	2.0 U
Arsenic				0.65 J	1.0 U	0.38 J			0.37 J	0.31 J
Barium				63.4	55.2	46.4			12.5	19.0
Beryllium				1.0 U	1.0 U	1.0 U			1.0 U	1.0 U
Cadmium				0.058	0.40 U	0.069 J			0.11	0.40 U
Calcium				47500	55500	47500			20400	36000
Chromium				22100	78500	16300			516	390
Chromium, Hexavalent				21400	45500	16000			449	322
Cobalt				1.4	1.3	1.0 UJ			1.4	1.8
Copper				2.0 UJ	2.0 UJ	1.0 J			2.0 UJ	1.3 J
Iron				6160	11600	5270 J			150 J-	325
Lead				0.20 U	0.20 U	1.0 U			0.14 J	0.20 U
Magnesium				11900	14300	11400 J			8080 J	14100
Manganese				892	568	461			132	245 J

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-06B	AE-06B	AE-06B	AE-06B	AE-06B	AE-06B	AE-07B	AE-07B	AE-07B	AE-07B
Sample ID:	WL-GW-AE-06B-1	WL-GW-AE-06B-2	WL-GW-AE-06B-3	WL-GWF-AE-06B-1	WL-GWF-AE-06B-2	WL-GWF-AE-06B-3	WL-GW-AE-07B-1	WL-GW-AE-07B-2	WL-GWF-AE-07B-1	WL-GWF-AE-07B-2
Sample Date:	8/6/2014	12/11/2014	9/22/2015	8/6/2014	12/11/2014	9/22/2015	8/4/2014	12/2/2014	8/4/2014	12/2/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury				0.20 UJ	0.20 UJ	0.20 U			0.20 UJ	0.20 UJ
Nickel				1.5	1.4	1.2			3.3 J-	4.0
Potassium				7820	10400	9110 J			3040 J	3960 J
Selenium				5.0 U	5.0 U	5.0 U			5.0 U	5.0 U
Silver				1.0 U	1.0 U	1.0 U			1.0 U	1.0 U
Sodium				63800	68200	68000 J			28700	43500
Vanadium				5.0 UJ	5.0 UJ	5.0 U			5.0 U	5.0 U
Zinc				4.0 U	3.8 U	7.1 J			12.0	11.4
Inorganics (ug/L)										
Aluminum	237	416	897 J				128	5450		
Antimony	0.72 J	2.0 U	2.0 U				2.0 U	2.0 U		
Arsenic	0.82 J	1.0 U	1.3				0.51 J	3.8		
Barium	65.7	58.0	49.3				13.2	25.8		
Beryllium	1.0 U	1.0 U	0.062 J				1.0 U	1.0 U		
Cadmium	0.050	0.40 UJ	0.047 J				0.12	0.40 U		
Calcium	50300	54100 J	43700				20600	34100		
Chromium	25300	40000	17600				511	497		
Chromium, Hexavalent	21600	36600	16300				452	335		
Cobalt	1.5	1.6	1.7 J				1.5	6.1		
Copper	2.0 U	2.0 UJ	3.2				2.0 UJ	12.3		
Cyanide	4.6 J	2.3 J	10.0 U				4.6 J	2.1 J		
Iron	8720	12500	7150 J				488 J-	12900		
Lead	0.96	1.5	4.7				0.45	10.7		
Magnesium	12800	14300 J	11200 J				8160 J	15700		
Manganese	911	554	535				148	466		
Mercury	0.20 UJ	0.20 UJ	0.20 U				0.20 UJ	0.20 UJ		
Nickel	1.5	1.9	3.6 J				3.5 J-	11.9		
Potassium	8510	10900	9020				3050 J	4250		
Selenium	0.35 J	0.37	5.0 U				5.0 U	0.82 J		
Silver	1.0 UJ	1.0 U	1.0 U				1.0 U	1.0 U		
Sodium	65400	70700	65400				28900	41400		
Vanadium	5.0 UJ	R	5.0 U				5.0 U	5.0 U		
Zinc	6.4 U	4.9 U	14.5 J				12.4 J+	34.0 J		
Other										
Dissolved oxygen, field (mg/L)	0.25	0.34	0.29				1.18	0.85		
ORP, field (mV)	142.5	176.1	166.5				163.1	188.3		
pH, field (S.U.)	6.66	6.67	6.94				5.27	5.37		
Spec. cond., field (umho/cm)	705	791	627				371.7	565		
Temperature, field (deg C)	15.5	11.38	14.46				13.4	10.91		
Turbidity, field (N.T.U.)	18.7	-27	60				9.93	-19		

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-07D	AE-07D	AE-07D	AE-07D	AE-08B	AE-08B	AE-08B	AE-08B	AE-08B	AE-08B
Sample ID:	WL-GW-AE-07D-1	WL-GW-AE-07D-2	WL-GWF-AE-07D-1	WL-GWF-AE-07D-2	WL-GW-AE-08B-1	WL-GW-AE-08B-2	WL-GW-AE-08B-3	WL-GWF-AE-08B-1	WL-GWF-AE-08B-2	WL-GWF-AE-08B-3
Sample Date:	8/4/2014	12/3/2014	8/4/2014	12/3/2014	8/11/2014	12/9/2014	9/15/2015	8/11/2014	12/9/2014	9/15/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	12	9.9			0.50 U	0.50 U	0.50 U			
1,1,2-Trichloroethane	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
1,1-Dichloroethane	12	9.9			0.24 J	0.13 J	0.50 U			
1,1-Dichloroethene	3.4	2.3			0.50 U	0.50 U	0.50 U			
1,2-Dibromo-3-chloropropane	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
1,2-Dichloroethane	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
2-Butanone	5.0 U	5.0 U			5.0 U	5.0 U	5.0 U			
Acetone	5.0 U	5.0 U			5.0 UJ	5.0 U	5.0 U			
Benzene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Bromodichloromethane	0.50 U	0.50 U			R	0.50 U	0.50 U			
Bromoform	0.50 U	0.50 U			R	0.50 U	0.50 U			
Carbon disulfide	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Chloroethane	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Chloroform	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
cis-1,2-Dichloroethene	6.4	5.9			0.50 U	0.50 U	0.50 U			
Cyclohexane	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Ethylbenzene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Isopropylbenzene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
m,p-Xylene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Methyl tert-butyl ether	0.43 J	0.35 J			0.50 U	0.50 U	0.50 U			
Methylcyclohexane	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Methylene chloride	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
o-Xylene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Tetrachloroethene	0.31 J	0.21 J			0.50 U	0.50 U	0.50 U			
Toluene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
trans-1,2-Dichloroethene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Trichloroethene	26	22			0.19 J	0.28 J	0.50 U			
Vinyl chloride	0.060	0.50 U			0.012 J	0.50 U	0.50 U			
1,4-Dioxane (ug/L)										
1,4-Dioxane	2.5				0.48		0.12			
Inorganics, Dissolved (ug/L)										
Aluminum			21.6	20.0 U				20.0 U	20.0 U	20.0 UJ
Antimony			2.0 U	2.0 U				2.0 U	2.0 U	0.077 J
Arsenic			0.15 J	0.14 J				0.43 J	1.0 U	0.30 J
Barium			67.5	61.7				12.9	10.8	10.0 U
Beryllium			1.0 U	1.0 U				1.0 U	1.0 U	1.0 U
Cadmium			0.079	0.40 U				0.15	0.40 U	1.0 U
Calcium			32000	32000				25700	25200	18100
Chromium			4180	3800				285 J	922	133
Chromium, Hexavalent			3970	3250				286	920	450
Cobalt			1.0 U	1.0 U				2.8	1.1	1.0 UJ
Copper			2.0 UJ	0.90 J				2.0 UJ	1.8 J	2.0 U
Iron			935 J-	1010				57.4 J	290	200 U
Lead			0.15 J	0.20 U				0.032 J	0.20 U	1.0 U
Magnesium			9950 J	10100				7780	8100	7430 J
Manganese			18.7	13.8 J				436 J	230	3.2

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-07D	AE-07D	AE-07D	AE-07D	AE-08B	AE-08B	AE-08B	AE-08B	AE-08B	AE-08B
Sample ID:	WL-GW-AE-07D-1	WL-GW-AE-07D-2	WL-GWF-AE-07D-1	WL-GWF-AE-07D-2	WL-GW-AE-08B-1	WL-GW-AE-08B-2	WL-GW-AE-08B-3	WL-GWF-AE-08B-1	WL-GWF-AE-08B-2	WL-GWF-AE-08B-3
Sample Date:	8/4/2014	12/3/2014	8/4/2014	12/3/2014	8/11/2014	12/9/2014	9/15/2015	8/11/2014	12/9/2014	9/15/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury			0.038 J-	0.20 UJ				0.20 UJ	0.20 UJ	0.20 U
Nickel			3.0 J-	2.9				8.7	4.7	1.0 UJ
Potassium			9350 J	10700 J				1840	1740	1560 J
Selenium			5.0 U	5.0 U				5.0 U	5.0 U	5.0 U
Silver			1.0 U	1.0 U				1.0 U	1.0 UJ	1.0 U
Sodium			118000	110000				30600	40800	16500
Vanadium			5.0 U	5.0 U				5.0 U	5.0 U	5.0 U
Zinc			9.9	5.0				5.1	5.1	4.9 J
Inorganics (ug/L)										
Aluminum	107	281			20.0 UJ	2210	265 J			
Antimony	2.0 U	2.0 U			2.0 U	2.0 U	0.070 J			
Arsenic	0.18 J	0.24 J			1.0 U	1.8	0.41 J			
Barium	65.7	55.5			13.5	23.4	11.5			
Beryllium	1.0 U	1.0 U			1.0 U	1.0 U	1.0 U			
Cadmium	0.097	0.40 U			0.14	0.40 U	0.054 J			
Calcium	30500	30000			24500	24100	26100			
Chromium	4260	3420			249	897	781			
Chromium, Hexavalent	3900	3120			252	906	719			
Cobalt	1.0 U	1.0 U			3.2	3.6	1.0 UJ			
Copper	2.2	2.0 J			2.0 UJ	11.2	2.4			
Cyanide	5.7 J	2.5 U			3.6 J+	2.5 U	10.0 U			
Iron	1040 J-	1260			200 UJ	4030	766			
Lead	0.79	1.3			0.20 U	3.8	1.0 U			
Magnesium	9540 J	9490			7640 J	8700	7890 J			
Manganese	20.7	20.3			501	421	143 J			
Mercury	0.20 UJ	0.20 UJ			0.058 J-	0.20 UJ	0.20 U			
Nickel	3.1 J-	3.1			9.8	9.1	3.1 J			
Potassium	8990 J	9940			1820	2070	1650 J			
Selenium	5.0 U	5.0 U			5.0 U	0.41 J	5.0 U			
Silver	1.0 U	1.0 U			1.0 U	1.0 UJ	0.012 J			
Sodium	115000	102000			29200	39100	39600			
Vanadium	5.0 U	5.0 U			5.0 U	5.0 U	5.0 U			
Zinc	12.0 J+	7.0 J			5.2 J+	21.7 J	5.6			
Other										
Dissolved oxygen, field (mg/L)	3.44	1.37			3.73	6.46	5.24			
ORP, field (mV)	240.7	372.1			152.9	245.2	159.7			
pH, field (S.U.)	5.77	5.31			5.89	5.98	5.61			
Spec. cond., field (umho/cm)	0.84	790			383.9	449	522			
Temperature, field (deg C)	13.4	11.33			14.5	10.69	14.50			
Turbidity, field (N.T.U.)	5.88	4.33			0.23	4.43	2.77			

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-08D	AE-08D	AE-08D	AE-08D	AE-08D	AE-08D	AE-09S	AE-09S	AE-09S	AE-09S
Sample ID:	WL-GW-AE-08D-1	WL-GW-AE-08D-2	WL-GW-AE-08D-3	WL-GWF-AE-08D-1	WL-GWF-AE-08D-2	WL-GWF-AE-08D-3	WL-GW-AE-09S-1	WL-GW-AE-09S-2	WL-GWF-AE-09S-1	WL-GWF-AE-09S-2
Sample Date:	8/11/2014	12/9/2014	9/15/2015	8/11/2014	12/9/2014	9/15/2015	8/5/2014	12/8/2014	8/5/2014	12/8/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U				0.76	0.23 J		
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U				32	20		
1,1-Dichloroethene	0.50 U	0.50 U	0.50 U				7.3 J	4.0		
1,2-Dibromo-3-chloropropane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
1,2-Dichloroethane	0.50 U	0.50 U	0.38 J				0.50 U	0.50 U		
2-Butanone	5.0 U	5.0 U	5.0 U				5.0 U	5.0 U		
Acetone	5.0 UJ	5.0 U	5.0 U				5.0 U	5.0 U		
Benzene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Bromodichloromethane	R	0.50 U	0.50 U				0.50 U	0.50 U		
Bromoform	R	0.50 U	0.50 U				0.50 U	0.50 U		
Carbon disulfide	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Chloroethane	0.50 U	0.50 U	0.50 U				0.43 J	0.50 U		
Chloroform	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
cis-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U				51	40		
Cyclohexane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Ethylbenzene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Isopropylbenzene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
m,p-Xylene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Methyl tert-butyl ether	0.50 U	0.50 U	0.50 U				0.49 J	0.29 J		
Methylcyclohexane	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Methylene chloride	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
o-Xylene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Tetrachloroethene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Toluene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U				0.50 U	0.50 U		
Trichloroethene	0.15 UJ	0.50 U	0.50 U				9.2	4.7		
Vinyl chloride	0.012 J	0.50 U	0.50 U				2.9	1.4		
1,4-Dioxane (ug/L)										
1,4-Dioxane	0.058 J		0.10 U				2.4			
Inorganics, Dissolved (ug/L)										
Aluminum				20.0 U	20.0 U	20.0 UJ			20.0 UJ	1060 J+
Antimony				2.0 U	2.0 U	2.0 U			2.0 U	2.0 U
Arsenic				0.29 J	1.0 U	0.18 J			0.43 J	1.0 U
Barium				10.0 U	10.0 U	10.0 U			215	207
Beryllium				1.0 U	1.0 U	1.0 U			1.0 U	1.0 U
Cadmium				0.036 J	0.40 U	0.026 J			0.43	0.40 U
Calcium				22600	19900	24500			45600	42200
Chromium				16.5 J	11.6	33.3			1.4 J	4.2
Chromium, Hexavalent				17.9	12.3 J+	34.6			0.50 U	0.50 U
Cobalt				1.0 U	1.0 U	1.0 UJ			11.8 J	9.8
Copper				2.0 UJ	0.69 J	2.0 U			2.0 U	3.0
Iron				9.5 J	200 U	200 U			10300 J	12300
Lead				0.044 J	0.20 U	1.0 U			0.20 U	2.3
Magnesium				5830	5300	6170 J			9740 J	10500
Manganese				6.4 J	1.8 U	1.5			1610 J	1420

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-08D	AE-08D	AE-08D	AE-08D	AE-08D	AE-08D	AE-09S	AE-09S	AE-09S	AE-09S
Sample ID:	WL-GW-AE-08D-1	WL-GW-AE-08D-2	WL-GW-AE-08D-3	WL-GWF-AE-08D-1	WL-GWF-AE-08D-2	WL-GWF-AE-08D-3	WL-GW-AE-09S-1	WL-GW-AE-09S-2	WL-GWF-AE-09S-1	WL-GWF-AE-09S-2
Sample Date:	8/11/2014	12/9/2014	9/15/2015	8/11/2014	12/9/2014	9/15/2015	8/5/2014	12/8/2014	8/5/2014	12/8/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury				0.20 UJ	0.20 UJ	0.20 U			0.20 UJ	0.20 UJ
Nickel				1.7	1.1	1.0 UJ			4.3 J	3.7
Potassium				1870	2140	2110 J			3700	3020
Selenium				5.0 U	5.0 U	5.0 U			5.0 U	5.0 U
Silver				1.0 U	1.0 UJ	1.0 U			1.0 U	1.0 UJ
Sodium				27700	26300	29300			300000	220000
Vanadium				5.0 U	5.0 U	5.0 U			0.74 J	5.0 U
Zinc				3.1	9.8	3.3 J			11.4	11.4
Inorganics (ug/L)										
Aluminum	155 J	248	20.0 UJ				109	26400		
Antimony	0.67 J	2.0 U	2.0 U				2.0 U	4.0 U		
Arsenic	1.0 U	1.0 U	0.19 J				0.40 J	8.6		
Barium	8.6 J	10.0 U	10.0 U				213	327		
Beryllium	1.0 U	1.0 U	0.041 J				0.11 J+	2.0 U		
Cadmium	0.036 J	0.40 U	1.0 U				0.40	2.4 J-		
Calcium	22200	20000	23600				45300	40400		
Chromium	15.4	11.7	34.4				1.5 J-	69.1		
Chromium, Hexavalent	18.2	12.9 J+	34.3				0.50 U	0.50 U		
Cobalt	0.27 J	1.0 U	1.0 UJ				11.7	16.6		
Copper	2.0 UJ	0.96 J	2.0 U				2.0 U	56.2		
Cyanide	4.5 J+	2.5 U	10.0 U				4.4 J	2.5 U		
Iron	281 J	386	200 U				10200	31500		
Lead	0.46	0.64	1.0 U				0.35 J	50.0		
Magnesium	6050 J	5440	5980 J				9750 J	14700		
Manganese	15.1	14.3	3.0 J				1630	1870		
Mercury	0.063 J-	0.20 UJ	0.20 U				0.046 J-	0.023 J		
Nickel	1.4	1.5	1.0 UJ				4.2	31.0		
Potassium	1850	2100	1960 J				3740	4350		
Selenium	5.0 U	5.0 U	5.0 U				5.0 U	2.8 J		
Silver	1.0 U	1.0 UJ	0.013 J				1.0 U	2.0 UJ		
Sodium	27200	26700	28500				198000	192000		
Vanadium	5.0 U	5.0 U	5.0 U				1.1 J	56.2		
Zinc	4.7 J+	6.2 J	2.1				13.6 J+	97.3 J		
Other										
Dissolved oxygen, field (mg/L)	3.32	4.94	4.66				0.17	2.58		
ORP, field (mV)	225.4	262.3	156.8				22.1	46.7		
pH, field (S.U.)	5.80	5.76	5.60				5.76	6.00		
Spec. cond., field (umho/cm)	318	331	364				1780	1170		
Temperature, field (deg C)	14.5	10.16	14.23				11.87	11.73		
Turbidity, field (N.T.U.)	5.46	4.85	1.81				3.91	11.2		

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-10S	AE-10S	AE-10S	AE-10S	AE-11B	AE-11B	AE-11B	AE-11B	AE-11B	AE-11B
Sample ID:	WL-GW-AE-10S-1	WL-GW-AE-10S-2	WL-GWF-AE-10S-1	WL-GWF-AE-10S-2	WL-GW-AE-11B-2	WL-GW-AE-11B-3	WL-GW-AE-11B-3-D	WL-GWF-AE-11B-2	WL-GWF-AE-11B-3	WL-GWF-AE-11B-3-D
Sample Date:	8/5/2014	12/15/2014	8/5/2014	12/15/2014	12/11/2014	9/16/2015	9/16/2015	12/11/2014	9/16/2015	9/16/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U	0.33 J			0.50 U	0.50 U	0.50 U			
1,1,2-Trichloroethane	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
1,1-Dichloroethane	8.8	8.4			0.50 U	0.50 U	0.50 U			
1,1-Dichloroethene	4.1	5.1			0.50 U	0.50 U	0.50 U			
1,2-Dibromo-3-chloropropane	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
1,2-Dichloroethane	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
2-Butanone	5.0 U	5.0 U			5.0 U	5.0 U	5.0 U			
Acetone	5.0 U	5.0 U			5.0 U	5.0 U	5.0 U			
Benzene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Bromodichloromethane	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Bromoform	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Carbon disulfide	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Chloroethane	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Chloroform	0.50 U	0.50 U			0.50 U	1.1	0.99			
cis-1,2-Dichloroethene	25	37			0.50 U	0.50 U	0.50 U			
Cyclohexane	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Ethylbenzene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Isopropylbenzene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
m,p-Xylene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Methyl tert-butyl ether	1.0	0.84			0.50 U	0.50 U	0.50 U			
Methylcyclohexane	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Methylene chloride	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
o-Xylene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Tetrachloroethene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Toluene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
trans-1,2-Dichloroethene	0.50 U	0.50 U			0.50 U	0.50 U	0.50 U			
Trichloroethene	4.0	8.6			0.50 U	0.50 U	0.50 U			
Vinyl chloride	2.0	1.9			0.50 U	0.50 U	0.50 U			
1,4-Dioxane (ug/L)										
1,4-Dioxane	0.77					0.10 U	0.10 U			
Inorganics, Dissolved (ug/L)										
Aluminum			20.0 UJ	23.7				20.0 U	20.0 UJ	20.0 UJ
Antimony			2.0 U	2.0 U				2.0 U	2.0 U	2.0 U
Arsenic			2.5	2.7				1.0 U	0.10 J	0.11 J
Barium			280	323				10.0 U	10.0 U	10.0 U
Beryllium			1.0 U	1.0 U				1.0 U	1.0 U	1.0 U
Cadmium			0.040 U	0.40 U				0.40 U	0.037 J	0.027 J
Calcium			65200	69800				19600	21100	20800
Chromium			3.1 J	6.9				16.6	56.2	55.7
Chromium, Hexavalent			0.50 U	0.50 U				15.1 J+	53.8	52.3
Cobalt			1.0 UJ	2.0				1.2	1.0 UJ	1.0 UJ
Copper			2.0 U	1.2 J				2.0 UJ	2.0 U	2.0 U
Iron			12200 J	8540				200 U	200 U	200 U
Lead			0.20 U	0.20 U				0.20 U	1.0 U	1.0 U
Magnesium			15500 J	16200				4700	5050 J	5020 J
Manganese			1070 J	1300				398	50.3	49.4

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-10S	AE-10S	AE-10S	AE-10S	AE-11B	AE-11B	AE-11B	AE-11B	AE-11B	AE-11B
Sample ID:	WL-GW-AE-10S-1	WL-GW-AE-10S-2	WL-GWF-AE-10S-1	WL-GWF-AE-10S-2	WL-GW-AE-11B-2	WL-GW-AE-11B-3	WL-GW-AE-11B-3-D	WL-GWF-AE-11B-2	WL-GWF-AE-11B-3	WL-GWF-AE-11B-3-D
Sample Date:	8/5/2014	12/15/2014	8/5/2014	12/15/2014	12/11/2014	9/16/2015	9/16/2015	12/11/2014	9/16/2015	9/16/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate
Parameter										
Mercury			0.20 UJ	0.034 J				0.20 UJ	0.028 J	0.20 U
Nickel			1.7 J	4.6				2.5	1.4 J	1.4 J
Potassium			3020	3960				1990	1390 J	1390 J
Selenium			5.0 U	5.0 U				5.0 U	5.0 U	5.0 U
Silver			1.0 U	1.0 U				1.0 U	1.0 U	1.0 U
Sodium			166000	171000				41100	38500	37500
Vanadium			5.0 U	5.0 U				5.0 UJ	5.0 U	5.0 U
Zinc			6.2	10.7				2.3 U	3.0 J	3.5 J
Inorganics (ug/L)										
Aluminum	178	1640			76.7	20.0 UJ	20.0 UJ			
Antimony	2.0 U	2.0 U			2.0 U	2.0 U	2.0 U			
Arsenic	2.5	2.9			1.0 U	0.14 J	0.15 J			
Barium	281	291			10.2	10.0 U	10.0 U			
Beryllium	0.10 J+	0.12 J			1.0 U	1.0 U	1.0 U			
Cadmium	0.040 U	0.40 UJ			0.40 UJ	0.051 J	0.029 J			
Calcium	66300	66400			18900 J	21200	21000			
Chromium	5.4 J-	17.7			20.6	61	60.3			
Chromium, Hexavalent	0.50 U	0.50 U			13.6 J+	57.4	57.0			
Cobalt	1.0 U	2.3			1.2	1.0 UJ	1.0 UJ			
Copper	2.0 U	2.9 J-			2.0 UJ	2.0 U	2.0 U			
Cyanide	5.5 J	3.7			1.7 J	10.0 U	10.0 U			
Iron	12600	10300			230	200 U	200 U			
Lead	0.37 J	3.2			0.20 U	1.0 U	1.0 U			
Magnesium	16000 J	16600			4800 J	5140 J	5090 J			
Manganese	1100	1280			374	50.2 J	50.2 J			
Mercury	0.20 UJ	0.20 UJ			0.20 UJ	0.20 U	0.20 U			
Nickel	2.1	6.0			2.5	1.3 J	1.3 J			
Potassium	3130	3900			2030	1350 J	1360 J			
Selenium	5.0 U	5.0 U			5.0 U	5.0 U	5.0 U			
Silver	1.0 U	1.0 UJ			1.0 U	0.039 J	0.040 J			
Sodium	171000	165000			41000	39700	38800			
Vanadium	0.96 J	3.2 J			R	5.0 U	5.0 U			
Zinc	7.5 J+	18.2			2.3 U	2.3	2.4			
Other										
Dissolved oxygen, field (mg/L)	0.14	1.11			3.42	6.36				
ORP, field (mV)	124.6	91.8			63.4	284.8				
pH, field (S.U.)	5.62	5.74			5.98	5.56				
Spec. cond., field (umho/cm)	1377	1425			388	361				
Temperature, field (deg C)	14.7	12.28			11.80	13.95				
Turbidity, field (N.T.U.)	3.98	58			2.81	2.18				

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-12B	AE-12B	AE-12B	AE-12B	AE-13B	AE-13B	AE-13B	AE-13B	AE-14B	AE-14B
Sample ID:	WL-GW-AE-12B-2	WL-GW-AE-12B-3	WL-GWF-AE-12B-2	WL-GWF-AE-12B-3	WL-GW-AE-13B-2	WL-GW-AE-13B-3	WL-GWF-AE-13B-2	WL-GWF-AE-13B-3	WL-GW-AE-14B-2	WL-GW-AE-14B-3
Sample Date:	12/8/2014	9/15/2015	12/8/2014	9/15/2015	12/2/2014	9/21/2015	12/2/2014	9/21/2015	12/4/2014	9/16/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	9.8	1.2			0.50 U	0.50 U			0.24 J	0.57
1,1,2-Trichloroethane	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
1,1-Dichloroethane	10	4.5			0.62	0.50 U			3.6	9.5
1,1-Dichloroethene	2.9	0.80			0.50 U	0.50 U			0.50 U	1.0
1,2-Dibromo-3-chloropropane	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
1,2-Dichloroethane	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
2-Butanone	5.0 U	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U
Acetone	5.0 U	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U
Benzene	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Bromodichloromethane	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Bromoform	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Carbon disulfide	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Chloroethane	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Chloroform	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
cis-1,2-Dichloroethene	5.5	0.63			0.50 U	0.50 U			0.66	2.2
Cyclohexane	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Ethylbenzene	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Isopropylbenzene	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
m,p-Xylene	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Methyl tert-butyl ether	0.33 J	0.50 U			0.24 J	0.50 U			0.48 J	0.53
Methylcyclohexane	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Methylene chloride	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
o-Xylene	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Tetrachloroethene	0.54	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Toluene	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
trans-1,2-Dichloroethene	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
Trichloroethene	23	4.8			0.50 U	0.50 U			1.5	1.7
Vinyl chloride	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U
1,4-Dioxane (ug/L)										
1,4-Dioxane		1.3				0.23 U				1.1
Inorganics, Dissolved (ug/L)										
Aluminum			20.0 U	93.8 J			20.0 U	20.0 U		
Antimony			2.0 U	0.11 J			2.0 U	2.0 U		
Arsenic			1.0 U	0.26			1.5	1.4		
Barium			37.1	37.6			51.0	26.9		
Beryllium			1.0 U	0.050 J			1.0 U	1.0 U		
Cadmium			0.40 U	0.19 J			0.40 U	1.0 U		
Calcium			42100	40700			49700	26500		
Chromium			8460	3720			2.0 U	2.0 U		
Chromium, Hexavalent			8440	3150			0.50 U	0.50 U		
Cobalt			1.5	1.2 J			9.9	6.7 J		
Copper			0.22 J	2.6			2.0 UJ	0.12 J		
Iron			2380	1140			21600	10300 J		
Lead			0.20 U	1.0 U			0.20 U	1.0 U		
Magnesium			12700	11100 J			15400	8660 J		
Manganese			282	209			2000 J	1160		

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-12B	AE-12B	AE-12B	AE-12B	AE-13B	AE-13B	AE-13B	AE-13B	AE-14B	AE-14B
Sample ID:	WL-GW-AE-12B-2	WL-GW-AE-12B-3	WL-GWF-AE-12B-2	WL-GWF-AE-12B-3	WL-GW-AE-13B-2	WL-GW-AE-13B-3	WL-GWF-AE-13B-2	WL-GWF-AE-13B-3	WL-GW-AE-14B-2	WL-GW-AE-14B-3
Sample Date:	12/8/2014	9/15/2015	12/8/2014	9/15/2015	12/2/2014	9/21/2015	12/2/2014	9/21/2015	12/4/2014	9/16/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury			0.20 UJ	0.20 U			0.20 UJ	0.20 U		
Nickel			7.4	5.9 J			3.4	1.4		
Potassium			4450	3960 J			3900 J	1540 J		
Selenium			5.0 U	5.0 U			5.0 U	5.0 U		
Silver			1.0 UJ	1.0 U			1.0 U	1.0 U		
Sodium			91000	78900			57500	25200 J		
Vanadium			5.0 U	5.0 U			5.0 U	0.20 J		
Zinc			10.4	8.4 J			7.1	12.3 J		
Inorganics (ug/L)										
Aluminum	70.7	1380 J			2250	365 J			1960	20.0 UJ
Antimony	2.0 U	0.16 J			2.0 U	2.0 U			2.0 U	2.0 U
Arsenic	1.0 U	1.3			2.0	2.1			3.3	0.97 J
Barium	38.1	43.1			53.9	27.4			102	140
Beryllium	1.0 U	0.24 J			1.0 U	1.0 U			1.0 U	0.068 J
Cadmium	0.40 U	0.17 J			0.40 U	1.0 U			0.40 U	0.093 J
Calcium	41600	40000			46900	23700			60500	78800
Chromium	8460	3120			6.3 U	2.0 U			7.4 U	2.0 U
Chromium, Hexavalent	8920	3170			0.50 U	0.50 U			0.50 U	0.50 U
Cobalt	1.5	2.2 J			11.2	6.8 J			21.7	21.8 J
Copper	0.68 J	3.3			10.5	2.0 U			5.5	2.0 U
Cyanide	2.5 U	10.0 U			2.1 J	10.0 U			1.4 J	10.0 U
Iron	2570	3920			22800	11300 J			15100	19300
Lead	0.21 U	2.6			3.6	1.0 U			3.8	1.0 U
Magnesium	12500	11500 J			15000	8150 J			16300	19500 J
Manganese	285	250 J			2080	1220			3240	4320 J
Mercury	0.20 UJ	0.20 U			0.20 UJ	0.20 U			0.20 UJ	0.20 U
Nickel	7.6	8.0 J			6.4	1.8 J			9.5	6.2 J
Potassium	4460	3800 J			4090	1550			4000	2870 J
Selenium	5.0 U	0.49 J			5.0 U	5.0 U			5.0 U	5.0 U
Silver	1.0 UJ	0.019 J			1.0 U	1.0 U			1.0 U	1.0 U
Sodium	92800	79700			53300	23300			101000	118000
Vanadium	5.0 U	5.0 U			5.0 U	1.3 J			5.0 U	5.0 U
Zinc	15.1 J	14.3			15.5 J	19.1 J			27.1 J	21.6
Other										
Dissolved oxygen, field (mg/L)	2.39	2.41			0.76	0.22			0.79	0.14
ORP, field (mV)	148.9	166.1			-78.1	1.9			-6.0	2.3
pH, field (S.U.)	5.91	5.60			5.87	5.85			5.57	5.90
Spec. cond., field (umho/cm)	964	1043			1186	308			1100	1245
Temperature, field (deg C)	9.54	13.42			9.99	13.68			11.18	13.56
Turbidity, field (N.T.U.)	4.82	177			40	39.1			78.8	5.77

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-14B	AE-14B	AE-14D	AE-14D	AE-14D	AE-14D	AE-15B	AE-15B	AE-15B	AE-15B
Sample ID:	WL-GWF-AE-14B-2	WL-GWF-AE-14B-3	WL-GW-AE-14D-2	WL-GW-AE-14D-3	WL-GWF-AE-14D-2	WL-GWF-AE-14D-3	WL-GW-AE-15B-2	WL-GW-AE-15BD-2	WL-GW-AE-15B-3	WL-GWF-AE-15B-2
Sample Date:	12/4/2014	9/16/2015	12/4/2014	9/16/2015	12/4/2014	9/16/2015	12/11/2014	12/11/2014	9/21/2015	12/11/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane			1.1	2.6			0.50 U	0.50 U	0.50 U	
1,1,2-Trichloroethane			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U	
1,1-Dichloroethane			3.1	5.2			0.12 J	0.50 U	0.50 U	
1,1-Dichloroethene			0.50 U	0.99			0.50 U	0.50 U	0.50 U	
1,2-Dibromo-3-chloropropane			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U	
1,2-Dichloroethane			0.50 U	0.50 U			0.50 U	0.50 UJ	0.50 U	
2-Butanone			5.0 U	5.0 U			5.0 U	5.0 U	5.0 U	
Acetone			5.0 U	5.0 U			5.0 U	5.0 U	5.0 U	
Benzene			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U	
Bromodichloromethane			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U	
Bromoform			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U	
Carbon disulfide			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U	
Chloroethane			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U	
Chloroform			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U	
cis-1,2-Dichloroethene			1.5	2.7			0.50 U	0.50 U	0.50 U	
Cyclohexane			5.1	0.50 U			0.50 U	0.50 U	0.50 U	
Ethylbenzene			0.57	0.50 U			0.50 U	0.50 U	0.50 U	
Isopropylbenzene			0.49 J	0.50 U			0.50 U	0.50 U	0.50 U	
m,p-Xylene			1.9	0.50 U			0.50 U	0.50 U	0.50 U	
Methyl tert-butyl ether			0.23 J	0.50 U			0.22 J	0.50 U	0.50 U	
Methylcyclohexane			18	0.50 U			0.50 U	0.50 U	0.50 U	
Methylene chloride			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U	
o-Xylene			0.19 J	0.50 U			0.50 U	0.50 U	0.50 U	
Tetrachloroethene			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U	
Toluene			0.50 U	0.50 U			0.50 U	0.50 U	0.50 UJ	
trans-1,2-Dichloroethene			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U	
Trichloroethene			4.7	7.5			2.5 J	0.50 UJ	2.8	
Vinyl chloride			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U	
1,4-Dioxane (ug/L)										
1,4-Dioxane				0.10 U					0.49	
Inorganics, Dissolved (ug/L)										
Aluminum	212	20.0 UJ			20.0 U	20.0 UJ				20.0 U
Antimony	2.0 U	2.0 U			2.0 U	2.0 U				2.0 U
Arsenic	0.69 J	0.99 J			0.28 J	0.13 J				1.0 U
Barium	107	145			139	161				21.2
Beryllium	1.0 U	0.086 J			1.0 U	0.065 J				1.0 U
Cadmium	0.40 U	0.10 J			0.40 U	0.18 J				0.40 U
Calcium	62800	81100			82000	68300				31100
Chromium	2.0 U	2.0 U			2.0 U	30.8				12200
Chromium, Hexavalent	0.50 U	0.50 U			0.50 U	26.8				11700
Cobalt	21.7	22.5 J			8.5	1.8 J				1.0 U
Copper	0.81 J	2.0 U			0.31 J	2.0 U				2.0 UJ
Iron	12000	20100			200 UJ	200 U				3160
Lead	0.42	1.0 U			0.20 U	1.0 U				0.20 U
Magnesium	16300	20200 J			21700	15900 J				7790
Manganese	3060 J	4580			2250 J	427				101

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-14B	AE-14B	AE-14D	AE-14D	AE-14D	AE-14D	AE-15B	AE-15B	AE-15B	AE-15B
Sample ID:	WL-GWF-AE-14B-2	WL-GWF-AE-14B-3	WL-GW-AE-14D-2	WL-GW-AE-14D-3	WL-GWF-AE-14D-2	WL-GWF-AE-14D-3	WL-GW-AE-15B-2	WL-GW-AE-15BD-2	WL-GW-AE-15B-3	WL-GWF-AE-15B-2
Sample Date:	12/4/2014	9/16/2015	12/4/2014	9/16/2015	12/4/2014	9/16/2015	12/11/2014	12/11/2014	9/21/2015	12/11/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate
Parameter										
Mercury	0.20 UJ	0.20 U			0.20 UJ	0.20 U				0.20 UJ
Nickel	7.6	6.7 J			8.8	5.2 J				1.6
Potassium	3920 J	3080 J			17100 J	18300 J				2840
Selenium	5.0 U	5.0 U			5.0 U	5.0 U				5.0 U
Silver	1.0 U	1.0 U			1.0 U	1.0 U				1.0 U
Sodium	106000	120000			308000	330000				74900
Vanadium	5.0 U	5.0 U			5.0 U	5.0 U				5.0 UJ
Zinc	25.3	35.8 J			10.0	8.3 J				2.4 U
Inorganics (ug/L)										
Aluminum			763	155 J			72.4	104	52.1 J	
Antimony			2.0 U	0.073 J			2.0 U	2.0 U	2.0 U	
Arsenic			0.54 J	0.27 J			1.0 U	1.0 U	0.27 J	
Barium			124	162			22.9	22.5	25.5	
Beryllium			1.0 U	0.10 J			1.0 U	1.0 U	1.0 U	
Cadmium			0.40 U	0.24 J			0.40 UJ	0.40 UJ	0.14 J	
Calcium			76500	66700			31000 J	31100 J	34600	
Chromium			2.6 U	30.0			12100	12200	11700	
Chromium, Hexavalent			0.50 U	27.7			11900	11500	11500	
Cobalt			8.2	1.9 J			1.0 U	1.0 U	0.29 J	
Copper			1.2 J	2.0 U			2.0 UJ	2.0 UJ	2.0 U	
Cyanide			1.8 J	10.0 U			1.9 J	1.6 J	10.0 U	
Iron			1230	286			3670	3670	3760 J	
Lead			1.0	1.0 U			0.20 U	0.20 U	1.0 U	
Magnesium			20200	15700 J			7900 J	7850 J	8880 J	
Manganese			2280	410 J			101	101	132	
Mercury			0.20 UJ	0.20 U			0.20 UJ	0.20 UJ	0.20 U	
Nickel			8.9	4.7 J			1.6	1.6	2.5 J	
Potassium			15700	17600 J			2950	2950	2930	
Selenium			5.0 U	5.0 U			5.0 U	0.43 J	5.0 U	
Silver			1.0 U	0.065 J			1.0 U	1.0 U	1.0 U	
Sodium			292000	308000			77900	77600	71000	
Vanadium			5.0 U	5.0 U			R	R	5.0 U	
Zinc			8.5 J	7.6			2.8 U	3.7 U	2.0 UJ	
Other										
Dissolved oxygen, field (mg/L)			0.72	1.14			0.24		0.27	
ORP, field (mV)			-128.1	308.2			11		122	
pH, field (S.U.)			5.76	5.85			6.16		6.19	
Spec. cond., field (umho/cm)			2014	1979			652		528	
Temperature, field (deg C)			11.19	13.54			12.37		12.91	
Turbidity, field (N.T.U.)			24.3	13.7			4.16		4.4	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-15B	AE-15B	AE-15D	AE-15D	AE-15D	AE-15D	AE-15S	AE-15S	AE-15S	AE-15S
Sample ID:	WL-GWF-AE-15BD-2	WL-GWF-AE-15B-3	WL-GW-AE-15D-2	WL-GW-AE-15D-3	WL-GWF-AE-15D-2	WL-GWF-AE-15D-3	WL-GW-AE-15S-2	WL-GW-AE-15S-3	WL-GWF-AE-15S-2	WL-GWF-AE-15S-3
Sample Date:	12/11/2014	9/21/2015	12/9/2014	9/21/2015	12/9/2014	9/21/2015	12/9/2014	9/21/2015	12/9/2014	9/21/2015
Sample Type:	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane			0.50 U	0.50 U			0.50 U	0.50 U		
1,1,2-Trichloroethane			0.50 U	0.50 U			0.50 U	0.50 U		
1,1-Dichloroethane			0.50 U	0.50 U			0.50 U	0.50 U		
1,1-Dichloroethene			0.50 U	0.50 U			0.50 U	0.50 U		
1,2-Dibromo-3-chloropropane			0.50 U	0.50 U			0.50 U	0.50 U		
1,2-Dichloroethane			0.50 U	0.50 U			0.50 U	0.50 U		
2-Butanone			5.0 U	5.0 U			5.0 U	5.0 U		
Acetone			5.0 U	5.0 U			5.0 U	5.0 U		
Benzene			0.50 U	0.50 U			0.50 U	0.50 U		
Bromodichloromethane			0.50 U	0.50 U			0.50 U	0.50 U		
Bromoform			0.50 U	0.50 U			0.50 U	0.50 U		
Carbon disulfide			0.50 U	0.50 U			0.50 U	0.50 U		
Chloroethane			0.50 U	0.50 U			0.50 U	0.50 U		
Chloroform			0.50 U	0.50 U			0.50 U	0.50 U		
cis-1,2-Dichloroethene			0.50 U	0.50 U			0.50 U	0.50 U		
Cyclohexane			0.50 U	0.50 U			0.50 U	0.50 U		
Ethylbenzene			0.50 U	0.50 U			0.50 U	0.50 U		
Isopropylbenzene			0.50 U	0.50 U			0.50 U	0.50 U		
m,p-Xylene			0.50 U	0.50 U			0.50 U	0.50 U		
Methyl tert-butyl ether			0.50 U	0.50 U			0.50 U	0.50 U		
Methylcyclohexane			0.50 U	0.50 U			0.50 U	0.50 U		
Methylene chloride			0.50 U	0.50 U			0.50 U	0.50 U		
o-Xylene			0.50 U	0.50 U			0.50 U	0.50 U		
Tetrachloroethene			0.50 U	0.50 U			0.50 U	0.50 U		
Toluene			0.50 U	0.50 UJ			0.50 U	0.50 UJ		
trans-1,2-Dichloroethene			0.50 U	0.50 U			0.50 U	0.50 U		
Trichloroethene			1.6	2.2			0.17 J	0.50 U		
Vinyl chloride			0.50 U	0.50 U			0.50 U	0.50 U		
1,4-Dioxane (ug/L)										
1,4-Dioxane				0.13 U				4.9		
Inorganics, Dissolved (ug/L)										
Aluminum	20.0 U	20.0 U			54.8 J+	50.4			20.0 U	20.0 U
Antimony	2.0 U	2.0 U			2.0 U	2.0 U			2.0 U	2.0 U
Arsenic	1.0 U	0.25 J			1.0 U	0.13 J			1.0 U	0.16 J
Barium	21.3	26.3			50.8	80.7			27.7	81.9
Beryllium	1.0 U	1.0 U			1.0 U	0.080 J			1.0 U	0.050 J
Cadmium	0.40 U	0.13 J			0.50	0.64 J			0.40 U	0.22 J
Calcium	31500	36700			36100	45000			10800	29000
Chromium	12000	12000			12100	11600			1800	2080
Chromium, Hexavalent	11800				12000				1820	1910
Cobalt	1.0 U	1.0 UJ			1.5	2.2 J			1.0 U	1.0 UJ
Copper	2.0 UJ	0.48 J			0.27 J	1.2 J			0.84 J	0.73 J
Iron	3210	3580 J			3530	3430 J			577	578 J
Lead	0.20 U	1.0 U			0.20 U	1.0 U			0.20 U	1.0 U
Magnesium	7870	9040 J			8820	10400 J			2320	6450 J
Manganese	98.5	121			578	593.0			251	405

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-15B	AE-15B	AE-15D	AE-15D	AE-15D	AE-15D	AE-15S	AE-15S	AE-15S	AE-15S
Sample ID:	WL-GWF-AE-15BD-2	WL-GWF-AE-15B-3	WL-GW-AE-15D-2	WL-GW-AE-15D-3	WL-GWF-AE-15D-2	WL-GWF-AE-15D-3	WL-GW-AE-15S-2	WL-GW-AE-15S-3	WL-GWF-AE-15S-2	WL-GWF-AE-15S-3
Sample Date:	12/11/2014	9/21/2015	12/9/2014	9/21/2015	12/9/2014	9/21/2015	12/9/2014	9/21/2015	12/9/2014	9/21/2015
Sample Type:	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury	0.20 UJ	0.20 U			0.20 UJ	0.20 U			0.20 UJ	0.20 U
Nickel	1.6	2.4			19.5	22.5			4.4	5.1
Potassium	2860	2940 J			4630	4590 J			2850	3630 J
Selenium	5.0 U	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U
Silver	1.0 U	0.018 J			1.0 UJ	0.064 J			1.0 UJ	0.072 J
Sodium	76000	73400 J			121000	151000 J			109000	222000 J
Vanadium	5.0 UJ	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U
Zinc	2.1 U	2.4 J			51.0	86.8 J			4.2	9.7 J
Inorganics (ug/L)										
Aluminum			421	678 J			65.1 U	31.8 J		
Antimony			2.0 U	2.0 U			2.0 U	2.0 U		
Arsenic			1.0 U	0.90 J			1.0 U	0.21 J		
Barium			52.6	80.7			25.5	80.8		
Beryllium			1.0 U	0.12 J			1.0 U	0.043 J		
Cadmium			0.48 J-	0.60 J			0.40 U	0.19 J		
Calcium			35300	41400			9620	27300		
Chromium			11500	11000			1780	1880		
Chromium, Hexavalent			12300				1830	1800 J		
Cobalt			1.9	2.7 J			1.0 U	0.32 J		
Copper			0.98 J	2.1			0.50 J	2.0 U		
Cyanide			2.5 U	10.0 U			4.6 U	10.0 U		
Iron			4080	4740 J			589	630 J		
Lead			0.81	1.0 U			0.49 U	1.0 U		
Magnesium			8840	10200 J			2100	6870 J		
Manganese			616	701			256	435		
Mercury			0.20 UJ	0.20 U			0.20 UJ	0.20 U		
Nickel			19.9	22.2 J			3.8	5.0 J		
Potassium			4540	4580			2580	3630		
Selenium			5.0 U	5.0 U			5.0 U	5.0 U		
Silver			1.0 UJ	1.0 U			1.0 UJ	1.0 U		
Sodium			119000	155000			97600	216000		
Vanadium			5.0 U	5.0 U			5.0 U	5.0 U		
Zinc			52.3 J	88.0 J			2.4 UJ	10.3 J		
Other										
Dissolved oxygen, field (mg/L)			2.76	0.41			5.96	4.81		
ORP, field (mV)			182.8	230.8			44.7	148.1		
pH, field (S.U.)			5.28	5.60			5.31	5.20		
Spec. cond., field (umho/cm)			876	1005			541	1124		
Temperature, field (deg C)			11.44	14.02			9.32	14.96		
Turbidity, field (N.T.U.)			-56	0.92			12.7	1.09		

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-16S	AE-16S	AE-17S	AE-17S	AE-17S	AE-18S	AE-18S	AE-19S	AE-19S	AE-20B
Sample ID:	WL-GW-AE-16S-2	WL-GWF-AE-16S-2	WL-GW-AE-17S-2	WL-GW-AE-17S-3	WL-GWF-AE-17S-2	WL-GW-AE-18S-2	WL-GWF-AE-18S-2	WL-GW-AE-19S-2	WL-GWF-AE-19S-2	WL-GW-AE-20B-2
Sample Date:	12/4/2014	12/4/2014	12/4/2014	9/21/2015	12/4/2014	12/3/2014	12/3/2014	12/4/2014	12/4/2014	12/4/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.15 J		0.50 U	0.50 U		0.50 U		3.7		0.50 U
1,1,2-Trichloroethane	0.50 U		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U
1,1-Dichloroethane	0.34 J		0.50 U	0.50 U		0.50 U		3.2		0.96
1,1-Dichloroethene	0.50 U		0.50 U	0.50 U		0.50 U		0.96 U		0.50 U
1,2-Dibromo-3-chloropropane	0.50 U		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U
1,2-Dichloroethane	0.50 U		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U
2-Butanone	5.0 U		5.0 U	5.0 U		5.0 U		5.0 U		5.0 U
Acetone	5.0 U		5.0 U	5.0 U		5.0 U		5.0 U		5.0 U
Benzene	0.10 J		0.12 J	0.32 J		0.50 U		0.50 U		0.50 U
Bromodichloromethane	0.50 U		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U
Bromoform	0.50 U		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U
Carbon disulfide	0.50 U		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U
Chloroethane	0.50 U		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U
Chloroform	0.50 U		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U
cis-1,2-Dichloroethene	0.12 J		0.50 U	0.50 U		0.50 U		1.6		3.1
Cyclohexane	0.25 J		1.1	0.49 J		0.50 U		0.50 U		0.50 U
Ethylbenzene	0.50 U		0.73	0.76		0.50 U		0.50 U		0.50 U
Isopropylbenzene	0.50 U		1.0	3.0		0.50 U		0.50 U		0.50 U
m,p-Xylene	0.50 U		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U
Methyl tert-butyl ether	0.50 U		0.50 U	0.50 U		0.50 U		0.11 J		0.50 U
Methylcyclohexane	0.50 U		0.20 J	0.50 U		0.50 U		0.50 U		0.50 U
Methylene chloride	0.50 U		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U
o-Xylene	0.50 U		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U
Tetrachloroethene	0.50 U		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U
Toluene	0.50 U		0.50 U	0.50 UJ		0.50 U		0.50 U		0.50 U
trans-1,2-Dichloroethene	0.50 U		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U
Trichloroethene	0.30 J		0.50 U	0.50 U		0.50 U		7.6		1.1
Vinyl chloride	0.50 U		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U
1,4-Dioxane (ug/L)										
1,4-Dioxane										
Inorganics, Dissolved (ug/L)										
Aluminum		20.0 U			39.9		38.5		132	
Antimony		2.0 U			2.0 U		2.0 U		2.0 U	
Arsenic		0.73 J			0.88 J		0.11 J		0.47 J	
Barium		139			35.2		20.2		56.8	
Beryllium		1.0 U			1.0 U		1.0 U		1.0 U	
Cadmium		0.40 U			0.40 U		0.40 U		0.40 U	
Calcium		29100			15000		5660		20300	
Chromium		2.0 U			2.0 U		2.0 U		2.4	
Chromium, Hexavalent		0.50 U			0.50 U		0.50 U		2.00 J+	
Cobalt		5.3			1.5		1.0 U		1.0 U	
Copper		4.1			4.0		0.16 J		0.97 J	
Iron		1130			382		200 UJ		200 UJ	
Lead		0.57			0.23 U		0.20 U		0.20 U	
Magnesium		4000			1720		1450		4140	
Manganese		560 J			482 J		22.3 J		42.3 J	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-16S	AE-16S	AE-17S	AE-17S	AE-17S	AE-18S	AE-18S	AE-19S	AE-19S	AE-20B
Sample ID:	WL-GW-AE-16S-2	WL-GWF-AE-16S-2	WL-GW-AE-17S-2	WL-GW-AE-17S-3	WL-GWF-AE-17S-2	WL-GW-AE-18S-2	WL-GWF-AE-18S-2	WL-GW-AE-19S-2	WL-GWF-AE-19S-2	WL-GW-AE-20B-2
Sample Date:	12/4/2014	12/4/2014	12/4/2014	9/21/2015	12/4/2014	12/3/2014	12/3/2014	12/4/2014	12/4/2014	12/4/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury		0.20 UJ			0.20 UJ		0.20 UJ		0.20 UJ	
Nickel		4.8			2.6		1.5		2.4	
Potassium		4250 J			1670 J		814 J		7090 J	
Selenium		5.0 U			5.0 U		5.0 U		5.0 U	
Silver		1.0 U			1.0 U		1.0 U		1.0 U	
Sodium		125000			26600		7090		56100	
Vanadium		5.0 U			5.0 U		5.0 U		5.0 U	
Zinc		78.5			57.9		51.1		13.5	
Inorganics (ug/L)										
Aluminum	668		488			171		1240		171
Antimony	2.0 U		2.0 U			2.0 U		2.0 U		2.0 U
Arsenic	0.84 J		1.1			0.14 J		0.95 J		0.47 J
Barium	141		35.0			20.5		54.5		40.1
Beryllium	1.0 U		1.0 U			1.0 U		1.0 U		1.0 U
Cadmium	0.40 U		0.40 U			0.40 U		0.40 U		0.40 U
Calcium	29100		14700			5880		19100		43700
Chromium	2.0 U		2.0 U			2.0 U		3.8 U		1340
Chromium, Hexavalent	0.50 U		0.50 U			0.50 U		1.7 J+		1270
Cobalt	5.5		1.7			1.0 U		1.0 U		3.1
Copper	6.5		4.5			0.44 J		2.9		2.1
Cyanide	2.8		2.8			2.0 J		1.7 J		3.0
Iron	1420		974			200 UJ		1930		758
Lead	2.7		1.9			0.41		1.4		0.38
Magnesium	3930		1730			1580		4200		16200
Manganese	567		491			29.5		76.1		253
Mercury	0.20 UJ		0.20 UJ			0.20 UJ		0.20 UJ		0.20 UJ
Nickel	4.9		3.2			1.8		3.6		5.3
Potassium	4360		1620			888		6690		2970
Selenium	5.0 U		5.0 U			5.0 U		0.48 J		5.0 U
Silver	1.0 U		1.0 U			1.0 U		1.0 U		1.0 U
Sodium	135000		25200			7540		53100		55600
Vanadium	5.0 U		5.0 U			5.0 U		5.0 U		5.0 U
Zinc	76.2 J		54.5 J			47.9 J		13.5 J		24.7 J
Other										
Dissolved oxygen, field (mg/L)	0.81		3.15	0.28		4.29		7.41		1.18
ORP, field (mV)	114.6		-3.9	-43.4		299.7		255.9		-42.8
pH, field (S.U.)	5.65		5.75	6.31		5.65		5.84		6.00
Spec. cond., field (umho/cm)	854		259	512		120		430		648
Temperature, field (deg C)	10.25		13.01	20.16		12.20		12.35		11.14
Turbidity, field (N.T.U.)	4.71		4.95	2.06		4.31		17.3		8.12

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-20B	AE-20B	AE-20B	AE-ML-01A	AE-ML-01A	AE-ML-01B	AE-ML-01B	AE-ML-01C	AE-ML-01C	AE-ML-02
Sample ID:	WL-GW-AE-20B-3	WL-GWF-AE-20B-2	WL-GWF-AE-20B-3	WL-GW-AE-ML-01A-3	WL-GWF-AE-ML-01A-3	WL-GW-AE-ML-01B-3	WL-GWF-AE-ML-01B-3	WL-GW-AE-ML-01C-3	WL-GWF-AE-ML-01C-3	WL-GW-AE-ML-02-3
Sample Date:	9/15/2015	12/4/2014	9/15/2015	9/22/2015	9/22/2015	9/22/2015	9/22/2015	9/22/2015	9/22/2015	9/21/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U			0.50 U		0.50 U		0.50 U		0.82
1,1,2-Trichloroethane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
1,1-Dichloroethane	0.50 U			0.50 U		0.50 U		0.50 U		25
1,1-Dichloroethene	0.50 U			0.50 U		0.50 U		0.50 U		2.7
1,2-Dibromo-3-chloropropane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
1,2-Dichloroethane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
2-Butanone	5.0 U			5.0 U		5.0 U		5.0 U		5.0 U
Acetone	5.0 U			5.0 U		5.0 U		5.0 U		5.0 U
Benzene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Bromodichloromethane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Bromoform	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Carbon disulfide	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Chloroethane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Chloroform	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
cis-1,2-Dichloroethene	0.50 U			2.6		2.3		2.2		1.6
Cyclohexane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Ethylbenzene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Isopropylbenzene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
m,p-Xylene	0.50 U			0.50 U		0.50 U		0.50 U		0.23 J
Methyl tert-butyl ether	0.50 U			0.50 U		0.50 U		0.43 J		0.69
Methylcyclohexane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Methylene chloride	0.50 U			0.95 U		0.50 U		0.52 U		0.24 J
o-Xylene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Tetrachloroethene	0.50 U			0.58		0.50 U		0.50 U		0.50 U
Toluene	0.50 U			0.50 U		0.39 J		0.47 J		4.6 J
trans-1,2-Dichloroethene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Trichloroethene	0.46 J			6.3		6.2		4.0		6.2
Vinyl chloride	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
1,4-Dioxane (ug/L)										
1,4-Dioxane	0.095 J			0.10 U		0.10 U		0.10 U		13 J
Inorganics, Dissolved (ug/L)										
Aluminum		21.7	24.3 J		20.0 U		20.0 U		20.0 U	
Antimony		2.0 U	2.0 U		2.0 U		2.0 U		2.0 U	
Arsenic		0.35 J	0.37 J		2.9		1.3		2.3	
Barium		42.7	15.2		75.1		89.8		118	
Beryllium		1.0 U	0.041 J		1.0 U		1.0 U		1.0 U	
Cadmium		0.40 U	0.065 J		0.11 J		0.043 J		1.0 U	
Calcium		44400	22600		93700		84700		71500	
Chromium		1360	62.6		2.0 U		2.0 U		2.0 U	
Chromium, Hexavalent		1120	58.2		0.50 U		0.50 U		0.50 U	
Cobalt		3.2	2.4 J		7.3 J		1.0 UJ		1.0 UJ	
Copper		1.1 J	2.0 U		2.0 U		2.0 U		2.0 U	
Iron		456	200 U		2010 J		583 J		398 J	
Lead		0.20 U	1.0 U		1.0 U		1.0 U		1.0 U	
Magnesium		16500	8280 J		12400 J		8700 J		7480 J	
Manganese		266 J	43.7		1660		1750		1480	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-20B	AE-20B	AE-20B	AE-ML-01A	AE-ML-01A	AE-ML-01B	AE-ML-01B	AE-ML-01C	AE-ML-01C	AE-ML-02
Sample ID:	WL-GW-AE-20B-3	WL-GWF-AE-20B-2	WL-GWF-AE-20B-3	WL-GW-AE-ML-01A-3	WL-GWF-AE-ML-01A-3	WL-GW-AE-ML-01B-3	WL-GWF-AE-ML-01B-3	WL-GW-AE-ML-01C-3	WL-GWF-AE-ML-01C-3	WL-GW-AE-ML-02-3
Sample Date:	9/15/2015	12/4/2014	9/15/2015	9/22/2015	9/22/2015	9/22/2015	9/22/2015	9/22/2015	9/22/2015	9/21/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Parameter										
Mercury		0.20 UJ	0.20 U		0.20 U		0.20 U		0.20 U	
Nickel		5.3	3.9 J		2.9		1.1		1.4	
Potassium		3090 J	1560 J		1930 J		2520 J		2990 J	
Selenium		5.0 U	5.0 U		5.0 U		5.0 U		5.0 U	
Silver		1.0 U	1.0 U		1.0 U		1.0 U		1.0 U	
Sodium		57000	20400		68100 J		71400 J		53900 J	
Vanadium		5.0 U	5.0 U		0.19 J		5.0 U		5.0 U	
Zinc		26.5	11.2 J		10.7 J		11.7 J		16.1 J	
Inorganics (ug/L)										
Aluminum	123 J			20.0 UJ		20.0 UJ		328 J		36.1 J
Antimony	0.078 J			2.0 U		2.0 U		2.0 U		2.0 U
Arsenic	0.48 J			3.2		1.4		2.7		0.63 J
Barium	15.5			72.7		90.5		101		103
Beryllium	0.046 J			1.0 U		1.0 U		0.039 J		1.0 U
Cadmium	0.053 J			0.13 J		0.046 J		1.0 U		1.0 U
Calcium	23600			87100		83900		66800		77000
Chromium	78.2			2.0 U		2.0 U		42.2		13.4
Chromium, Hexavalent	61.3			0.50 U		0.50 U		0.50 U		0.50 U
Cobalt	2.1 J			7.5 J		0.88 J		0.86 J		0.98 J
Copper	2.0 U			2.0 U		2.0 U		2.0 U		2.0 U
Cyanide	10.0 U			10.0 U		10.0 U		10.0 U		10.0 U
Iron	286			2110 J		680 J		1600 J		18200 J
Lead	1.0 U			1.0 U		1.0 U		1.0 U		1.0 U
Magnesium	8860 J			11700 J		8730 J		7220 J		14200 J
Manganese	40 J			1770		1950		1410		3750
Mercury	0.20 U			0.20 U		0.20 U		0.20 U		0.20 U
Nickel	3.6 J			2.8 J		1.3 J		1.4 J		1.2 J
Potassium	1490 J			1880		2610		2870		4040
Selenium	5.0 U			5.0 U		5.0 U		0.41 J		5.0 U
Silver	1.0 U			1.0 U		1.0 U		1.0 U		1.0 U
Sodium	21300			63900		73300		56000		82900
Vanadium	5.0 U			0.37 J		5.0 U		5.0 U		5.0 U
Zinc	9.1			29.7 J		15.9 J		35.5 J		142 J
Other										
Dissolved oxygen, field (mg/L)	3.15			0.53		0.33		0.34		0.10
ORP, field (mV)	125.5			-41.3		-137		-169.2		-239
pH, field (S.U.)	5.64			6.60		7.39		7.34		7.35
Spec. cond., field (umho/cm)	349			855		802		664		849
Temperature, field (deg C)	14.11			15.72		16.43		16.54		14.45
Turbidity, field (N.T.U.)	4.11			2.5		0.73		0.96		7.1

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-ML-02	AE-ML-02	AE-ML-02	AE-ML-03A	AE-ML-03A	AE-ML-03B	AE-ML-03B	AE-ML-03C	AE-ML-03C	AE-ML-04A
Sample ID:	WL-GW-AE-ML-02-3-D	WL-GWF-AE-ML-02-3	WL-GWF-AE-ML-02-3-D	WL-GW-AE-ML-03A-3	WL-GWF-AE-ML-03A-3	WL-GW-AE-ML-03B-3	WL-GWF-AE-ML-03B-3	WL-GW-AE-ML-03C-3	WL-GWF-AE-ML-03C-3	WL-GW-AE-ML-04A-3
Sample Date:	9/21/2015	9/21/2015	9/21/2015	9/16/2015	9/16/2015	9/16/2015	9/16/2015	9/16/2015	9/16/2015	9/23/2015
Sample Type:	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.76			0.50 U		0.50 U		0.50 U		8.8
1,1,2-Trichloroethane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
1,1-Dichloroethane	18			0.50 U		0.50 U		0.50 U		12
1,1-Dichloroethene	2.6			0.50 U		0.50 U		0.50 U		4.2
1,2-Dibromo-3-chloropropane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
1,2-Dichloroethane	0.50 U			0.50 U		0.50 U		0.42 J+		0.50 U
2-Butanone	5.0 U			5.0 U		5.0 U		5.0 U		5.0 U
Acetone	5.0 U			5.0 U		5.0 U		5.0 U		5.0 U
Benzene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Bromodichloromethane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Bromoform	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Carbon disulfide	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Chloroethane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Chloroform	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
cis-1,2-Dichloroethene	1.5			0.50 U		0.50 U		0.50 U		1.8
Cyclohexane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Ethylbenzene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Isopropylbenzene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
m,p-Xylene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Methyl tert-butyl ether	0.72			0.50 U		0.50 U		0.50 U		0.74
Methylcyclohexane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Methylene chloride	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
o-Xylene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Tetrachloroethene	0.50 U			0.50 U		0.50 U		0.50 U		0.48 J
Toluene	4.3 J			1.3		0.50 U		0.50 U		0.50 U
trans-1,2-Dichloroethene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Trichloroethene	5.8			0.50 U		0.50 U		0.50 U		19
Vinyl chloride	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
1,4-Dioxane (ug/L)										
1,4-Dioxane	8.5 J			0.10 U		0.10 U		0.10 U		3.2
Inorganics, Dissolved (ug/L)										
Aluminum		20.0 U	20.0 U		20.0 UJ		20.0 UJ		20.0 UJ	
Antimony		2.0 U	2.0 U		0.33 J		0.31 J		0.27 J	
Arsenic		0.73 J	0.77 J		2.1		2.1		2.0	
Barium		105	104		29.6		19.3		18.0	
Beryllium		1.0 U	1.0 U		1.0 U		1.0 U		1.0 U	
Cadmium		1.0 U	1.0 U		1.0 U		1.0 U		1.0 U	
Calcium		79800	81400		14900		15700		15500	
Chromium		2.0 U	2.0 U		2.0 U		2.0 U		2.0 U	
Chromium, Hexavalent		0.50 U	0.50 U		0.50 U		0.50 U		0.50 U	
Cobalt		1.1 J	1.2 J		1.0 UJ		1.0 UJ		1.0 UJ	
Copper		0.32 J	0.25 J		2.0 U		2.0 U		2.0 U	
Iron		16600 J	16700 J		200 U		200 U		200 U	
Lead		1.0 U	1.0 U		1.0 U		1.0 U		1.0 U	
Magnesium		14400 J	14400 J		3710 J		4940 J		4870 J	
Manganese		3730	3850		60.3		36.0		33.6	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-ML-02	AE-ML-02	AE-ML-02	AE-ML-03A	AE-ML-03A	AE-ML-03B	AE-ML-03B	AE-ML-03C	AE-ML-03C	AE-ML-04A
Sample ID:	WL-GW-AE-ML-02-3-D	WL-GWF-AE-ML-02-3	WL-GWF-AE-ML-02-3-D	WL-GW-AE-ML-03A-3	WL-GWF-AE-ML-03A-3	WL-GW-AE-ML-03B-3	WL-GWF-AE-ML-03B-3	WL-GW-AE-ML-03C-3	WL-GWF-AE-ML-03C-3	WL-GW-AE-ML-04A-3
Sample Date:	9/21/2015	9/21/2015	9/21/2015	9/16/2015	9/16/2015	9/16/2015	9/16/2015	9/16/2015	9/16/2015	9/23/2015
Sample Type:	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Parameter										
Mercury		0.20 U	0.20 U		0.20 U		0.20 U		0.20 U	
Nickel		1.1	1.2		1.0 UJ		1.0 UJ		1.0 UJ	
Potassium		3790 J	3910 J		1880 J		1440 J		1400 J	
Selenium		5.0 U	5.0 U		5.0 U		5.0 U		5.0 U	
Silver		1.0 U	1.0 U		1.0 U		1.0 U		1.0 U	
Sodium		86400 J	85900 J		33300		21100		17900	
Vanadium		5.0 U	5.0 U		5.0 U		5.0 U		5.0 U	
Zinc		19.3 J	18.1 J		2.8 J		2.9 J		2.6 J	
Inorganics (ug/L)										
Aluminum	38.3 J			72.1 J		48.3 J		20.0 UJ		27.6 J
Antimony	2.0 U			0.30 J		0.34 J		0.32 J		2.0 U
Arsenic	0.59 J			2.1		2.0		2.1		1.0 U
Barium	98.7			29.1		19.8		18.7		131
Beryllium	1.0 U			1.0 U		1.0 U		1.0 U		1.0 U
Cadmium	0.026 J			1.0 U		1.0 U		1.0 U		1.0 U
Calcium	74400			14200		15800		15700		68900 J
Chromium	13.9			2.0 U		2.0 U		2.0 U		18900
Chromium, Hexavalent	0.50 U			0.50 U		0.50 U		0.50 U		17700
Cobalt	0.91 J			1.0 UJ		1.0 UJ		1.0 UJ		5.5 J
Copper	2.0 U			2.0 U		2.0 U		2.0 U		2.0 U
Cyanide	10.0 U			10.0 U		4.0 J		10.0 U		10 UJ
Iron	18200 J			29.7 J-		28.9 J-		10.6 J-		5550 J
Lead	1.0 U			1.0 U		1.0 U		1.0 U		1.0 U
Magnesium	13900 J			3460 J		5100 J		5070 J		18600 J
Manganese	3710			54.1 J		34.8 J		33.1 J		2230
Mercury	0.20 U			0.20 U		0.20 U		0.20 U		0.20 U
Nickel	1.1 J			1.0 UJ		1.0 UJ		1.0 UJ		5.8 J
Potassium	3990			1850 J		1420 J		1350 J		7140 J
Selenium	5.0 U			5.0 U		5.0 U		5.0 U		5.0 U
Silver	1.0 U			1.0 U		1.0 U		1.0 U		1.0 U
Sodium	79000			35800		21400		18200		88100 J
Vanadium	5.0 U			5.0 U		5.0 U		5.0 U		R
Zinc	141 J			5.3		2.2		2.0 U		14.4 J
Other										
Dissolved oxygen, field (mg/L)				0.46		0.18		0.17		0.75
ORP, field (mV)				139.5		-234		-211		76.7
pH, field (S.U.)				7.90		8.67		8.77		6.42
Spec. cond., field (umho/cm)				300		206		196		980
Temperature, field (deg C)				14.51		14.15		13.15		14.43
Turbidity, field (N.T.U.)				2.14		1.5		0.55		3.4

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-ML-04A	AE-ML-04A	AE-ML-04A	AE-ML-04B	AE-ML-04B	AE-ML-04C	AE-ML-04C	AE-ML-04E	AE-ML-04E	DEP-1D
Sample ID:	WL-GW-AE-ML-04A-3-D	WL-GWF-AE-ML-04A-3	WL-GWF-AE-ML-04A-3-D	WL-GW-AE-ML-04B-3	WL-GWF-AE-ML-04B-3	WL-GW-AE-ML-04C-3	WL-GWF-AE-ML-04C-3	WL-GW-AE-ML-04E-3	WL-GWF-AE-ML-04E-3	WL-GW-DEP-1D-1
Sample Date:	9/23/2015	9/23/2015	9/23/2015	9/23/2015	9/23/2015	9/23/2015	9/23/2015	9/23/2015	9/23/2015	8/6/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	7.8			0.91		0.50 U		4.9		0.50 U
1,1,2-Trichloroethane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
1,1-Dichloroethane	10			7.8		2.1		13		0.50 U
1,1-Dichloroethene	3.5			0.94		0.50 U		2.2		0.50 U
1,2-Dibromo-3-chloropropane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
1,2-Dichloroethane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
2-Butanone	5.0 U			5.0 U		5.0 U		5.0 U		5.0 U
Acetone	5.0 U			5.0 U		5.0 U		5.0 U		5.0 U
Benzene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Bromodichloromethane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Bromoform	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Carbon disulfide	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Chloroethane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Chloroform	0.50 U			0.50 U		0.50 U		1.0		0.50 U
cis-1,2-Dichloroethene	1.5			0.64		0.50 U		0.85		0.50 U
Cyclohexane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Ethylbenzene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Isopropylbenzene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
m,p-Xylene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Methyl tert-butyl ether	0.71			0.50 J		0.48 J		0.92		0.50 U
Methylcyclohexane	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Methylene chloride	0.50 U			0.50 U		0.50 U		0.39 J		0.50 U
o-Xylene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Tetrachloroethene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Toluene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
trans-1,2-Dichloroethene	0.50 U			0.50 U		0.50 U		0.50 U		0.50 U
Trichloroethene	17			2.0		0.50 U		9.6		0.15 U
Vinyl chloride	0.50 U			0.50 U		0.50 U		0.50 U		0.015 U
1,4-Dioxane (ug/L)										
1,4-Dioxane	3.1			0.95		5.9		3.8		0.10 U
Inorganics, Dissolved (ug/L)										
Aluminum		20.0 U	20.0 U		20.0 U		20.0 U		20.0 U	
Antimony		2.0 U	2.0 U		2.0 U		2.0 U		2.0 U	
Arsenic		0.35 J	0.47 J		0.98 J		2.4		0.6 J	
Barium		127	130		197		73.0		57.8	
Beryllium		1.0 U	1.0 U		1.0 U		1.0 U		1.0 U	
Cadmium		0.17 J	0.17 J		1.0 U		1.0 U		1.0 U	
Calcium		70300 J	70400 J		82300 J		42800 J		58000 J	
Chromium		19500	19800		2.0 U		2.0 U		4890	
Chromium, Hexavalent		17900	17900		0.50 U		0.50 U		4850	
Cobalt		5.8 J	6.1 J		6.0 J		0.56 J		0.68 J	
Copper		2.0 U	2.0 U		2.0 U		2.0 U		2.0 U	
Iron		5420 J	5540 J		14800 J		1600 J		1420 J	
Lead		1.0 U	1.0 U		1.0 U		1.0 U		1.0 U	
Magnesium		18800 J	19000 J		21700 J		17900 J		10300 J	
Manganese		2170	2250		3140		1090		801	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	AE-ML-04A	AE-ML-04A	AE-ML-04A	AE-ML-04B	AE-ML-04B	AE-ML-04C	AE-ML-04C	AE-ML-04E	AE-ML-04E	DEP-1D
Sample ID:	WL-GW-AE-ML-04A-3-D	WL-GWF-AE-ML-04A-3	WL-GWF-AE-ML-04A-3-D	WL-GW-AE-ML-04B-3	WL-GWF-AE-ML-04B-3	WL-GW-AE-ML-04C-3	WL-GWF-AE-ML-04C-3	WL-GW-AE-ML-04E-3	WL-GWF-AE-ML-04E-3	WL-GW-DEP-1D-1
Sample Date:	9/23/2015	9/23/2015	9/23/2015	9/23/2015	9/23/2015	9/23/2015	9/23/2015	9/23/2015	9/23/2015	8/6/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury		0.20 U	0.20 U		0.12 J		0.20 U		0.20 U	
Nickel		6.3 J	6.4 J		8.6 J		1.4 J		1.1 J	
Potassium		7520 J	7550 J		4470 J		2130 J		6040 J	
Selenium		0.36 J	5.0 U		5.0 U		5.0 U		5.0 U	
Silver		1.0 U	1.0 U		1.0 U		1.0 U		1.0 U	
Sodium		92000	91600		122000		29700		71700	
Vanadium		R	R		R		R		R	
Zinc		15.8 J	16.1 J		23.7 J		4.1 J		2.0 U	
Inorganics (ug/L)										
Aluminum	20.0 UJ			20.0 UJ		20.0 UJ		31.3 J		280
Antimony	2.0 U			2.0 U		2.0 U		2.1		2.0 U
Arsenic	1.0 U			1.0 U		2.2		1.0 U		0.47 J
Barium	133			194		73.9		63.3		84.4
Beryllium	1.0 U			1.0 U		1.0 U		1.0 U		1.0 U
Cadmium	1.0 U			1.0 U		1.0 U		1.0 U		0.15
Calcium	70600 J			79200 J		42900 J		59300 J		21800
Chromium	18600			2.0 U		4.8		5480		2.0 UJ
Chromium, Hexavalent	17200			0.50 U		0.50 U		4670		0.50 U
Cobalt	5.6 J			5.6 J		1.0 UJ		1.0 UJ		3.7
Copper	2.0 U			2.0 U		2.0 U		2.0 U		2.0 U
Cyanide	10 UJ			10 UJ		10 UJ		10 UJ		5.5 J
Iron	5630 J			13000 J		1550 J		2650 J		778
Lead	1.0 U			1.0 U		1.0 U		1.0 U		0.34
Magnesium	19100 J			21000 J		17600 J		10700 J		3610
Manganese	2160			2840		1100		842		979
Mercury	0.035 J			0.16 J		0.047 J		0.20 U		0.038 J-
Nickel	5.9 J			7.5 J		1.2 J		1.0 UJ		4.1
Potassium	7220 J			4300 J		2080 J		5830 J		3360
Selenium	5.0 U			5.0 U		5.0 U		5.0 U		0.43 J
Silver	1.0 U			1.0 U		1.0 U		1.0 U		1.0 UJ
Sodium	89400 J			115000 J		29600 J		71900 J		265000
Vanadium	R			R		R		R		1.0 J-
Zinc	15.7 J			24.5 J		4.6 J		5.1 J		3.7 U
Other										
Dissolved oxygen, field (mg/L)				0.33		0.39		0.0		2.78
ORP, field (mV)				-66.5		-106.9		-19.1		168
pH, field (S.U.)				6.22		6.92		7.36		5.55
Spec. cond., field (umho/cm)				1174		513		776		1391
Temperature, field (deg C)				14.81		14.51		15.09		12.8
Turbidity, field (N.T.U.)				2.07		1.61		6.0		7.7

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DEP-1D	DEP-1D	DEP-1D	DEP-1S	DEP-1S	DEP-1S	DEP-1S	DEP-2D	DEP-2D	DEP-2D
Sample ID:	WL-GW-DEP-1D-2	WL-GWF-DEP-1D-1	WL-GWF-DEP-1D-2	WL-GW-DEP-1S-1	WL-GW-DEP-1S-2	WL-GWF-DEP-1S-1	WL-GWF-DEP-1S-2	WL-GW-DEP-2D-1	WL-GW-DEP-2DD-1	WL-GW-DEP-2D-2
Sample Date:	12/4/2014	8/6/2014	12/4/2014	8/6/2014	12/4/2014	8/6/2014	12/4/2014	8/4/2014	8/4/2014	12/3/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U			0.50 U	0.50 U			0.16 J	0.15 J	0.56
1,1-Dichloroethene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-chloropropane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
2-Butanone	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	5.0 U
Acetone	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	5.0 U
Benzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Bromoform	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Carbon disulfide	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Chloroform	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Isopropylbenzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
m,p-Xylene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Methyl tert-butyl ether	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.21 J
Methylcyclohexane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Methylene chloride	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
o-Xylene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Tetrachloroethene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Toluene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Trichloroethene	0.50 U			0.15 U	0.50 U			0.15 U	0.15 U	0.50 U
Vinyl chloride	0.50 U			0.015 U	0.50 U			0.015 U	0.015 U	0.50 U
1,4-Dioxane (ug/L)										
1,4-Dioxane				0.10 U				0.10 U	0.10 U	
Inorganics, Dissolved (ug/L)										
Aluminum		20.0 U	20.0 U			110 J-	58.9			
Antimony		2.0 U	2.0 U			2.0 UJ	2.0 U			
Arsenic		0.42 J	0.38 J			0.15 J-	0.22 J			
Barium		81.3	110			25.4 J-	10.3			
Beryllium		1.0 U	1.0 U			0.20 J-	1.0 U			
Cadmium		0.13	0.40 U			0.087 J-	0.40 U			
Calcium		20600	31500			4060 J-	2240			
Chromium		2.0 UJ	2.0 U			2.0 UJ	2.0 U			
Chromium, Hexavalent		0.50 U	0.50 U			0.50 U	0.50 U			
Cobalt		3.6	3.2			1.4 J-	1.4			
Copper		2.0 UJ	0.33 J			2.0 UJ	0.17 J			
Iron		447 J-	429			200 UJ	200 UJ			
Lead		0.20 U	0.20 U			0.23 J-	0.20 U			
Magnesium		3170	5070			732 J-	500 U			
Manganese		957	1560 J			190 J-	191 J			

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DEP-1D	DEP-1D	DEP-1D	DEP-1S	DEP-1S	DEP-1S	DEP-1S	DEP-2D	DEP-2D	DEP-2D
Sample ID:	WL-GW-DEP-1D-2	WL-GWF-DEP-1D-1	WL-GWF-DEP-1D-2	WL-GW-DEP-1S-1	WL-GW-DEP-1S-2	WL-GWF-DEP-1S-1	WL-GWF-DEP-1S-2	WL-GW-DEP-2D-1	WL-GW-DEP-2DD-1	WL-GW-DEP-2D-2
Sample Date:	12/4/2014	8/6/2014	12/4/2014	8/6/2014	12/4/2014	8/6/2014	12/4/2014	8/4/2014	8/4/2014	12/3/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample
Parameter										
Mercury		0.20 UJ	0.20 UJ			0.20 UJ	0.20 UJ			
Nickel		4.0	2.7			1.9 J-	1.3			
Potassium		3150	4860 J			261 J-	500 UJ			
Selenium		5.0 U	5.0 U			0.35 J-	5.0 U			
Silver		1.0 U	1.0 U			1.0 UJ	1.0 U			
Sodium		261000	322000			27200 J-	17400			
Vanadium		0.59 J-	5.0 U			5.0 UJ	5.0 U			
Zinc		6.6	2.0 U			4.8 UJ	5.6			
Inorganics (ug/L)										
Aluminum	56.0			644 J-	101			517	506	213
Antimony	2.0 U			2.0 UJ	2.0 U			2.0 U	2.0 U	2.0 U
Arsenic	0.38 J			0.29 J-	0.21 J			1.3	1.3	1.8
Barium	102			30.4 J-	10.0 U			21.6	21.1	65.5
Beryllium	1.0 U			0.19 J-	1.0 U			1.0 U	0.11 J	1.0 U
Cadmium	0.40 U			0.089 J-	0.40 U			0.040 U	0.040 U	0.40 U
Calcium	30800			4130 J-	2150			15500	15300	42800
Chromium	2.0 U			2.0 UJ	2.0 U			0.64 J-	0.61 J-	2.0 U
Chromium, Hexavalent	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Cobalt	3.2			1.7 J-	1.4			2.2	2.2	5.2
Copper	0.19 J			2.0 UJ	2.0 UJ			2.0 UJ	2.0 UJ	0.16 J
Cyanide	2.5 U			4.0 J	1.9 J			4.8 J	7.1 J	2.4 J
Iron	486			561 J-	200 UJ			6340	6000	16100
Lead	0.20 U			1.3 J-	0.30			0.66	0.66	0.33
Magnesium	4840			938 J-	500 U			5500 J	5440 J	14000
Manganese	1650			218 J-	191			590	576	1570
Mercury	0.20 UJ			0.20 UJ	0.20 UJ			0.20 UJ	0.20 UJ	0.20 UJ
Nickel	2.8			2.1 J-	1.6			1.7 J-	1.6 J-	2.4
Potassium	4700			366 J-	500 U			1280 J	1250 J	2300
Selenium	5.0 U			0.50 J-	5.0 U			5.0 U	5.0 U	5.0 U
Silver	1.0 U			1.0 UJ	1.0 U			1.0 U	1.0 U	1.0 U
Sodium	312000			29300 J-	16900			15400	15100	47900
Vanadium	5.0 U			1.0 J-	5.0 U			1.6 J	1.3 J	5.0 U
Zinc	2.5 UJ			4.0 UJ	2.1 UJ			3.8 J+	3.5 J+	4.3 J
Other										
Dissolved oxygen, field (mg/L)	0.25			8.49	3.46			0.10		0.44
ORP, field (mV)	166.8			283	266.1			27.2		-76.7
pH, field (S.U.)	5.69			4.71	5.10			5.97		5.61
Spec. cond., field (umho/cm)	1740			191	114			259		1075
Temperature, field (deg C)	12.50			14.7	12.45			13.1		11.28
Turbidity, field (N.T.U.)	2.01			8.6	1.84			21		4.61

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DEP-2D	DEP-2D	DEP-2D	DEP-2S	DEP-2S	DEP-2S	DEP-2S	DEP-3D	DEP-3D	DEP-3D
Sample ID:	WL-GWF-DEP-2D-1	WL-GWF-DEP-2DD-1	WL-GWF-DEP-2D-2	WL-GW-DEP-2S-1	WL-GW-DEP-2S-2	WL-GWF-DEP-2S-1	WL-GWF-DEP-2S-2	WL-GW-DEP-3D-1	WL-GW-DEP-3D-2	WL-GWF-DEP-3D-1
Sample Date:	8/4/2014	8/4/2014	12/3/2014	8/5/2014	12/2/2014	8/5/2014	12/2/2014	8/5/2014	12/3/2014	8/5/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane				0.50 U	0.50 U			0.50 U	0.50 U	
1,1,2-Trichloroethane				0.50 U	0.50 U			0.50 U	0.50 U	
1,1-Dichloroethane				0.50 U	0.50 U			0.50 U	0.50 U	
1,1-Dichloroethene				0.50 U	0.50 U			0.50 U	0.50 U	
1,2-Dibromo-3-chloropropane				0.50 U	0.50 U			0.50 U	0.50 U	
1,2-Dichloroethane				0.50 U	0.50 U			0.50 U	0.50 U	
2-Butanone				5.0 U	5.0 U			5.0 U	5.0 U	
Acetone				5.0 U	5.0 U			5.0 U	5.0 U	
Benzene				0.33 J	0.26 J			0.50 U	0.50 U	
Bromodichloromethane				0.50 U	0.50 U			0.50 U	0.50 U	
Bromoform				0.50 U	0.50 U			0.50 U	0.50 U	
Carbon disulfide				0.50 U	0.50 U			0.50 U	0.32 J	
Chloroethane				0.50 U	0.50 U			0.50 U	0.50 U	
Chloroform				0.50 U	0.50 U			0.50 U	0.50 U	
cis-1,2-Dichloroethene				0.50 U	0.50 U			0.50 U	0.50 U	
Cyclohexane				0.50 U	0.50 U			0.50 U	0.50 U	
Ethylbenzene				0.50 U	0.50 U			0.50 U	0.50 U	
Isopropylbenzene				0.50 U	0.50 U			0.50 U	0.50 U	
m,p-Xylene				0.50 U	0.50 U			0.50 U	0.50 U	
Methyl tert-butyl ether				0.54	0.43 J			0.50 U	0.18 J	
Methylcyclohexane				0.50 U	0.50 U			0.50 U	0.50 U	
Methylene chloride				0.50 U	0.50 U			0.50 U	0.50 U	
o-Xylene				0.50 U	0.50 U			0.50 U	0.50 U	
Tetrachloroethene				0.50 U	0.50 U			0.50 U	0.50 U	
Toluene				0.50 U	0.50 U			0.50 U	0.50 U	
trans-1,2-Dichloroethene				0.50 U	0.50 U			0.50 U	0.50 U	
Trichloroethene				0.15 U	0.50 U			0.15 U	0.50 U	
Vinyl chloride				0.015 U	0.50 U			0.032	0.50 U	
1,4-Dioxane (ug/L)										
1,4-Dioxane				0.12				0.18		
Inorganics, Dissolved (ug/L)										
Aluminum	20.0 U	20.0 U	20.0 U			20.0 UJ	24.8			1110
Antimony	2.0 U	2.0 U	2.0 U			2.0 U	2.0 U			2.0 U
Arsenic	1.3	1.3	1.8			1.8	1.6			0.43 J
Barium	18.9	18.8	69.3			109	128			97.1
Beryllium	1.0 U	1.0 U	1.0 U			1.0 U	1.0 U			1.0 U
Cadmium	0.040 U	0.068	0.40 U			0.040 U	0.40 U			0.040 U
Calcium	15900	16000	43500			63900	79000			38000
Chromium	2.0 UJ	2.0 UJ	2.0 U			2.0 UJ	2.0 U			4.0 J
Chromium, Hexavalent	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Cobalt	1.9	1.9	5.3			1.0 UJ	1.0 U			2.0 J
Copper	2.0 UJ	2.0 UJ	2.0 UJ			2.0 U	0.33 J			2.0 U
Iron	5950	5960	16200			30200 J	42000			24400 J
Lead	0.030 J	0.027 J	0.20 U			0.20 U	0.20 U			2.0
Magnesium	5510 J	5440 J	14400			7360 J	10600			11700 J
Manganese	574	575	1510 J			3230 J	4240 J			1130 J

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DEP-2D	DEP-2D	DEP-2D	DEP-2S	DEP-2S	DEP-2S	DEP-2S	DEP-3D	DEP-3D	DEP-3D
Sample ID:	WL-GWF-DEP-2D-1	WL-GWF-DEP-2DD-1	WL-GWF-DEP-2D-2	WL-GW-DEP-2S-1	WL-GW-DEP-2S-2	WL-GWF-DEP-2S-1	WL-GWF-DEP-2S-2	WL-GW-DEP-3D-1	WL-GW-DEP-3D-2	WL-GWF-DEP-3D-1
Sample Date:	8/4/2014	8/4/2014	12/3/2014	8/5/2014	12/2/2014	8/5/2014	12/2/2014	8/5/2014	12/3/2014	8/5/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury	0.20 UJ	0.20 UJ	0.20 UJ			0.046 J-	0.20 UJ			0.041 J-
Nickel	1.1 J-	1.0 J-	2.4			1.3 UJ	1.1			2.4 J
Potassium	1230 J	1230 J	2370 J			6270	7270 J			3790
Selenium	5.0 U	5.0 U	5.0 U			5.0 U	5.0 U			5.0 U
Silver	1.0 U	1.0 U	1.0 U			1.0 U	1.0 U			1.0 U
Sodium	15800	15400	49800			120000	160000			108000
Vanadium	0.52 J	0.56 J	5.0 U			1.7 J	5.0 U			4.2 J
Zinc	2.2 U	2.2 U	4.1			9.0	24.0			24.4
Inorganics (ug/L)										
Aluminum				61.0	50.5			7960	24400	
Antimony				2.0 U	2.0 U			2.0 U	2.0 UJ	
Arsenic				2.0	1.5			3.4	5.1	
Barium				109	104			130 J	152 J	
Beryllium				1.0 U	1.0 U			0.38 J	1.8	
Cadmium				0.040 U	0.40 U			0.18 J	0.40 UJ	
Calcium				63700	67900			16100	27700	
Chromium				0.14 J-	2.0 U			58.0	83.2	
Chromium, Hexavalent				0.50 U	0.50 U			0.50 U	0.50 U	
Cobalt				1.0 U	1.0 U			9.1 J	12.1 J	
Copper				2.0 U	0.19 J			20.6 J	29.4 J	
Cyanide				4.1 J	2.5 U			5.2 J	1.8 J	
Iron				30400	37100			33600 J	43400 J	
Lead				0.40 J	0.37			31.8 J	49.7	
Magnesium				7320 J	8740			8030 J	19900	
Manganese				3320	3820			1700	1930	
Mercury				0.20 UJ	0.20 UJ			0.046 J-	0.20 UJ	
Nickel				1.4	1.2			16.6 J	22.3 J	
Potassium				6310	6150			2450	4120	
Selenium				5.0 U	5.0 U			1.2 J	2.2 J	
Silver				1.0 U	1.0 U			1.0 UJ	1.0 UJ	
Sodium				146000	138000			43400	98400	
Vanadium				1.8 J	5.0 U			52.4	68.0	
Zinc				7.6 J+	25.6 J			56.8 J	66.7 J	
Other										
Dissolved oxygen, field (mg/L)				0.69	0.86			0.17	0.22	
ORP, field (mV)				-53.2	-36.9			-52.2	3.5	
pH, field (S.U.)				6.09	6.45			6.36	6.32	
Spec. cond., field (umho/cm)				1236	1347			993	1038	
Temperature, field (deg C)				18.7	8.72			13.3	11.09	
Turbidity, field (N.T.U.)				2.8	1.44			1402	over limit	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DEP-3D	DEP-3S	DEP-3S	DEP-3S	DEP-3S	DEP-4D	DEP-4D	DEP-4D	DEP-4D	DEP-4S
Sample ID:	WL-GWF-DEP-3D-2	WL-GW-DEP-3S-1	WL-GW-DEP-3S-2	WL-GWF-DEP-3S-1	WL-GWF-DEP-3S-2	WL-GW-DEP-4D-1	WL-GW-DEP-4D-2	WL-GWF-DEP-4D-1	WL-GWF-DEP-4D-2	WL-GW-DEP-4S-1
Sample Date:	12/3/2014	8/5/2014	12/3/2014	8/5/2014	12/3/2014	8/18/2014	12/10/2014	8/18/2014	12/10/2014	8/18/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
1,1,2-Trichloroethane		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
1,1-Dichloroethane		0.50 U	0.50 U			1.7	1.1			0.15 J
1,1-Dichloroethene		0.50 U	0.50 U			0.54	0.50 U			0.50 U
1,2-Dibromo-3-chloropropane		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
1,2-Dichloroethane		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
2-Butanone		5.0 U	5.0 U			5.0 U	5.0 U			5.0 U
Acetone		5.0 U	5.0 U			5.0 U	5.0 U			5.0 U
Benzene		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Bromodichloromethane		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Bromoform		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Carbon disulfide		0.50 U	0.24 J			0.50 U	0.50 U			0.50 U
Chloroethane		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Chloroform		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
cis-1,2-Dichloroethene		0.50 U	0.50 U			2.3	5.1			1.6
Cyclohexane		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Ethylbenzene		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Isopropylbenzene		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
m,p-Xylene		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Methyl tert-butyl ether		0.50 U	0.50 U			0.67	0.40 J			5.6
Methylcyclohexane		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Methylene chloride		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
o-Xylene		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Tetrachloroethene		0.50 U	0.50 U			0.50 U	0.29 J			0.50 U
Toluene		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
trans-1,2-Dichloroethene		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Trichloroethene		0.15 U	0.50 U			3.2	4.4			3.0
Vinyl chloride		0.083	0.50 U			1.5	0.84			0.81
1,4-Dioxane (ug/L)										
1,4-Dioxane		0.10 U				0.33				0.051 J
Inorganics, Dissolved (ug/L)										
Aluminum	1460			35.0	323			54.9	50.0 J+	
Antimony	2.0 U			2.0 U	2.0 U			0.61 J	2.0 U	
Arsenic	0.56 J			1.1	1.2			1.8	1.3	
Barium	106			119	137			582	522	
Beryllium	1.0 U			1.0 U	1.0 U			0.096 J+	1.0 U	
Cadmium	0.40 U			0.040 U	0.40 U			0.72	0.49 U	
Calcium	36100			27100	33100			169000	125000	
Chromium	6.7			20.9 J	52.8			1.2 J-	2.0 U	
Chromium, Hexavalent	0.50 U			0.50 U	0.50 U			0.50 UJ	0.50 U	
Cobalt	1.7			1.0 UJ	1.0 U			81.6	52.2	
Copper	2.5			2.0 U	0.84 J			2.0 UJ	2.0 UJ	
Iron	28400			12500 J	19400			12700	10100	
Lead	2.5			0.20 U	0.68			0.27	0.20 U	
Magnesium	12300			5790 J	7680			23800	17500	
Manganese	1060 J			1860 J	2290 J			19900	13500	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DEP-3D	DEP-3S	DEP-3S	DEP-3S	DEP-3S	DEP-4D	DEP-4D	DEP-4D	DEP-4D	DEP-4S
Sample ID:	WL-GWF-DEP-3D-2	WL-GW-DEP-3S-1	WL-GW-DEP-3S-2	WL-GWF-DEP-3S-1	WL-GWF-DEP-3S-2	WL-GW-DEP-4D-1	WL-GW-DEP-4D-2	WL-GWF-DEP-4D-1	WL-GWF-DEP-4D-2	WL-GW-DEP-4S-1
Sample Date:	12/3/2014	8/5/2014	12/3/2014	8/5/2014	12/3/2014	8/18/2014	12/10/2014	8/18/2014	12/10/2014	8/18/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury	0.20 UJ			0.078 J-	0.20 UJ			0.20 UJ	0.29	
Nickel	2.7			1.0 UJ	1.7			28.2	21.0	
Potassium	2870 J			3060	3400 J			10000	9360	
Selenium	5.0 U			5.0 U	5.0 U			0.33 J	5.0 U	
Silver	1.0 U			1.0 U	1.0 U			1.0 UJ	1.0 U	
Sodium	120000			192000	178000			1060000	1190000	
Vanadium	5.4			1.0 J	5.0 U			0.50 J	5.0 UJ	
Zinc	10.5			2.0 U	4.3			20.1	14.4	
Inorganics (ug/L)										
Aluminum		106	3500			20.0 U	65.8 U			48.5
Antimony		2.0 U	2.0 U			2.0 U	2.0 U			2.0 U
Arsenic		1.1	2.5			2.0 J-	1.4			1.4 J-
Barium		121	141			552	543			223
Beryllium		1.0 U	1.0 U			1.0 U	1.0 U			1.0 U
Cadmium		0.10 U	0.40 U			0.60	0.75			0.040 U
Calcium		27500	31800			163000	124000 J			63500
Chromium		22.0	72.9			1.8 J-	2.4			5.2 J-
Chromium, Hexavalent		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Cobalt		1.0 U	2.1			74.1	55.8			30.7
Copper		2.0 U	7.2			2.0 UJ	2.0 UJ			2.0 UJ
Cyanide		5.8 J	2.1 J			2.8 J+	2.5 U			3.7 J+
Iron		13000	22300			12600	10200			20000
Lead		0.37 J	7.7			0.20 U	0.20 U			0.21
Magnesium		5780 J	8340			22800	17200 J			8430
Manganese		1890	2480			18500	13600			21000
Mercury		0.20 UJ	0.20 UJ			0.20 U	0.33			0.20 U
Nickel		1.0 U	6.7			25.0	20.9			3.8
Potassium		3130	3420			9080	9600			7800
Selenium		5.0 U	0.45 J			5.0 U	5.0 U			0.27 J
Silver		1.0 U	1.1 U			1.0 U	1.0 U			1.0 U
Sodium		189000	183000			1010000	1220000			536000
Vanadium		1.3 J	6.8			5.0 U	5.0 UJ			5.0 U
Zinc		8.7 J+	16.0 J			17.2 J+	15.7			7.2 J+
Other										
Dissolved oxygen, field (mg/L)		2.10	5.23			0.07	0.59			0.08
ORP, field (mV)		-94.7	-30.5			81.9	90.4			-21.8
pH, field (S.U.)		6.47	6.60			5.36	6.02			5.75
Spec. cond., field (umho/cm)		1234	1255			6603	6760			3363
Temperature, field (deg C)		15.4	11.07			14.3	11.29			16.1
Turbidity, field (N.T.U.)		4.5	790			3.64	3.02			3.37

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DEP-4S	DEP-4S	DEP-4S	DEP-5D	DEP-5D	DEP-5D	DEP-5D	DEP-5S	DEP-5S	DEP-5S
Sample ID:	WL-GW-DEP-4S-2	WL-GWF-DEP-4S-1	WL-GWF-DEP-4S-2	WL-GW-DEP-5D-1	WL-GW-DEP-5D-2	WL-GWF-DEP-5D-1	WL-GWF-DEP-5D-2	WL-GW-DEP-5S-1	WL-GW-DEP-5S-2	WL-GW-DEP-5S-3
Sample Date:	12/10/2014	8/18/2014	12/10/2014	8/20/2014	12/17/2014	8/20/2014	12/17/2014	8/20/2014	12/17/2014	9/15/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
1,1,2-Trichloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
1,1-Dichloroethene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
1,2-Dibromo-3-chloropropane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
1,2-Dichloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
2-Butanone	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	5.0 U
Acetone	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	5.0 U
Benzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Bromodichloromethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Bromoform	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Carbon disulfide	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Chloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Chloroform	4.9			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	2.6			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Cyclohexane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Ethylbenzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Isopropylbenzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
m,p-Xylene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Methyl tert-butyl ether	0.43 J			1.5	2.4			0.50 U	0.50 U	0.50 U
Methylcyclohexane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Methylene chloride	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
o-Xylene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Tetrachloroethene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Toluene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	0.50 U
Trichloroethene	5.4			0.15 U	0.50 U			0.15 U	0.50 U	0.50 U
Vinyl chloride	0.49 J			0.015 U	0.50 U			0.015 U	0.50 U	0.50 U
1,4-Dioxane (ug/L)										
1,4-Dioxane				0.026 J				0.10 U		0.10 U
Inorganics, Dissolved (ug/L)										
Aluminum		23.9 U	313 J+			20.0 U	20.0 U			
Antimony		2.0 U	2.0 U			2.0 U	2.0 U			
Arsenic		1.4	1.0 U			6.5	7.2			
Barium		226	153			37.2	41.4			
Beryllium		1.0 U	1.0 U			1.0 U	1.0 U			
Cadmium		0.040 U	0.67 U			0.040 U	0.40 U			
Calcium		64000	26600			20700	32200			
Chromium		4.3 J-	4.9			0.96 J-	0.51 J			
Chromium, Hexavalent		0.50 UJ	0.50 U			0.50 UJ	0.50 U			
Cobalt		30.3	21.8			1.0 U	1.0 U			
Copper		2.0 UJ	4.3			2.0 U	2.0 UJ			
Iron		19000	231			10300	11600			
Lead		0.33	0.20 U			0.041 J	0.20 U			
Magnesium		8350	5460			3300	4730			
Manganese		21900	5450			878	1100 J			

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DEP-4S	DEP-4S	DEP-4S	DEP-5D	DEP-5D	DEP-5D	DEP-5D	DEP-5S	DEP-5S	DEP-5S
Sample ID:	WL-GW-DEP-4S-2	WL-GWF-DEP-4S-1	WL-GWF-DEP-4S-2	WL-GW-DEP-5D-1	WL-GW-DEP-5D-2	WL-GWF-DEP-5D-1	WL-GWF-DEP-5D-2	WL-GW-DEP-5S-1	WL-GW-DEP-5S-2	WL-GW-DEP-5S-3
Sample Date:	12/10/2014	8/18/2014	12/10/2014	8/20/2014	12/17/2014	8/20/2014	12/17/2014	8/20/2014	12/17/2014	9/15/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury		0.079 J-	0.20 UJ			0.20 UJ	0.088 J			
Nickel		5.1	5.9			1.1	0.63 J			
Potassium		7940	2340			2420	2900 J			
Selenium		0.30 J	5.0 U			5.0 U	5.0 U			
Silver		1.0 UJ	1.0 U			1.0 U	1.0 U			
Sodium		553000	184000			161000	149000			
Vanadium		0.82 J	5.0 UJ			3.0 J	5.0 U			
Zinc		9.5	48.8			2.0 U	3.5 U			
Inorganics (ug/L)										
Aluminum	503			33.5 UJ	20.0 U			8630 J	2130	2570 J
Antimony	2.0 U			2.0 U	2.0 U			1.4 J	2.0 U	2.7
Arsenic	1.0 U			6.5	7.3			3.6	1.1	1.5
Barium	153			37.0	41.0			51.3 J	22.3	33.8
Beryllium	1.0 U			1.0 U	1.0 U			1.0 U	1.0 U	0.21 J
Cadmium	0.44			0.049 UJ	0.40 U			0.29 J	0.40 U	0.16 J
Calcium	24400 J			20900	31300			4570 J-	3810	5050
Chromium	5.6			2.0 UJ	1.0 J			107 J	27.1	29.8
Chromium, Hexavalent	0.50 U			0.50 U	0.50 U			0.60	6.75 J+	0.50 U
Cobalt	21.8			1.0 U	1.0 UJ			119	119 J	125 J
Copper	4.3			2.0 U	2.0 UJ			46.3	16.9	23.0
Cyanide	3.6 U			4.9 J+	1.6 J			4.0 J+	1.4 J	10.0 U
Iron	523			10500	11400			5010	1670	2330
Lead	0.50			0.13 J	0.20 U			108 J	26.1	33.7
Magnesium	5330 J			3360	4610			1290	500 U	715 J
Manganese	5060			896	1090			130	44.1	84.8 J
Mercury	0.20 UJ			0.20 UJ	0.20 UJ			0.16 J-	0.20 UJ	0.20 U
Nickel	5.6			1.0 UJ	0.90 J			6.4 J	3.2 J	4.0 J
Potassium	2240			2430	2890			1320	696	1240 J
Selenium	5.0 U			5.0 U	5.0 U			1.0 J	0.42 J	0.85 J
Silver	1.0 U			1.0 U	1.0 U			1.0 UJ	1.0 U	0.19 J
Sodium	173000			153000	135000			25100	15600	27100
Vanadium	5.0 UJ			3.1 J	5.0 U			8.7	5.0 U	5.0 U
Zinc	50.4			2.0 UJ	5.2 UJ			31.2 J	15.8 J	20.4
Other										
Dissolved oxygen, field (mg/L)	2.50			0.06	0.73			0.37	5.54	2.50
ORP, field (mV)	235.4			-90.6	-58.2			183	240.5	157.6
pH, field (S.U.)	5.70			6.49	6.40			5.83	5.81	5.53
Spec. cond., field (umho/cm)	1054			1043	1016			162	100	231
Temperature, field (deg C)	6.87			17.1	13.84			21.0	10.66	24.53
Turbidity, field (N.T.U.)	5.87			1.5	2.96			93	49.8	95.3

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DEP-5S	DEP-5S	DEP-5S	DEP-7D	DEP-7D	DEP-7D	DEP-7D	DEP-7S	DEP-7S	DEP-7S
Sample ID:	WL-GWF-DEP-5S-1	WL-GWF-DEP-5S-2	WL-GWF-DEP-5S-3	WL-GW-DEP-7D-1	WL-GW-DEP-7D-2	WL-GWF-DEP-7D-1	WL-GWF-DEP-7D-2	WL-GW-DEP-7S-1	WL-GW-DEP-7S-2	WL-GWF-DEP-7S-1
Sample Date:	8/20/2014	12/17/2014	9/15/2015	8/6/2014	12/3/2014	8/6/2014	12/3/2014	8/6/2014	12/3/2014	8/6/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane				0.50 U	0.50 U			0.50 U	0.50 U	
1,1,2-Trichloroethane				0.50 U	0.50 U			0.50 U	0.50 U	
1,1-Dichloroethane				0.50 U	0.50 U			0.50 U	0.50 U	
1,1-Dichloroethene				0.50 U	0.50 U			0.50 U	0.50 U	
1,2-Dibromo-3-chloropropane				0.50 U	0.50 U			0.50 U	0.50 U	
1,2-Dichloroethane				0.50 U	0.50 U			0.50 U	0.50 U	
2-Butanone				5.0 U	5.0 U			5.0 U	5.0 U	
Acetone				5.0 U	5.0 U			5.0 U	5.0 U	
Benzene				0.50 U	0.50 U			0.50 U	0.50 U	
Bromodichloromethane				0.50 U	0.50 U			0.50 U	0.50 U	
Bromoform				0.50 U	0.50 U			0.50 U	0.50 U	
Carbon disulfide				0.50 U	0.50 U			0.50 U	0.50 U	
Chloroethane				0.50 U	0.50 U			0.50 U	0.50 U	
Chloroform				0.50 U	0.50 U			0.50 U	0.50 U	
cis-1,2-Dichloroethene				0.50 U	0.50 U			0.50 U	0.50 U	
Cyclohexane				0.50 U	0.50 U			0.50 U	0.50 U	
Ethylbenzene				0.50 U	0.50 U			0.50 U	0.50 U	
Isopropylbenzene				0.50 U	0.50 U			0.50 U	0.50 U	
m,p-Xylene				0.50 U	0.50 U			0.50 U	0.50 U	
Methyl tert-butyl ether				0.50 U	0.50 U			0.50 U	0.50 U	
Methylcyclohexane				0.50 U	0.50 U			0.50 U	0.50 U	
Methylene chloride				0.50 U	0.50 U			0.50 U	0.50 U	
o-Xylene				0.50 U	0.50 U			0.50 U	0.50 U	
Tetrachloroethene				0.50 U	0.50 U			0.50 U	0.50 U	
Toluene				0.50 U	0.50 U			0.50 U	0.50 U	
trans-1,2-Dichloroethene				0.50 U	0.50 U			0.50 U	0.50 U	
Trichloroethene				0.15 U	0.50 U			0.15 U	0.50 U	
Vinyl chloride				0.010 J	0.50 U			0.0077 J	0.50 U	
1,4-Dioxane (ug/L)										
1,4-Dioxane				0.10 U				0.10 U		
Inorganics, Dissolved (ug/L)										
Aluminum	3990	338	171 J			20.0 UJ	59.7			48.5
Antimony	1.6 J	2.0 U	2.5			2.0 UJ	2.0 U			2.0 U
Arsenic	2.0	0.45 J	0.42 J			0.085 J-	0.15 J			0.081 J
Barium	33.3 J	12.2	21.4			10.0 UJ	11.1			15.5
Beryllium	0.27 J	1.0 U	0.049 J			1.0 UJ	1.0 U			0.14 J
Cadmium	0.15	0.40 U	0.094 J			0.074 J-	0.40 U			0.034 J
Calcium	4130 J-	3760	5170			20300 J-	24200			7520
Chromium	49.4	11.1	4.1			3.2 J	2.0 U			2.0 UJ
Chromium, Hexavalent	0.70 J	6.90 J+	0.50 U			4.1	1.10 J+			1.2
Cobalt	103	110	99.6 J			1.0 UJ	1.0 U			1.0 U
Copper	28.2	6.3	7.2			2.0 UJ	0.47 J			2.0 UJ
Iron	2530	234	200 U			200 UJ	200 UJ			200 UJ
Lead	49.8	4.2	2.1			0.20 UJ	0.20 U			0.20 U
Magnesium	743	500 U	500 UJ			6200 J-	7880			2550
Manganese	76.8	9.0 J	44.6			126 J-	39.5 J			49.7

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DEP-5S	DEP-5S	DEP-5S	DEP-7D	DEP-7D	DEP-7D	DEP-7D	DEP-7S	DEP-7S	DEP-7S
Sample ID:	WL-GWF-DEP-5S-1	WL-GWF-DEP-5S-2	WL-GWF-DEP-5S-3	WL-GW-DEP-7D-1	WL-GW-DEP-7D-2	WL-GWF-DEP-7D-1	WL-GWF-DEP-7D-2	WL-GW-DEP-7S-1	WL-GW-DEP-7S-2	WL-GWF-DEP-7S-1
Sample Date:	8/20/2014	12/17/2014	9/15/2015	8/6/2014	12/3/2014	8/6/2014	12/3/2014	8/6/2014	12/3/2014	8/6/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury	0.12 J-	0.20 UJ	0.20 U			0.20 UJ	0.20 UJ			0.20 UJ
Nickel	3.9	1.5	1.8 J			2.6 J-	2.2			2.1
Potassium	1110	561 J	1170 J			2140 J-	2160 J			2410
Selenium	0.61 J	5.0 U	0.53 J			5.0 UJ	5.0 U			5.0 U
Silver	1.0 UJ	1.0 U	1.0 U			1.0 UJ	1.0 U			1.0 U
Sodium	25600	15600	28200			21200 J-	24400			12200
Vanadium	4.3 J	5.0 U	5.0 U			5.0 UJ	5.0 U			5.0 UJ
Zinc	18.5	9.0 U	8.7 J			6.6 J-	4.1			10.2
Inorganics (ug/L)										
Aluminum				6910 J-	886			93.9	152	
Antimony				2.0 UJ	2.0 U			2.0 U	2.0 U	
Arsenic				1.9 J-	0.40 J			0.082 J	0.21 J	
Barium				29.3 J-	11.8			15.6	21.9	
Beryllium				0.43 J-	1.0 U			0.14 J	1.0 U	
Cadmium				0.16 J-	0.40 U			0.046	0.40 U	
Calcium				19600 J-	22000			7530	12100	
Chromium				14.9 J-	3.1 U			2.0 UJ	2.0 U	
Chromium, Hexavalent				3.0	1.10 J+			0.50 U	0.50 U	
Cobalt				5.8 J-	1.0 U			1.0 U	1.0 U	
Copper				12.8 J-	2.0 J			2.0 U	0.39 J	
Cyanide				3.8 J	4.0			4.5 J	1.9 J	
Iron				11400 J-	1550			200 U	200 UJ	
Lead				8.1 J-	1.1			0.20 U	0.20 U	
Magnesium				8960 J-	7300			2840	4190	
Manganese				368 J-	65.3			54.0	153	
Mercury				0.034 J-	0.20 UJ			0.20 UJ	0.20 UJ	
Nickel				11.2 J-	3.2			1.7	3.3	
Potassium				2660 J-	1980			2590	3270	
Selenium				1.0 J-	5.0 U			5.0 U	5.0 U	
Silver				1.0 UJ	1.0 U			1.0 UJ	1.0 U	
Sodium				21400 J-	21600			12900	16600	
Vanadium				15.0 J-	5.0 U			0.50 J-	5.0 U	
Zinc				34.4 J-	7.3 J			5.6 U	5.5 J	
Other										
Dissolved oxygen, field (mg/L)				2.13	1.00			6.28	4.38	
ORP, field (mV)				527.7	238.1			420.8	275.1	
pH, field (S.U.)				5.41	5.74			4.90	5.54	
Spec. cond., field (umho/cm)				287.9	316			137	204	
Temperature, field (deg C)				12.2	10.81			11.8	11.58	
Turbidity, field (N.T.U.)				126	21.3			2.15	3.56	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DEP-7S	DEP-8D	DEP-8D	DEP-8S	DEP-8S	MW-100D	MW-100D	MW-100S	MW-100S	MW-101D
Sample ID:	WL-GWF-DEP-7S-2	WL-GW-DEP-8D-3	WL-GWF-DEP-8D-3	WL-GW-DEP-8S-3	WL-GWF-DEP-8S-3	WL-GWF-MW-100D-3	WL-GW-MW-100D-3	WL-GWF-MW-100S-3	WL-GW-MW-100S-3	WL-GWF-MW-101D-1
Sample Date:	12/3/2014	9/16/2015	9/16/2015	9/16/2015	9/16/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015	8/12/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane		0.50 U		0.50 U			0.50 U		0.50 U	
1,1,2-Trichloroethane		0.50 U		0.50 U			0.50 U		0.50 U	
1,1-Dichloroethane		0.50 U		0.50 U			0.50 U		0.50 U	
1,1-Dichloroethene		0.50 U		0.50 U			0.50 U		0.50 U	
1,2-Dibromo-3-chloropropane		0.50 U		0.50 U			0.50 U		0.50 U	
1,2-Dichloroethane		0.50 U		0.50 U			0.50 U		0.50 U	
2-Butanone		5.0 U		5.0 U			5.0 U		5.0 U	
Acetone		5.0 U		5.0 U			5.0 U		5.0 U	
Benzene		0.50 U		0.50 U			0.50 U		0.50 U	
Bromodichloromethane		0.50 U		0.50 U			0.50 U		0.50 U	
Bromoform		0.50 U		0.50 U			0.50 U		0.50 U	
Carbon disulfide		0.50 U		0.50 U			0.50 U		0.50 U	
Chloroethane		0.50 U		0.50 U			0.50 U		0.50 U	
Chloroform		0.50 U		0.50 U			0.50 U		0.50 U	
cis-1,2-Dichloroethene		0.50 U		0.50 U			0.50 U		0.50 U	
Cyclohexane		0.50 U		0.50 U			0.50 U		0.50 U	
Ethylbenzene		0.50 U		0.50 U			0.50 U		0.50 U	
Isopropylbenzene		0.50 U		0.50 U			0.50 U		0.50 U	
m,p-Xylene		0.50 U		0.50 U			0.50 U		0.50 U	
Methyl tert-butyl ether		0.50 U		0.50 U			0.50 U		0.50 U	
Methylcyclohexane		0.50 U		0.50 U			0.50 U		0.50 U	
Methylene chloride		0.50 U		0.50 U			0.50 U		0.50 U	
o-Xylene		0.50 U		0.50 U			0.50 U		0.50 U	
Tetrachloroethene		0.50 U		0.50 U			0.50 U		0.50 U	
Toluene		0.50 U		0.50 U			0.50 U		0.50 U	
trans-1,2-Dichloroethene		0.50 U		0.50 U			0.50 U		0.50 U	
Trichloroethene		0.50 U		0.50 U			0.50 U		0.50 U	
Vinyl chloride		0.50 U		0.50 U			0.50 U		0.50 U	
1,4-Dioxane (ug/L)										
1,4-Dioxane		0.24		0.10 U			0.49		0.10 U	
Inorganics, Dissolved (ug/L)										
Aluminum	75.2		20.0 UJ		20.0 UJ	20.0 UJ		150 J		20.0 U
Antimony	2.0 U		2.0 U		2.0 U	2.0 U		0.35 J		2.0 U
Arsenic	0.17 J		0.18 J		0.21 J	0.18 J		0.28 J		0.33 J
Barium	21.6		34.4		39.8	18.2		36.7		24.1
Beryllium	1.0 U		1.0 U		0.045 J	0.039 J		0.11 J		1.0 U
Cadmium	0.40 U		0.051 J		0.066 J	0.035 J		0.22 J		0.046
Calcium	11700		26400		25700	29100		3960		24000
Chromium	2.0 U		2.0 U		2.0 U	2.0 U		2.0 U		2400 J
Chromium, Hexavalent	0.50 U		0.50 U		0.50 U	0.50 U		0.50 U		2570
Cobalt	1.0 U		1.0 UJ		1.0 UJ	1.0 UJ		1.0 UJ		1.0 U
Copper	0.21 J		2.0 U		2.0 U	2.0 U		18.3		2.0 UJ
Iron	200 UJ		200 U		200 U	200 U		200 U		493 J
Lead	0.20 U		1.0 U		1.0 U	1.0 U		8.3		0.76
Magnesium	4110		5240 J		5100 J	6380 J		933 J		5660
Manganese	144 J		12.4		27.0	2.8		42.7		12.7 J

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	DEP-7S	DEP-8D	DEP-8D	DEP-8S	DEP-8S	MW-100D	MW-100D	MW-100S	MW-100S	MW-101D
Sample ID:	WL-GWF-DEP-7S-2	WL-GW-DEP-8D-3	WL-GWF-DEP-8D-3	WL-GW-DEP-8S-3	WL-GWF-DEP-8S-3	WL-GWF-MW-100D-3	WL-GW-MW-100D-3	WL-GWF-MW-100S-3	WL-GW-MW-100S-3	WL-GWF-MW-101D-1
Sample Date:	12/3/2014	9/16/2015	9/16/2015	9/16/2015	9/16/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015	8/12/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury	0.20 UJ		0.025 J		0.20 U	0.20 U		0.20 U		0.20 UJ
Nickel	2.8		1.1 J		1.1 J	1.0 UJ		2.6 J		2.6
Potassium	3180 J		1620 J		1830 J	2970 J		1320 J		2300
Selenium	5.0 U		5.0 U		5.0 U	5.0 U		5.0 U		5.0 U
Silver	1.0 U		1.0 U		1.0 U	1.0 U		1.0 U		1.0 U
Sodium	16200		97200		103000	31500		15000		77900
Vanadium	5.0 U		5.0 U		5.0 U	5.0 U		5.0 U		5.0 U
Zinc	3.9 U		2.3 J		2.8 J	3.3 J		44.7 J		9.8
Inorganics (ug/L)										
Aluminum		45.9 J		60.9 J			20.0 UJ		158 J	
Antimony		0.071 J		0.078 J			2.0 U		0.34 J	
Arsenic		0.24 J		0.21 J			0.25 J		0.29 J	
Barium		36.3		42.4			19.2		36.3	
Beryllium		1.0 U		1.0 U			0.054 J		0.10 J	
Cadmium		0.054 J		0.097 J			0.030 J		0.23 J	
Calcium		26900		26800			30000		3830	
Chromium		2.0 U		2.0 U			2.0 U		2.0 U	
Chromium, Hexavalent		0.50 U		0.50 U			0.50 U		0.50 U	
Cobalt		1.0 UJ		1.0 UJ			1.0 UJ		1.0 UJ	
Copper		2.0 U		2.0 U			2.0 U		20.0	
Cyanide		10.0 U		3.9 J			10.0 U		10.0 U	
Iron		200 U		200 U			200 U		37.1 J-	
Lead		1.0 U		1.0 U			1.0 U		8.7	
Magnesium		5470 J		5410 J			6730 J		904 J	
Manganese		13.6 J		42.5 J			3.7 J		40.9 J	
Mercury		0.20 U		0.20 U			0.20 U		0.20 U	
Nickel		1.1 J		1.3 J			1.0 UJ		2.7 J	
Potassium		1620 J		1890 J			3000 J		1250 J	
Selenium		5.0 U		5.0 U			5.0 U		5.0 U	
Silver		0.082 J		0.085 J			0.040 J		0.015 J	
Sodium		101000		110000			33800		14800	
Vanadium		5.0 U		5.0 U			5.0 U		5.0 U	
Zinc		2.1		2.4			2.8		41.1	
Other										
Dissolved oxygen, field (mg/L)		0.26		0.39			6.52		0.35	
ORP, field (mV)		151.4		127.0			205		205	
pH, field (S.U.)		5.92		5.83			5.74		5.33	
Spec. cond., field (umho/cm)		689		731			434		120	
Temperature, field (deg C)		17.26		18.19			13.32		18.30	
Turbidity, field (N.T.U.)		4.07		4.64			0.9		0.8	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-101D	MW-101D	MW-101D	MW-101S	MW-101S	MW-101S	MW-101S	MW-101S	MW-101S	MW-102D
Sample ID:	WL-GWF-MW-101D-2	WL-GW-MW-101D-1	WL-GW-MW-101D-2	WL-GWF-MW-101S-1	WL-GWF-MW-101S-2	WL-GWF-MW-101SD-2	WL-GW-MW-101S-1	WL-GW-MW-101S-2	WL-GW-MW-101SD-2	WL-GWF-MW-102D-1
Sample Date:	12/8/2014	8/12/2014	12/8/2014	8/12/2014	12/8/2014	12/8/2014	8/12/2014	12/8/2014	12/8/2014	8/11/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane		0.50 U	0.16 J				0.50 U	0.50 U	0.50 U	
1,1,2-Trichloroethane		0.50 U	0.50 U				0.50 U	0.50 U	0.50 U	
1,1-Dichloroethane		0.50 U	0.11 J				R	0.50 U	0.50 U	
1,1-Dichloroethene		0.50 U	0.50 U				R	0.50 U	0.50 U	
1,2-Dibromo-3-chloropropane		0.50 U	0.50 U				R	0.50 U	0.50 U	
1,2-Dichloroethane		0.50 U	0.50 U				R	0.50 U	0.50 U	
2-Butanone		5.0 U	5.0 U				R	5.0 U	5.0 U	
Acetone		5.0 U	5.0 U				5.0 UJ	5.0 U	5.0 U	
Benzene		0.50 U	0.50 U				0.50 U	0.50 U	0.50 U	
Bromodichloromethane		R	0.50 U				R	0.50 U	0.50 U	
Bromoform		R	0.50 U				R	0.50 U	0.50 U	
Carbon disulfide		0.50 U	0.50 U				R	0.50 U	0.50 U	
Chloroethane		0.50 U	0.50 U				R	0.50 U	0.50 U	
Chloroform		0.50 U	0.50 U				R	0.50 U	0.50 U	
cis-1,2-Dichloroethene		0.50 U	0.50 U				R	0.50 U	0.50 U	
Cyclohexane		0.50 U	0.50 U				0.50 U	0.50 U	0.50 U	
Ethylbenzene		0.50 U	0.50 U				0.50 U	0.50 U	0.50 U	
Isopropylbenzene		0.50 U	0.50 U				0.50 U	0.50 U	0.50 U	
m,p-Xylene		0.50 U	0.50 U				0.50 U	0.50 U	0.50 U	
Methyl tert-butyl ether		0.50 U	0.50 U				R	0.50 U	0.50 U	
Methylcyclohexane		0.50 U	0.50 U				0.50 U	0.50 U	0.50 U	
Methylene chloride		0.50 U	0.50 U				R	0.50 U	0.50 U	
o-Xylene		0.50 U	0.50 U				0.50 U	0.50 U	0.50 U	
Tetrachloroethene		0.50 U	0.50 U				0.50 U	0.50 U	0.50 U	
Toluene		0.50 U	0.50 U				0.50 U	0.50 U	0.50 U	
trans-1,2-Dichloroethene		0.50 U	0.50 U				R	0.50 U	0.50 U	
Trichloroethene		0.60	1.0				0.15 U	0.50 U	0.50 U	
Vinyl chloride		0.015 U	0.50 U				0.015 U	0.50 U	0.50 U	
1,4-Dioxane (ug/L)										
1,4-Dioxane		0.21					0.10 U			
Inorganics, Dissolved (ug/L)										
Aluminum	26.7 J+			400	267 J+	263 J+				51.8
Antimony	2.0 U			2.0 U	2.0 U	2.0 U				0.46 J
Arsenic	1.0 U			0.34 J	1.0 U	1.0 U				1.2
Barium	23.6			207	107	106				134
Beryllium	1.0 U			0.36 J	1.0 U	1.0 U				0.19 J+
Cadmium	0.40 U			0.53	0.40 U	0.40 U				1.0
Calcium	21800			17400	12500	12200				70900
Chromium	3550			4.8 UJ	2.0 U	2.0 U				23100 J
Chromium, Hexavalent	3420			0.90	0.50 U	0.50 U				21500
Cobalt	1.0 U			1.3	1.0 U	1.0 U				21.7
Copper	2.0 UJ			3.0	2.7	2.7				4.7
Iron	1060			310 J	200 U	200 U				4660 J
Lead	0.20 U			0.14 J	0.20 U	0.20 U				0.12 J
Magnesium	5180			2640	1910	1840				18000
Manganese	14.4			178 J	110	109				1960 J

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-101D	MW-101D	MW-101D	MW-101S	MW-101S	MW-101S	MW-101S	MW-101S	MW-101S	MW-102D
Sample ID:	WL-GWF-MW-101D-2	WL-GW-MW-101D-1	WL-GW-MW-101D-2	WL-GWF-MW-101S-1	WL-GWF-MW-101S-2	WL-GWF-MW-101SD-2	WL-GW-MW-101S-1	WL-GW-MW-101S-2	WL-GW-MW-101SD-2	WL-GWF-MW-102D-1
Sample Date:	12/8/2014	8/12/2014	12/8/2014	8/12/2014	12/8/2014	12/8/2014	8/12/2014	12/8/2014	12/8/2014	8/11/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate	Field Sample
Parameter										
Mercury	0.20 UJ			0.20 UJ	0.20 UJ	0.20 UJ				0.20 UJ
Nickel	1.7			1.5	1.3	1.4				23.7
Potassium	2540			3540	2730	2700				8300
Selenium	5.0 U			5.0 U	5.0 U	5.0 U				5.0 U
Silver	1.0 UJ			1.0 U	1.0 UJ	1.0 UJ				1.0 U
Sodium	81300			25800	18400	18000				231000
Vanadium	5.0 U			5.0 U	5.0 U	5.0 U				5.0 U
Zinc	3.2			42.4	17.8	17.5				130
Inorganics (ug/L)										
Aluminum		95.4 J	3240				447 J	271	290	
Antimony		2.0 U	2.0 U				2.0 U	2.0 U	2.0 U	
Arsenic		1.0 U	1.7				1.0 U	1.0 U	1.0 U	
Barium		23.7	36.2				216	103	112	
Beryllium		1.0 U	1.0 U				0.29 J	1.0 U	1.0 U	
Cadmium		0.038 J	0.40 U				0.54	0.40 U	0.40 U	
Calcium		21500	19700				17100	11800	13000	
Chromium		2510	3350				4.6 UJ	2.0 U	2.0 U	
Chromium, Hexavalent		2510	3480				1.4	0.50 U	0.50 U	
Cobalt		0.14 J	1.9				1.4	1.0 U	1.0 U	
Copper		2.0 UJ	4.4				2.0 UJ	3.2	3.1	
Cyanide		3.7 J+	2.5 U				4.8 J+	2.5 U	2.5 U	
Iron		854 J	5530				366 J	200 U	200 U	
Lead		0.20 U	4.2				0.20 U	0.20 U	0.20 U	
Magnesium		5460 J	5830				2710 J	1790	1950	
Manganese		16.6	171				191	104	116	
Mercury		0.20 UJ	0.20 UJ				0.20 UJ	0.20 UJ	0.20 UJ	
Nickel		1.5	5.8				1.2	1.5	1.5	
Potassium		2150	2670				3560	2640	2840	
Selenium		5.0 U	5.0 U				0.42 J	0.48 J	0.45 J	
Silver		1.0 U	1.0 UJ				1.0 U	1.0 UJ	1.0 UJ	
Sodium		71900	75700				25100	18100	19000	
Vanadium		5.0 U	5.0 U				5.0 U	5.0 U	5.0 U	
Zinc		2.4 J+	13.9 J				42.4 J+	19.4 J	19.4 J	
Other										
Dissolved oxygen, field (mg/L)		3.79	3.69				0.04	2.21		
ORP, field (mV)		285.6	260.5				308	268.4		
pH, field (S.U.)		5.89	5.86				4.96	5.09		
Spec. cond., field (umho/cm)		563.2	609				287.3	231		
Temperature, field (deg C)		13.6	12.98				16.7	11.74		
Turbidity, field (N.T.U.)		1.8	1.97				1.6	1.02		

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-102D	MW-102D	MW-102D	MW-102S	MW-102S	MW-102S	MW-102S	MW-103D	MW-103D	MW-103D
Sample ID:	WL-GWF-MW-102D-2	WL-GW-MW-102D-1	WL-GW-MW-102D-2	WL-GWF-MW-102S-1	WL-GWF-MW-102S-2	WL-GW-MW-102S-1	WL-GW-MW-102S-2	WL-GWF-MW-103D-1	WL-GWF-MW-103DD-1	WL-GWF-MW-103D-2
Sample Date:	12/8/2014	8/11/2014	12/8/2014	8/11/2014	12/8/2014	8/11/2014	12/8/2014	8/11/2014	8/11/2014	12/10/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane		28	34			29	34			
1,1,2-Trichloroethane		0.50 U	0.50 U			0.50 U	0.50 U			
1,1-Dichloroethane		16	18			18	19			
1,1-Dichloroethene		16 J	15			8.3 J	6.2			
1,2-Dibromo-3-chloropropane		0.50 U	0.50 U			0.50 U	0.50 U			
1,2-Dichloroethane		0.50 U	0.50 U			0.50 U	0.50 U			
2-Butanone		5.0 U	5.0 U			5.0 U	5.0 U			
Acetone		5.0 UJ	5.0 U			5.0 UJ	5.0 U			
Benzene		0.49 J	0.37 J			0.50 U	0.50 U			
Bromodichloromethane		R	0.50 U			R	0.50 U			
Bromoform		R	0.50 U			R	0.50 U			
Carbon disulfide		0.50 U	0.50 U			0.50 U	0.50 U			
Chloroethane		0.16 J	0.50 U			0.50 U	0.50 U			
Chloroform		0.50 U	0.50 U			0.50 U	0.50 U			
cis-1,2-Dichloroethene		15 J	18			54	63			
Cyclohexane		0.50 U	0.50 U			0.50 U	0.50 U			
Ethylbenzene		0.50 U	0.50 U			0.50 U	0.50 U			
Isopropylbenzene		0.50 U	0.50 U			0.50 U	0.50 U			
m,p-Xylene		0.50 U	0.50 U			0.50 U	0.50 U			
Methyl tert-butyl ether		0.42 J	0.42 J			0.22 J	0.14 J			
Methylcyclohexane		0.50 U	0.50 U			0.50 U	0.50 U			
Methylene chloride		0.50 U	0.50 U			0.50 U	0.50 U			
o-Xylene		0.50 U	0.50 U			0.50 U	0.50 U			
Tetrachloroethene		1.2	1.4			1.6	1.2			
Toluene		0.50 U	0.50 U			0.50 U	0.50 U			
trans-1,2-Dichloroethene		0.50 U	0.17 J			0.18 J	0.17 J			
Trichloroethene		53	70			42	47			
Vinyl chloride		1.8	1.6			0.66	0.32 J			
1,4-Dioxane (ug/L)										
1,4-Dioxane		3.8				1.8				
Inorganics, Dissolved (ug/L)										
Aluminum	29.1 J+			6880	31.2 J+			20.0 UJ	20.0 UJ	59.6 J+
Antimony	2.0 U			2.0 U	2.0 U			2.0 UJ	2.0 UJ	2.0 U
Arsenic	1.0 U			2.8	1.0 U			0.26 J-	0.26 J-	1.0 U
Barium	144			228	162			15.9 J-	16.6 J-	53.7
Beryllium	1.0 U			0.50 J+	1.0 U			1.0 UJ	1.0 UJ	1.0 U
Cadmium	1.1			1.2	0.96			0.077 J-	0.066 J-	0.40 U
Calcium	73900			30700	27800			23500 J-	23900 J-	38600
Chromium	16400			4440 J	5730			582 J	580 J	662
Chromium, Hexavalent	16000			5300	5720			558	568	664
Cobalt	22.9			5.1	1.0 U			1.0 UJ	1.0 UJ	1.0 U
Copper	4.3			17.0	0.60 J			2.0 UJ	2.0 UJ	2.0 UJ
Iron	4760			11100 J	1600			117 J	114 J	200 U
Lead	0.20 U			9.7	0.20 U			0.028 J-	0.030 J-	0.37
Magnesium	18900			9460	6540			8330 J-	8230 J-	13400
Manganese	2140			1640 J	1340			12.4 J	12.4 J	80.0

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-102D	MW-102D	MW-102D	MW-102S	MW-102S	MW-102S	MW-102S	MW-103D	MW-103D	MW-103D
Sample ID:	WL-GWF-MW-102D-2	WL-GW-MW-102D-1	WL-GW-MW-102D-2	WL-GWF-MW-102S-1	WL-GWF-MW-102S-2	WL-GW-MW-102S-1	WL-GW-MW-102S-2	WL-GWF-MW-103D-1	WL-GWF-MW-103DD-1	WL-GWF-MW-103D-2
Sample Date:	12/8/2014	8/11/2014	12/8/2014	8/11/2014	12/8/2014	8/11/2014	12/8/2014	8/11/2014	8/11/2014	12/10/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample
Parameter										
Mercury	0.20 UJ			0.20 UJ	0.20 UJ			0.20 UJ	0.20 UJ	0.20 UJ
Nickel	23.4			24.8	15.8			2.7 J-	2.6 J-	4.6
Potassium	7920			4100	3430			2840 J-	2830 J-	4190
Selenium	5.0 U			0.44 J	5.0 U			5.0 UJ	5.0 UJ	5.0 U
Silver	1.0 UJ			1.0 U	1.0 UJ			1.0 UJ	1.0 UJ	1.0 U
Sodium	211000			199000	172000			30300 J-	30000 J-	49800
Vanadium	5.0 U			5.0 U	5.0 U			5.0 UJ	5.0 UJ	5.0 UJ
Zinc	144			38.9	7.0			3.6 J-	3.6 J-	4.7
Inorganics (ug/L)										
Aluminum		2250 J	3850			103 J	2440			
Antimony		1.5 J	2.0 U			2.0 U	2.0 U			
Arsenic		12.8	1.6			1.0 U	11.3			
Barium		150	172			218	168			
Beryllium		1.4 J+	1.0 U			0.10 J+	1.7 J+			
Cadmium		1.2	0.93 J-			1.2	1.4 J-			
Calcium		64700	25700			28500	75300			
Chromium		30200	5660			4320	25600			
Chromium, Hexavalent		21100	16400			4380	5610			
Cobalt		23.6	3.0			0.62 J	26.2			
Copper		57.6	8.4			2.0 UJ	67.0			
Cyanide		5.2 J+	3.8 U			5.7 J+	3.4 U			
Iron		28400	6630			1360 J	33800			
Lead		5.6	4.6			0.20 U	3.9			
Magnesium		16400 J	7190			6900 J	20000			
Manganese		2120	1450			1310	2430			
Mercury		0.081 J-	0.20 UJ			0.20 UJ	0.20 UJ			
Nickel		25.9	19.2			15.6	28.8			
Potassium		8000	3520			3630	8120			
Selenium		1.2 J	0.75 J			0.34 J	1.2 J			
Silver		1.0 U	1.0 UJ			1.0 U	1.0 UJ			
Sodium		214000	173000			208000	199000			
Vanadium		5.0 U	5.0 U			5.0 U	5.0 U			
Zinc		175	20.9 J			8.3 J+	199 J			
Other										
Dissolved oxygen, field (mg/L)		0.06	0.71			1.17	2.69			
ORP, field (mV)		260.1	280.2			310.0	256.1			
pH, field (S.U.)		6.10	5.91			5.34	5.25			
Spec. cond., field (umho/cm)		1664	1728			1361	1142			
Temperature, field (deg C)		13.5	11.42			15.8	12.59			
Turbidity, field (N.T.U.)		70	84			3.95	4.73			

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-103D	MW-103D	MW-103D	MW-103S	MW-103S	MW-103S	MW-103S	MW-10D	MW-10D	MW-10D
Sample ID:	WL-GW-MW-103D-1	WL-GW-MW-103DD-1	WL-GW-MW-103D-2	WL-GWF-MW-103S-1	WL-GWF-MW-103S-2	WL-GW-MW-103S-1	WL-GW-MW-103S-2	WL-GWF-MW-10D-1	WL-GWF-MW-10D-2	WL-GW-MW-10D-1
Sample Date:	8/11/2014	8/11/2014	12/10/2014	8/11/2014	12/10/2014	8/11/2014	12/10/2014	8/19/2014	12/16/2014	8/19/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.43 J	0.45 J	3.8			8.3	3.6			0.50 U
1,1,2-Trichloroethane	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
1,1-Dichloroethane	0.83	0.82	8.5			4.8	2.9			0.50 U
1,1-Dichloroethene	0.30 J	0.50 U	2.1			2.5	1.5			0.50 U
1,2-Dibromo-3-chloropropane	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
1,2-Dichloroethane	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
2-Butanone	5.0 U	5.0 U	5.0 U			5.0 U	5.0 U			5.0 U
Acetone	5.0 UJ	5.0 UJ	5.0 U			5.0 U	5.0 U			5.0 U
Benzene	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Bromodichloromethane	R	R	0.50 U			R	0.50 U			0.50 U
Bromoform	R	R	0.50 U			R	0.50 U			0.50 U
Carbon disulfide	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Chloroethane	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Chloroform	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
cis-1,2-Dichloroethene	0.25 J	0.26 J	1.3			5.5	3.7			1.8
Cyclohexane	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Ethylbenzene	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Isopropylbenzene	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
m,p-Xylene	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Methyl tert-butyl ether	0.50 U	0.50 U	0.26 J			0.50 U	0.50 U			0.50 U
Methylcyclohexane	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Methylene chloride	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
o-Xylene	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Tetrachloroethene	0.50 U	0.50 U	0.50 U			0.50	0.42 J			0.29 J
Toluene	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
trans-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Trichloroethene	2.3 J	2.2	9.9			19	20			6.5
Vinyl chloride	0.015 U	0.015 U	0.50 U			0.038	0.50 U			0.84
1,4-Dioxane (ug/L)										
1,4-Dioxane	0.63	0.55				0.57				0.037 J
Inorganics, Dissolved (ug/L)										
Aluminum				22.3 U	52.3 J+			20.0 U	20.0 U	
Antimony				2.0 U	2.0 U			1.2 J	2.0 U	
Arsenic				0.39 J	1.0 U			0.20 J	0.23 J	
Barium				87.2	79.5			61.7	75.6	
Beryllium				1.0 U	1.0 U			1.0 U	1.0 U	
Cadmium				0.32	0.40 U			0.17	0.40 U	
Calcium				23900	24100			24100	12900	
Chromium				3880 J	3170			56.2	19.7	
Chromium, Hexavalent				3870	3130			46.9 J	6.60 J+	
Cobalt				5.0	5.1			7.1	14.0	
Copper				2.0 UJ	2.0 UJ			4.0 UJ	3.5	
Iron				722 J	841			400 U	13.8 J	
Lead				0.068 J	0.20 U			0.031 J	0.20 U	
Magnesium				7210	6950			3360	2050	
Manganese				108 J	110			105	181	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-103D	MW-103D	MW-103D	MW-103S	MW-103S	MW-103S	MW-103S	MW-10D	MW-10D	MW-10D
Sample ID:	WL-GW-MW-103D-1	WL-GW-MW-103DD-1	WL-GW-MW-103D-2	WL-GWF-MW-103S-1	WL-GWF-MW-103S-2	WL-GW-MW-103S-1	WL-GW-MW-103S-2	WL-GWF-MW-10D-1	WL-GWF-MW-10D-2	WL-GW-MW-10D-1
Sample Date:	8/11/2014	8/11/2014	12/10/2014	8/11/2014	12/10/2014	8/11/2014	12/10/2014	8/19/2014	12/16/2014	8/19/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury				0.20 UJ	0.20 UJ			0.20 UJ	0.20 UJ	
Nickel				10.2	11.0			2.0 U	3.0	
Potassium				4850	4450			7230	8050	
Selenium				5.0 U	5.0 U			0.25 J	5.0 U	
Silver				1.0 U	1.0 U			2.0 UJ	1.0 U	
Sodium				79000	74400			35000	48600	
Vanadium				5.0 U	5.0 UJ			5.0 U	5.0 U	
Zinc				11.0	12.9			7.1	12.4	
Inorganics (ug/L)										
Aluminum	36.6 J	47.6 J	501			28.2 J	77.6			93.1
Antimony	2.0 UJ	2.0 UJ	2.0 U			2.0 U	2.0 U			1.3 J
Arsenic	1.0 UJ	1.0 UJ	1.0 U			1.0 U	1.0 U			0.40 J-
Barium	17.1 J-	17.3 J-	57.6			93.4	81.7			65.8
Beryllium	1.0 UJ	1.0 UJ	1.0 U			1.0 U	1.0 U			1.0 U
Cadmium	0.062 J-	0.076 J-	0.40 UJ			0.36	0.40 UJ			0.17
Calcium	22600 J-	23300 J-	36800 J			23600	23200 J			22800
Chromium	555 J-	564 J-	678			3950	2970			60.4
Chromium, Hexavalent	576	573	664			4020	3000			46.5
Cobalt	0.21 J-	0.22 J-	1.0 U			5.4	5.4			7.6
Copper	2.0 UJ	2.0 UJ	2.0 UJ			2.0 UJ	2.0 UJ			2.5
Cyanide	4.2 J+	4.3 J+	2.5 U			7.7 J+	3.4 U			3.7 J+
Iron	238 J	261 J	1070			1140 J	983			227
Lead	0.20 UJ	0.20 UJ	0.61			0.20 U	0.21 U			0.26
Magnesium	7440 J	7570 J	13200 J			7060 J	6920 J			3290
Manganese	14.1 J-	14.3 J-	94.9			112	97.6			104
Mercury	0.20 UJ	0.20 UJ	0.20 UJ			0.20 UJ	0.20 UJ			0.20 U
Nickel	2.6 J-	2.6 J-	5.1			10.2	11.2			1.3
Potassium	2840 J-	2840 J-	4260			4860	4520			6920
Selenium	5.0 UJ	5.0 UJ	5.0 U			0.46 J	0.48			5.0 U
Silver	1.0 UJ	1.0 UJ	1.0 U			1.0 U	1.0 U			1.0 U
Sodium	29100 J-	29500 J-	49500			78000	75400			34000
Vanadium	5.0 UJ	5.0 UJ	R			5.0 U	R			5.0 U
Zinc	6.3 J	15.1 J	6.7			11.3 J+	13.3			7.3 J+
Other										
Dissolved oxygen, field (mg/L)	3.09		0.32			0.00	0.32			0.0
ORP, field (mV)	277.5		130.5			263.1	211.0			194
pH, field (S.U.)	5.60		5.79			5.59	5.89			5.79
Spec. cond., field (umho/cm)	377.8		647			612	614			382
Temperature, field (deg C)	13.1		10.93			16.0	10.01			16.5
Turbidity, field (N.T.U.)	3.5		16.1			0.64	2.67			4.4

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-10D	MW-10S	MW-10S	MW-10S	MW-10S	MW-12D	MW-12D	MW-12D	MW-12D	MW-12S
Sample ID:	WL-GW-MW-10D-2	WL-GWF-MW-10S-1	WL-GWF-MW-10S-2	WL-GW-MW-10S-1	WL-GW-MW-10S-2	WL-GWF-MW-12D-1	WL-GWF-MW-12D-2	WL-GW-MW-12D-1	WL-GW-MW-12D-2	WL-GWF-MW-12S-1
Sample Date:	12/16/2014	8/20/2014	12/16/2014	8/20/2014	12/16/2014	8/19/2014	12/15/2014	8/19/2014	12/15/2014	8/19/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U			0.50 U	0.22 J			0.50 U	0.50 U	
1,1,2-Trichloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
1,1-Dichloroethane	0.94			0.22 J	0.50 U			0.37 J	0.36 J	
1,1-Dichloroethene	0.50 U			0.50 U	0.50 U			0.35 J	0.50 U	
1,2-Dibromo-3-chloropropane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
1,2-Dichloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
2-Butanone	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	
Acetone	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	
Benzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Bromodichloromethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Bromoform	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Carbon disulfide	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Chloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Chloroform	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
cis-1,2-Dichloroethene	1.3			4.6	1.2			9.3	11	
Cyclohexane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Ethylbenzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Isopropylbenzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
m,p-Xylene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Methyl tert-butyl ether	0.50 U			0.50 U	0.50 U			0.50 U	0.14 J	
Methylcyclohexane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Methylene chloride	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
o-Xylene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Tetrachloroethene	0.26 J			0.50 U	0.23 J			0.23 J	0.22 J	
Toluene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
trans-1,2-Dichloroethene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Trichloroethene	16			1.1 J	8.1			22	26	
Vinyl chloride	0.27 J			0.32	0.50 U			2.1	1.5	
1,4-Dioxane (ug/L)										
1,4-Dioxane				0.059 J				0.082 J		
Inorganics, Dissolved (ug/L)										
Aluminum		51.9	20.1 U			20.0 U	20.0 U			28.0 U
Antimony		3.8	2.7 U			2.0 U	2.0 U			0.75 J
Arsenic		1.1	0.63			2.3	1.9			3.9
Barium		76.3	64.5			48.0	48.3			227
Beryllium		1.0 U	1.0 U			1.0 U	1.0 U			1.0 U
Cadmium		0.040 U	0.73			0.042 U	0.40 U			0.70
Calcium		33800	29400			33200	33700			38100
Chromium		51.9	18.3			0.24 J-	0.94 J			52.5
Chromium, Hexavalent		1.40 J	1.20 J+			0.50 UJ	0.50 U			0.50 UJ
Cobalt		6.3	7.9			9.2	9.1			24.8
Copper		2.0 U	25.4			2.0 UJ	2.0 UJ			3.6 J
Iron		1710	201			3080	2590			1610
Lead		0.38	1.5			0.20 U	0.20 U			0.17 J
Magnesium		4060	3630			6110	5850			3640
Manganese		342	235			844	836			877

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-10D	MW-10S	MW-10S	MW-10S	MW-10S	MW-12D	MW-12D	MW-12D	MW-12D	MW-12S
Sample ID:	WL-GW-MW-10D-2	WL-GWF-MW-10S-1	WL-GWF-MW-10S-2	WL-GW-MW-10S-1	WL-GW-MW-10S-2	WL-GWF-MW-12D-1	WL-GWF-MW-12D-2	WL-GW-MW-12D-1	WL-GW-MW-12D-2	WL-GWF-MW-12S-1
Sample Date:	12/16/2014	8/20/2014	12/16/2014	8/20/2014	12/16/2014	8/19/2014	12/15/2014	8/19/2014	12/15/2014	8/19/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury		0.20 UJ	0.20 UJ			0.20 UJ	0.20 UJ			0.20 UJ
Nickel		5.6	2.7			1.6	1.5			2.6
Potassium		11200	9670			1220	1320			8110
Selenium		0.30 J	5.0 U			5.0 U	5.0 U			0.62 J
Silver		1.0 U	1.0 U			1.0 UJ	1.0 U			1.0 UJ
Sodium		14900	9410			66600	68500			160000
Vanadium		5.0 U	5.0 U			5.0 U	5.0 U			5.0 U
Zinc		5.2	96.1			3.6	2.8 U			22.1
Inorganics (ug/L)										
Aluminum	31.4			74.1 J	28.9			52.3	38.9	
Antimony	2.0 U			1.1 J	2.1 U			2.0 U	2.0 U	
Arsenic	0.18 J			1.0 U	0.52 J			4.5 J-	2.7	
Barium	65.6			77.8	61.7			46.4	45.5	
Beryllium	1.0 UJ			1.0 U	1.0 UJ			1.0 U	1.0 UJ	
Cadmium	0.40 UJ			0.30 J	0.70			0.053	0.40 UJ	
Calcium	11800			33600	28700			32100	32900	
Chromium	30.1			66.7 J	19.8			5.8 J-	3.3	
Chromium, Hexavalent	6.90 J+			1.20	2.70 J+			0.50 U	0.50 U	
Cobalt	11.9			6.4	7.4			9.0	8.5	
Copper	2.9 J-			7.0	27.8			2.0 UJ	2.0 UJ	
Cyanide	2.8			6.1 J+	3.8			4.1 J+	3.6	
Iron	98.1 J			1750	249			3760	3060	
Lead	0.27 U			2.3 J	2.5			0.20 U	0.20 U	
Magnesium	2000			4010	3720			5940	6000	
Manganese	168			372	225			808	802	
Mercury	0.20 UJ			0.20 UJ	0.20 UJ			0.20 U	0.20 UJ	
Nickel	2.7			5.6 J	2.7			1.6	1.3	
Potassium	7430			11200	9230			1170	1240	
Selenium	5.0 U			0.47 J	5.0 U			5.0 U	5.0 U	
Silver	1.0 UJ			1.0 U	0.020 J			1.0 U	1.0 UJ	
Sodium	46700			14900	9390			65800	66900	
Vanadium	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	
Zinc	11.9			10.4 J	96.6			2.8 U	2.2	
Other										
Dissolved oxygen, field (mg/L)	0.24			0.10	0.36			0.00	0.56	
ORP, field (mV)	183.8			-12.3	113.8			60.4	99.7	
pH, field (S.U.)	6.15			6.07	6.22			5.95	5.46	
Spec. cond., field (umho/cm)	369			339.3	250			631	477	
Temperature, field (deg C)	12.42			20.4	7.91			15.0	13.30	
Turbidity, field (N.T.U.)	3.39			2.96	1.86			11.49	9.48	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-13	MW-13	MW-13	MW-13	MW-14
Sample ID:	WL-GWF-MW-12S-2	WL-GWF-MW-12SD-2	WL-GW-MW-12S-1	WL-GW-MW-12S-2	WL-GW-MW-12SD-2	WL-GWF-MW-13-1	WL-GWF-MW-13-2	WL-GW-MW-13-1	WL-GW-MW-13-2	WL-GWF-MW-14-1
Sample Date:	12/15/2014	12/15/2014	8/19/2014	12/15/2014	12/15/2014	8/5/2014	12/10/2014	8/5/2014	12/10/2014	8/12/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane			1500	640	650			0.50 U	0.50 U	
1,1,2-Trichloroethane			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
1,1-Dichloroethane			390	250	260			0.50 U	0.50 U	
1,1-Dichloroethene			140	39 J	34 J			0.50 U	0.50 U	
1,2-Dibromo-3-chloropropane			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
1,2-Dichloroethane			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
2-Butanone			100 U	5.0 U	5.0 U			5.0 U	5.0 U	
Acetone			100 U	5.0 U	5.0 U			5.0 U	5.0 U	
Benzene			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
Bromodichloromethane			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
Bromoform			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
Carbon disulfide			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
Chloroethane			240	62	68			0.50 U	0.50 U	
Chloroform			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
cis-1,2-Dichloroethene			190 J	110	110			0.50 U	0.50 U	
Cyclohexane			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
Ethylbenzene			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
Isopropylbenzene			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
m,p-Xylene			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
Methyl tert-butyl ether			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
Methylcyclohexane			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
Methylene chloride			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
o-Xylene			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
Tetrachloroethene			12	5.9	5.1			0.50 U	0.50 U	
Toluene			10 U	0.50 U	0.50 U			0.50 U	0.50 U	
trans-1,2-Dichloroethene			7.0 J	3.9	3.5			0.50 U	0.50 U	
Trichloroethene			7.4 J	5.9	5.3			0.15 J	0.50 U	
Vinyl chloride			33 J	24 J	30			0.015 U	0.50 U	
1,4-Dioxane (ug/L)										
1,4-Dioxane			1.0					0.10 U		
Inorganics, Dissolved (ug/L)										
Aluminum	63.8	67.0				45.2	197 J+			44.6
Antimony	2.0 U	2.0 U				2.0 U	2.0 U			2.0 U
Arsenic	2.1	2.2				0.11 J	1.0 U			0.41 J
Barium	119	123				98.5	212			142
Beryllium	1.0 U	1.0 U				0.16 J+	1.0 U			1.0 U
Cadmium	0.45	0.48				0.081 U	0.40 U			0.75
Calcium	38400	39700				12800	12000			20300
Chromium	45.2	45.8				944 J	454			2880 J
Chromium, Hexavalent	1.00 J+	1.00 J+				829	475			2910
Cobalt	6.2	6.5				1.0 UJ	1.0 U			1.6
Copper	3.9	4.8				2.0 U	2.0 UJ			2.0 UJ
Iron	431	455				251 J	200 U			567 J
Lead	0.22 U	0.21 U				0.20 U	0.20 U			0.13 J
Magnesium	3610	3770				2020 J	1710			3030
Manganese	514	517				54.8 J	66.0			216 J

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-12S	MW-12S	MW-12S	MW-12S	MW-12S	MW-13	MW-13	MW-13	MW-13	MW-14
Sample ID:	WL-GWF-MW-12S-2	WL-GWF-MW-12SD-2	WL-GW-MW-12S-1	WL-GW-MW-12S-2	WL-GW-MW-12SD-2	WL-GWF-MW-13-1	WL-GWF-MW-13-2	WL-GW-MW-13-1	WL-GW-MW-13-2	WL-GWF-MW-14-1
Sample Date:	12/15/2014	12/15/2014	8/19/2014	12/15/2014	12/15/2014	8/5/2014	12/10/2014	8/5/2014	12/10/2014	8/12/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury	0.20 UJ	0.20 UJ				0.20 UJ	0.20 UJ			0.20 UJ
Nickel	1.5	2.3				1.3 UJ	0.68 J			1.4
Potassium	8020	8250				649	555			3150
Selenium	5.0 U	5.0 U				5.0 U	5.0 U			0.32 J
Silver	1.0 U	1.0 U				1.0 U	1.0 U			1.0 U
Sodium	73600	76000				130000	157000			422000
Vanadium	5.0 U	5.0 U				5.0 U	5.0 UJ			5.0 U
Zinc	8.5 U	8.4 U				4.6 U	3.2 U			4.7
Inorganics (ug/L)										
Aluminum			45.5	98.3	88.7			78.5	192	
Antimony			0.72 J	2.0 U	2.0 U			2.0 U	2.0 U	
Arsenic			4.3 J-	2.4	2.3			0.076 J	1.0 U	
Barium			219	118	119			95.8	227	
Beryllium			1.0 U	1.0 UJ	1.0 U			0.15 J+	1.0 U	
Cadmium			0.82	0.46	0.45			0.079 U	0.40 UJ	
Calcium			36800	39100	39000			12400	13000 J	
Chromium			59.4	50.5	49.1			948	457	
Chromium, Hexavalent			0.50 U	0.80 J+	0.90 J+			858	470	
Cobalt			24.6	6.2	6.3 J			1.0 U	1.0 U	
Copper			4.1	4.7 J-	6.6			2.0 U	2.0 UJ	
Cyanide			3.6 J+	2.4 J	2.5 U			6.0 J	2.5 U	
Iron			1850	613	572			286	200 U	
Lead			0.47	0.50	0.40			0.20 UJ	0.20 U	
Magnesium			3560	3790	3600			1970 J	1900 J	
Manganese			817	488	481			56.5	67.5	
Mercury			0.20 U	0.20 UJ	0.20 UJ			0.20 UJ	0.20 UJ	
Nickel			2.6	1.6	1.6 J			1.0 U	0.63 J	
Potassium			7840	8250	8220			635	567	
Selenium			0.41 J	5.0 U	5.0 U			5.0 U	5.0 U	
Silver			1.0 U	1.0 UJ	1.0 U			1.0 U	1.0 U	
Sodium			167000	77200	73100			137000	161000	
Vanadium			5.0 U	5.0 U	5.0 U			5.0 U	R	
Zinc			21.3 J+	9.1	8.8 UJ			2.7 U	2.5 U	
Other										
Dissolved oxygen, field (mg/L)			0.00	0.47				5.85	6.71	
ORP, field (mV)			84.9	124.1				291	217.6	
pH, field (S.U.)			5.59	5.41				4.99	5.02	
Spec. cond., field (umho/cm)			1103	516				762	932	
Temperature, field (deg C)			18.5	8.72				16.9	11.96	
Turbidity, field (N.T.U.)			2.34	4.06				3.1	0.90	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-14	MW-14	MW-14	MW-14	MW-14	MW-15	MW-15	MW-15	MW-15	MW-16
Sample ID:	WL-GWF-MW-14-2	WL-GWF-MW-14-3	WL-GW-MW-14-1	WL-GW-MW-14-2	WL-GW-MW-14-3	WL-GWF-MW-15-1	WL-GWF-MW-15-2	WL-GW-MW-15-1	WL-GW-MW-15-2	WL-GWF-MW-16-1
Sample Date:	12/10/2014	9/22/2015	8/12/2014	12/10/2014	9/22/2015	8/12/2014	12/16/2014	8/12/2014	12/16/2014	8/4/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane			3.5	0.11 J	8.7			39	56	
1,1,2-Trichloroethane			0.50 U	0.50 U	0.50 U			1.0 U	0.50 U	
1,1-Dichloroethane			4.4 J	0.50 U	16			28	33	
1,1-Dichloroethene			0.90 J	0.50 U	3.7			9.6	8.2	
1,2-Dibromo-3-chloropropane			R	0.50 U	0.50 U			1.0 U	0.50 U	
1,2-Dichloroethane			R	0.50 U	0.50 U			1.0 U	0.50 U	
2-Butanone			R	5.0 U	5.0 U			10 U	5.0 U	
Acetone			R	5.0 U	5.0 U			10 U	5.0 U	
Benzene			0.50 U	0.50 U	0.50 U			1.0 U	0.50 U	
Bromodichloromethane			R	0.50 U	0.55			R	0.50 U	
Bromoform			R	0.50 U	0.50 U			R	0.50 U	
Carbon disulfide			R	0.50 U	0.50 U			1.0 U	0.50 U	
Chloroethane			R	0.50 U	0.50 U			1.0 U	0.50 U	
Chloroform			1.2 UJ	0.50 U	1.5			1.0 U	0.50 U	
cis-1,2-Dichloroethene			0.30 J	0.50 U	0.47 J			130	110	
Cyclohexane			0.50 U	0.50 U	0.50 U			1.0 U	0.50 U	
Ethylbenzene			0.50 U	0.50 U	0.50 U			1.0 U	0.50 U	
Isopropylbenzene			0.50 U	0.50 U	0.50 U			1.0 U	0.50 U	
m,p-Xylene			0.50 U	0.50 U	0.50 U			1.0 U	0.50 U	
Methyl tert-butyl ether			0.19 J	0.50 U	0.59			1.0 U	0.50 U	
Methylcyclohexane			0.50 U	0.50 U	0.50 U			1.0 U	0.50 U	
Methylene chloride			R	0.50 U	0.50 U			1.0 U	0.50 U	
o-Xylene			0.50 U	0.50 U	0.50 U			1.0 U	0.50 U	
Tetrachloroethene			0.10 J	0.50 U	0.54			1.1	1.0	
Toluene			0.50 U	0.50 U	0.50 U			1.0 U	0.19 J	
trans-1,2-Dichloroethene			R	0.50 U	0.50 U			0.27 J	0.25 J	
Trichloroethene			4.9	0.16 J	17			40	51	
Vinyl chloride			0.030	0.50 U	0.50 U			4.3	4.2	
1,4-Dioxane (ug/L)										
1,4-Dioxane			0.75		6.0			1.9		
Inorganics, Dissolved (ug/L)										
Aluminum	125 J+	20.0 U				39.2	20.0 U			20.0 U
Antimony	2.0 U	2.0 U				2.0 U	2.0 U			2.0 U
Arsenic	1.0 U	0.16 J				0.38 J	0.12 J			1.0 U
Barium	245	27.1				179	74.8			32.9
Beryllium	1.0 U	1.0 U				1.0 U	1.0 U			1.0 U
Cadmium	1.9	0.14 J				0.55	0.40 U			0.040 U
Calcium	22700	3960				19600	10200			9290
Chromium	137	10300				129 J	21.2			50.6
Chromium, Hexavalent	125	10100				91.6	14.2 J+			48.8
Cobalt	2.3	1.0 UJ				4.6	1.6			1.0 U
Copper	2.0 UJ	3.8				2.0 UJ	2.0 UJ			2.0 UJ
Iron	200 U	3040 J				31.4 J	200 UJ			24.9 J-
Lead	0.20 U	1.0 U				0.067 J	0.20 U			0.036 J
Magnesium	2760	714 J				4030	2210			2880 J
Manganese	271	52.4				870 J	491			2.7

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-14	MW-14	MW-14	MW-14	MW-14	MW-15	MW-15	MW-15	MW-15	MW-16
Sample ID:	WL-GWF-MW-14-2	WL-GWF-MW-14-3	WL-GW-MW-14-1	WL-GW-MW-14-2	WL-GW-MW-14-3	WL-GWF-MW-15-1	WL-GWF-MW-15-2	WL-GW-MW-15-1	WL-GW-MW-15-2	WL-GWF-MW-16-1
Sample Date:	12/10/2014	9/22/2015	8/12/2014	12/10/2014	9/22/2015	8/12/2014	12/16/2014	8/12/2014	12/16/2014	8/4/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury	0.20 UJ	0.20 U				0.20 UJ	0.20 UJ			0.20 UJ
Nickel	2.6	1.1				7.5	2.1			0.82 J-
Potassium	2810	991 J				3750	2380			3260 J
Selenium	5.0 U	0.46 J				5.0 U	5.0 U			5.0 U
Silver	1.0 U	1.0 U				1.0 U	1.0 U			1.0 U
Sodium	599000	159000 J				267000	122000			26900
Vanadium	5.0 UJ	5.0 U				5.0 U	5.0 U			5.0 U
Zinc	16.3	9.7 J				7.4	18.8			2.6 U
Inorganics (ug/L)										
Aluminum			446 J	142	1070 J			44.5 J	44.9	
Antimony			0.58 J	2.0 U	2.0 U			2.0 U	2.0 U	
Arsenic			1.0 U	1.0 U	0.46 J			1.0 U	0.11 J	
Barium			143	249	31.9			174	75.9	
Beryllium			0.13 J+	1.0 U	0.084 J			0.10 J+	1.0 UJ	
Cadmium			0.61	1.5	0.10 J			0.51	0.40 UJ	
Calcium			19100	21800 J	4000			18600	10400	
Chromium			2900	153	9480			115	22.7	
Chromium, Hexavalent			2940	121	9930			98.1	14.1 J+	
Cobalt			1.7	2.4	0.92 J			4.5	1.5	
Copper			2.0 UJ	2.0 UJ	4.0			2.0 UJ	0.21 J	
Cyanide			5.3 J+	2.5 U	10.0 U			3.4 J+	3.1	
Iron			1360 J	200 U	4470 J			200 UJ	65.8 J	
Lead			0.67	0.39	2.4			0.20 U	0.28 U	
Magnesium			2980 J	3050 J	1020 J			4030 J	2390	
Manganese			224	265	74.6			862	500	
Mercury			0.20 UJ	0.20 UJ	0.20 U			0.20 UJ	0.20 UJ	
Nickel			1.9	2.4	2.0 J			6.7	2.4	
Potassium			3060	2780	1070			3590	2360	
Selenium			0.60 J	5.0 U	0.49 J			0.34 J	5.0 U	
Silver			1.0 U	1.0 U	1.0 U			1.0 U	1.0 UJ	
Sodium			437000	563000	170000			235000	130000	
Vanadium			5.0 U	R	5.0 U			5.0 U	5.0 U	
Zinc			5.5 J+	17.6	12.9 J			6.8 J+	22.4	
Other										
Dissolved oxygen, field (mg/L)			0.92	3.32	1.59			0.11	2.85	
ORP, field (mV)			259.4	235.0	125.0			272.3	153.7	
pH, field (S.U.)			5.32	5.45	6.02			5.17	5.58	
Spec. cond., field (umho/cm)			2233	3140	731			1441	350	
Temperature, field (deg C)			20.1	11.96	17.71			17.0	11.81	
Turbidity, field (N.T.U.)			28.2	-0.33	31.3			0.89	4.20	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-16	MW-16	MW-16	MW-16	MW-16	MW-5D	MW-5D	MW-5D	MW-5D	MW-5S
Sample ID:	WL-GWF-MW-16-2	WL-GWF-MW-16D-2	WL-GW-MW-16-1	WL-GW-MW-16-2	WL-GW-MW-16D-2	WL-GWF-MW-5D-1	WL-GWF-MW-5D-2	WL-GW-MW-5D-1	WL-GW-MW-5D-2	WL-GWF-MW-5S-1
Sample Date:	12/2/2014	12/2/2014	8/4/2014	12/2/2014	12/2/2014	8/19/2014	12/9/2014	8/19/2014	12/9/2014	8/19/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane			0.88	2.5	2.6			78	47	
1,1,2-Trichloroethane			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
1,1-Dichloroethane			0.79	2.0	2.1			9.8	8.1	
1,1-Dichloroethene			0.31 J	0.56 U	0.50 U			12 J	6.0	
1,2-Dibromo-3-chloropropane			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
1,2-Dichloroethane			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
2-Butanone			5.0 U	5.0 U	5.0 U			5.0 U	5.0 U	
Acetone			5.0 U	5.0 U	5.0 U			5.0 U	5.0 U	
Benzene			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
Bromodichloromethane			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
Bromoform			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
Carbon disulfide			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
Chloroethane			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
Chloroform			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
cis-1,2-Dichloroethene			0.59	1.5	1.5			49	34	
Cyclohexane			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
Ethylbenzene			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
Isopropylbenzene			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
m,p-Xylene			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
Methyl tert-butyl ether			0.50 U	0.50 U	0.50 U			0.50 U	0.12 J	
Methylcyclohexane			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
Methylene chloride			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
o-Xylene			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
Tetrachloroethene			0.50 U	0.50 U	0.50 U			0.89	0.65	
Toluene			0.50 U	0.50 U	0.50 U			0.50 U	0.50 U	
trans-1,2-Dichloroethene			0.50 U	0.50 U	0.50 U			0.52 J	0.46 J	
Trichloroethene			4.4	7.8	7.8			130	91	
Vinyl chloride			0.015 U	0.50 U	0.50 U			9.9	5.1	
1,4-Dioxane (ug/L)										
1,4-Dioxane			0.10 U					0.45		
Inorganics, Dissolved (ug/L)										
Aluminum	23.8	20.0 U				20.0 U	20.0 U			148
Antimony	2.0 U	2.0 U				2.0 U	2.0 U			1.1 J
Arsenic	0.14 J	0.10 J				4.5	4.9			0.87 J
Barium	42.4	43.2				51.1	51.9			206
Beryllium	1.0 U	1.0 U				1.0 U	1.0 U			0.25 J+
Cadmium	0.40 U	0.40 U				0.040 U	0.40 U			0.040 U
Calcium	11600	11700				35000	38100			18300
Chromium	106	111				0.21 J-	2.0 U			46.2
Chromium, Hexavalent	102	107				0.50 UJ	0.50 U			0.50 UJ
Cobalt	1.0 U	1.0 U				11.8	6.0			377
Copper	2.0 UJ	2.0 UJ				2.0 UJ	2.0 UJ			2.0 UJ
Iron	200 UJ	200 UJ				4310	4270			22000
Lead	0.20 U	0.20 U				0.040 J	0.20 U			0.20 U
Magnesium	3290	3330				6140	6880			3320
Manganese	3.1 J	3.2 J				953	930			955

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-16	MW-16	MW-16	MW-16	MW-16	MW-5D	MW-5D	MW-5D	MW-5D	MW-5S
Sample ID:	WL-GWF-MW-16-2	WL-GWF-MW-16D-2	WL-GW-MW-16-1	WL-GW-MW-16-2	WL-GW-MW-16D-2	WL-GWF-MW-5D-1	WL-GWF-MW-5D-2	WL-GW-MW-5D-1	WL-GW-MW-5D-2	WL-GWF-MW-5S-1
Sample Date:	12/2/2014	12/2/2014	8/4/2014	12/2/2014	12/2/2014	8/19/2014	12/9/2014	8/19/2014	12/9/2014	8/19/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury	0.20 UJ	0.20 UJ				0.20 UJ	0.20 UJ			0.20 UJ
Nickel	1.0	1.1				2.2	1.8			25.7
Potassium	3890 J	3980 J				1270	1340			4020
Selenium	5.0 U	5.0 U				5.0 U	5.0 U			0.34 J
Silver	1.0 U	1.0 U				1.0 UJ	1.0 UJ			1.0 UJ
Sodium	37800	38600				75300	78800			144000
Vanadium	5.0 U	5.0 U				5.0 U	5.0 U			5.0 U
Zinc	2.6 U	2.3 U				7.9	7.4			7.0
Inorganics (ug/L)										
Aluminum			22.1	21.5	21.0			20.0 U	153	
Antimony			2.0 U	2.0 U	2.0 U			2.0 U	2.0 U	
Arsenic			0.12 J	0.17 J	0.15 J			6.6 J-	9.1	
Barium			32.6	40.4	46.8			46.9	51.4	
Beryllium			1.0 U	1.0 U	1.0 U			1.0 U	1.0 U	
Cadmium			0.040 U	0.40 U	0.40 U			0.059	0.40 U	
Calcium			9130	11600	13500			34100	37300	
Chromium			53.0	108	129			2.2 J-	2.0 U	
Chromium, Hexavalent			49.8	102	102			0.50 U	0.50 U	
Cobalt			1.0 U	1.0 U	1.0 U			5.9	6.0	
Copper			2.0 UJ	0.17 J	0.27 J			2.0 UJ	0.82 J	
Cyanide			4.7 J	2.0 J	2.5 U			3.8 J+	2.5 U	
Iron			252 J-	200 UJ	200 UJ			4550	5320	
Lead			0.56	0.45	0.52			0.20 U	0.65	
Magnesium			2810 J	3190	3710			6030	6720	
Manganese			6.7	5.4	6.2			928	902	
Mercury			0.20 UJ	0.20 UJ	0.20 UJ			0.20 U	0.20 UJ	
Nickel			0.93 J-	1.1	1.2			1.7	2.5	
Potassium			3190 J	3880	4520			1180	1350	
Selenium			5.0 U	5.0 U	5.0 U			5.0 U	5.0 U	
Silver			1.0 U	1.0 U	1.0 U			1.0 U	1.0 UJ	
Sodium			26800	37500	43900			74100	77600	
Vanadium			5.0 U	5.0 U	5.0 U			5.0 U	5.0 U	
Zinc			2.9 J+	4.7 J	3.2 UJ			7.9 J+	13.0 J	
Other										
Dissolved oxygen, field (mg/L)			3.96	2.71				0.12	1.28	
ORP, field (mV)			265.8	267.8				53.8	87.1	
pH, field (S.U.)			5.59	5.57				5.82	5.97	
Spec. cond., field (umho/cm)			238	302				687	667	
Temperature, field (deg C)			13.0	12.17				14.4	10.65	
Turbidity, field (N.T.U.)			1.7	1.85				3.81	4.11	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-5S	MW-5S	MW-5S	MW-6D	MW-6D	MW-6D	MW-6D	MW-6S	MW-6S	MW-6S
Sample ID:	WL-GWF-MW-5S-2	WL-GW-MW-5S-1	WL-GW-MW-5S-2	WL-GWF-MW-6D-1	WL-GWF-MW-6D-2	WL-GW-MW-6D-1	WL-GW-MW-6D-2	WL-GWF-MW-6S-1	WL-GWF-MW-6S-2	WL-GW-MW-6S-1
Sample Date:	12/15/2014	8/19/2014	12/15/2014	8/18/2014	12/15/2014	8/18/2014	12/15/2014	8/18/2014	12/15/2014	8/18/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane		2600	390			16	12			480
1,1,2-Trichloroethane		10 U	0.50 U			0.50 U	0.50 U			5.0 U
1,1-Dichloroethane		1700	410			24	22			120
1,1-Dichloroethene		450	48			3.7 J	2.4			61 J
1,2-Dibromo-3-chloropropane		10 U	0.50 U			0.50 U	0.50 U			5.0 U
1,2-Dichloroethane		10 U	0.50 U			0.50 U	0.50 U			5.0 U
2-Butanone		100 U	5.0 U			5.0 U	5.0 U			50 U
Acetone		100 U	5.0 U			5.0 U	5.0 U			50 U
Benzene		10 U	0.50 U			0.50 U	0.50 U			5.0 U
Bromodichloromethane		10 U	0.50 U			0.50 U	0.50 U			5.0 U
Bromoform		10 U	0.50 U			0.50 U	0.50 U			5.0 U
Carbon disulfide		10 U	0.50 U			0.50 U	0.50 U			5.0 U
Chloroethane		330	84			0.50 U	0.50 U			7.5
Chloroform		10 U	0.50 U			0.50 U	0.50 U			5.0 U
cis-1,2-Dichloroethene		790	170			33	29			230
Cyclohexane		10 U	0.50 U			0.50 U	0.50 U			5.0 U
Ethylbenzene		10 U	0.11 J			0.50 U	0.50 U			5.0 U
Isopropylbenzene		10 U	0.12 J			0.50 U	0.50 U			5.0 U
m,p-Xylene		10 U	0.30 J			0.50 U	0.50 U			5.0 U
Methyl tert-butyl ether		10 U	0.50 U			0.23 J	0.16 J			5.0 U
Methylcyclohexane		10 U	0.50 U			0.50 U	0.50 U			5.0 U
Methylene chloride		10 U	0.50 U			0.50 U	0.50 U			5.0 U
o-Xylene		10 U	0.23 J			0.50 U	0.50 U			5.0 U
Tetrachloroethene		19	7.7			0.50 U	0.50 U			14
Toluene		10 U	1.4			0.50 U	0.50 U			5.0 U
trans-1,2-Dichloroethene		10 U	0.45 J			0.50 U	0.50 U			5.0 U
Trichloroethene		1300	380			3.4	4.2			530
Vinyl chloride		19	3.1			6.9	6.1			8.2
1,4-Dioxane (ug/L)										
1,4-Dioxane		1.4				0.62				6.6
Inorganics, Dissolved (ug/L)										
Aluminum	539			20.0 U	20.0 U			76.5	67.3	
Antimony	2.0 U			2.0 U	2.0 U			2.0 U	2.0 U	
Arsenic	0.68 J			3.5	4.4			0.86 J	0.60 J	
Barium	209			69.6	73.7			144	107	
Beryllium	1.0 U			1.0 U	1.0 U			0.13 J	1.0 U	
Cadmium	0.44			0.040 U	0.40 U			0.59	0.54	
Calcium	24400			33700	37300			25700	28900	
Chromium	59.2			0.98 J-	0.62 J			60.4	55.6	
Chromium, Hexavalent	0.50 U			0.50 UJ	0.50 U			0.50 UJ	0.50 U	
Cobalt	488			3.3	3.6			78.5	78.5	
Copper	25.9			2.0 UJ	2.0 UJ			2.0 UJ	1.5 J	
Iron	29000			5330	5970			1720	1490	
Lead	0.54			0.20 U	0.20 U			0.042 J	0.20 U	
Magnesium	4330			5710	5880			3790	4100	
Manganese	1190			940	1000			490	529	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-5S	MW-5S	MW-5S	MW-6D	MW-6D	MW-6D	MW-6D	MW-6S	MW-6S	MW-6S
Sample ID:	WL-GWF-MW-5S-2	WL-GW-MW-5S-1	WL-GW-MW-5S-2	WL-GWF-MW-6D-1	WL-GWF-MW-6D-2	WL-GW-MW-6D-1	WL-GW-MW-6D-2	WL-GWF-MW-6S-1	WL-GWF-MW-6S-2	WL-GW-MW-6S-1
Sample Date:	12/15/2014	8/19/2014	12/15/2014	8/18/2014	12/15/2014	8/18/2014	12/15/2014	8/18/2014	12/15/2014	8/18/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury	0.14 J			0.20 UJ	0.20 UJ			0.049 J-	0.20 UJ	
Nickel	26.2			1.3	1.5			39.2	29.3	
Potassium	4120			1130	1270			8220	7550	
Selenium	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	
Silver	1.0 U			1.0 UJ	1.0 U			1.0 UJ	1.0 U	
Sodium	144000			74900	78100			80400	72500	
Vanadium	5.0 U			0.56 J	5.0 U			5.0 U	5.0 U	
Zinc	42.5			2.3 U	2.8 U			128	66.1	
Inorganics (ug/L)										
Aluminum		147	2850			155	152			104
Antimony		0.99 J	2.0 U			2.0 U	2.0 U			0.36 J
Arsenic		0.65 J-	1.8			11.7	8.8			0.98 J-
Barium		197	215			66.9	74.9			139
Beryllium		0.22 J+	1.0 U			0.14 J	1.0 U			0.15 J
Cadmium		0.040 U	2.9			0.040 U	0.40 U			1.1
Calcium		17600	24400			32200	37000			24700
Chromium		52.1	222			5.8 J-	4.7			132
Chromium, Hexavalent		0.50 U	0.50 U			0.50 U	0.50 U			0.50 U
Cobalt		357	493 J			3.3	3.7 J			75.3
Copper		2.0 UJ	178			2.0 UJ	2.0 UJ			4.3
Cyanide		17.0 J+	36.1			3.5 J+	1.8 J			3.3 J+
Iron		22500	48700			7910	7780			1930
Lead		0.20 U	3.0			0.39	0.46			0.39
Magnesium		3130	4950			5580	5980			3640
Manganese		923	1220			911	1000			468
Mercury		0.20 U	0.20 UJ			0.20 U	0.20 UJ			0.20 U
Nickel		23.3	29.0 J			1.5	1.7 J			37.1
Potassium		3940	4220			1110	1310			7850
Selenium		5.0 U	5.0 U			5.0 U	5.0 U			5.0 U
Silver		1.0 U	1.0 U			1.0 U	1.0 U			1.0 U
Sodium		125000	144000			73500	77900			78900
Vanadium		5.0 U	5.0 U			5.0 U	5.0 U			5.0 U
Zinc		5.3 J+	176 J			2.0 U	4.6 UJ			123
Other										
Dissolved oxygen, field (mg/L)		0.19	0.37			0.19	1.18			0.40
ORP, field (mV)		57.9	-1.3			15.1	40.3			92.4
pH, field (S.U.)		5.26	6.16			5.74	6.00			5.15
Spec. cond., field (umho/cm)		876	960			690	699			653
Temperature, field (deg C)		18.7	8.49			15.1	9.65			17.7
Turbidity, field (N.T.U.)		4.47	729			20.8	17.6			3.87

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-6S	MW-7	MW-7	MW-7	MW-7	MW-9D	MW-9D	MW-9D	MW-9D	MW-9S
Sample ID:	WL-GW-MW-6S-2	WL-GWF-MW-7-1	WL-GWF-MW-7-2	WL-GW-MW-7-1	WL-GW-MW-7-2	WL-GWF-MW-9D-1	WL-GWF-MW-9D-2	WL-GW-MW-9D-1	WL-GW-MW-9D-2	WL-GWF-MW-9S-1
Sample Date:	12/15/2014	8/18/2014	12/16/2014	8/18/2014	12/16/2014	8/20/2014	12/17/2014	8/20/2014	12/17/2014	8/20/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	230			0.22 J	0.50 U			0.50 U	0.50 U	
1,1,2-Trichloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
1,1-Dichloroethane	51			0.50 U	0.50 U			0.50 U	0.18 J	
1,1-Dichloroethene	23 J			0.50 U	0.50 U			0.50 U	0.50 U	
1,2-Dibromo-3-chloropropane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
1,2-Dichloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
2-Butanone	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	
Acetone	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	
Benzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Bromodichloromethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Bromoform	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Carbon disulfide	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Chloroethane	3.4			0.50 U	0.50 U			0.50 U	0.50 U	
Chloroform	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
cis-1,2-Dichloroethene	130			0.50 U	0.50 U			3.4	3.8	
Cyclohexane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Ethylbenzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Isopropylbenzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
m,p-Xylene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Methyl tert-butyl ether	0.50 U			0.50 U	0.50 U			0.50 U	0.12 J	
Methylcyclohexane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Methylene chloride	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
o-Xylene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Tetrachloroethene	11			0.50 U	0.50 U			1.2	1.2	
Toluene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
trans-1,2-Dichloroethene	0.95			0.50 U	0.50 U			0.50 U	0.50 U	
Trichloroethene	390			0.20 J	0.50 U			6.2	6.9	
Vinyl chloride	4.6			0.015 U	0.50 U			0.83	0.57	
1,4-Dioxane (ug/L)										
1,4-Dioxane				0.31				0.055 J		
Inorganics, Dissolved (ug/L)										
Aluminum		247	158			20.0 U	20.0 U			20.0 U
Antimony		0.61 J	2.0 U			2.0 U	2.0 U			2.0 U
Arsenic		0.23 J	0.13 J			1.1	1.0			5.8
Barium		10.0 U	10.0 U			46.2	38.3			173
Beryllium		0.10 J	1.0 U			0.090 J	1.0 U			1.0 U
Cadmium		0.15	0.40 U			0.14	0.40 U			0.040 U
Calcium		7590	8540			28100	31500			22600
Chromium		14700	11500			0.96 J-	0.29 J			13.2 J-
Chromium, Hexavalent		13600 J	11500			0.50 UJ	0.50 U			0.50 UJ
Cobalt		1.0 U	1.1			10.6	7.2			25.7
Copper		76.2	39.0			2.0 U	2.0 UJ			2.0 U
Iron		3130	2780			3390	1650			24700
Lead		0.061 J	0.20 U			0.36	0.20 U			0.087 J
Magnesium		1050	1220			5520	5290			3220
Manganese		163	191			607	596 J			911

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-6S	MW-7	MW-7	MW-7	MW-7	MW-9D	MW-9D	MW-9D	MW-9D	MW-9S
Sample ID:	WL-GW-MW-6S-2	WL-GWF-MW-7-1	WL-GWF-MW-7-2	WL-GW-MW-7-1	WL-GW-MW-7-2	WL-GWF-MW-9D-1	WL-GWF-MW-9D-2	WL-GW-MW-9D-1	WL-GW-MW-9D-2	WL-GWF-MW-9S-1
Sample Date:	12/15/2014	8/18/2014	12/16/2014	8/18/2014	12/16/2014	8/20/2014	12/17/2014	8/20/2014	12/17/2014	8/20/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury		0.20 UJ	0.20 UJ			0.090 J-	0.20 UJ			0.20 UJ
Nickel		2.8	2.8			2.7	2.2			1.5
Potassium		6410	4780			2460	1950 J			13500
Selenium		0.34 J	5.0 U			5.0 U	5.0 U			5.0 U
Silver		1.0 UJ	1.0 U			1.0 U	1.0 U			1.0 U
Sodium		12800	11100			56000	59800			41800
Vanadium		5.0 U	5.0 U			5.0 U	5.0 U			5.0 U
Zinc		26.1	34.9			5.2	6.5 U			2.0 U
Inorganics (ug/L)										
Aluminum	79.5			248	230			71.1 J	20.0 U	
Antimony	2.0 U			0.60 J	2.0 U			2.0 U	2.0 U	
Arsenic	0.60 J			0.21 J-	0.19 J			1.2	1.0	
Barium	105			10.0 U	10.0 U			42.4	37.3	
Beryllium	1.0 U			0.12 J	1.0 U			1.0 U	1.0 U	
Cadmium	0.58			0.14	0.40 U			0.11 J	0.40 U	
Calcium	29400			7450	8800			28900	31200	
Chromium	77.4			14200	11800			2.0 UJ	2.0	
Chromium, Hexavalent	0.50 U			13700	11300			0.50 U	2.60 J+	
Cobalt	74.9 J			1.0 U	1.1 J			6.9	7.1 J	
Copper	2.0 J-			73.3	39.7			2.0 U	0.40 J	
Cyanide	3.3			2.9 J+	1.8 J			3.7 J+	1.4 J	
Iron	1980			3140	2980			3210	2560	
Lead	0.77			0.20 U	0.20 U			0.63 J	0.25 U	
Magnesium	4050			1040	1240			5770	5210	
Manganese	518			157	191			576	592	
Mercury	0.20 UJ			0.20 U	0.20 UJ			0.20 UJ	0.20 UJ	
Nickel	28.4 J			2.7	2.9 J			2.5 J	2.1 J	
Potassium	7820			6350	4890			1730	1880	
Selenium	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	
Silver	1.0 U			1.0 U	1.0 U			1.0 U	1.0 U	
Sodium	71600			12800	11200			56000	59200	
Vanadium	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	
Zinc	64.7 J			23.8 J+	37.7 J			8.9 J	2.8 UJ	
Other										
Dissolved oxygen, field (mg/L)	0.47			0.71	4.07			0.06	0.74	
ORP, field (mV)	150.4			362.4	410.1			142.5	68.7	
pH, field (S.U.)	5.58			3.60	4.27			5.91	5.92	
Spec. cond., field (umho/cm)	5.87			211.8	178			578.4	572	
Temperature, field (deg C)	8.38			18.9	9.63			17.1	13.32	
Turbidity, field (N.T.U.)	4.83			1.40	3.69			3.85	9.30	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-9S	MW-9S	MW-9S	PRB-03ED	PRB-03ED	PRB-03ES	PRB-03ES	PRB-03WD	PRB-03WD	PRB-03WS
Sample ID:	WL-GWF-MW-9S-2	WL-GW-MW-9S-1	WL-GW-MW-9S-2	WL-GWF-PRB-03ED-3	WL-GW-PRB-03ED-3	WL-GWF-PRB-03ES-3	WL-GW-PRB-03ES-3	WL-GWF-PRB-03WD-3	WL-GW-PRB-03WD-3	WL-GWF-PRB-03WS-3
Sample Date:	12/17/2014	8/20/2014	12/17/2014	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane		0.50 U	0.50 U							
1,1,2-Trichloroethane		0.50 U	0.52							
1,1-Dichloroethane		0.50 U	0.23 J							
1,1-Dichloroethene		0.50 U	0.50 U							
1,2-Dibromo-3-chloropropane		0.50 U	0.50 U							
1,2-Dichloroethane		0.50 U	0.50 U							
2-Butanone		5.0 U	5.0 U							
Acetone		5.0 U	5.0 U							
Benzene		0.18 J	0.43 J							
Bromodichloromethane		0.50 U	0.50 U							
Bromoform		0.50 U	0.50 U							
Carbon disulfide		0.50 U	0.50 U							
Chloroethane		0.50 U	0.50 U							
Chloroform		0.50 U	0.50 U							
cis-1,2-Dichloroethene		0.16 J	0.21 J							
Cyclohexane		0.54	0.41 J							
Ethylbenzene		0.27 J	0.30 J							
Isopropylbenzene		1.1	0.89							
m,p-Xylene		0.50 U	0.50 U							
Methyl tert-butyl ether		0.50 U	0.50 U							
Methylcyclohexane		1.1	0.49 J							
Methylene chloride		0.50 U	0.50 U							
o-Xylene		0.50 U	0.50 U							
Tetrachloroethene		0.50 U	0.50 U							
Toluene		0.59	0.50 U							
trans-1,2-Dichloroethene		0.50 U	0.11 J							
Trichloroethene		0.069 J	0.21 J							
Vinyl chloride		2.5	1.0							
1,4-Dioxane (ug/L)										
1,4-Dioxane		0.077 J								
Inorganics, Dissolved (ug/L)										
Aluminum	20.0 U			20.0 U		184 J		20.0 UJ		35.8
Antimony	2.0 U			2.0 U		0.082 J		2.0 U		2.0 U
Arsenic	1.5			1.0 U		0.43 J		0.12 J		1.0 U
Barium	140			43.1		58.6		78.3		77.9
Beryllium	1.0 U			1.0 U		0.058 J		0.096 J		1.0 U
Cadmium	0.49			1.0 U		0.11 J		0.12 J		1.0 U
Calcium	35600			18100		19200		37600		19600
Chromium	10.5			3070		21.0		14600		122
Chromium, Hexavalent	0.50 U			2780		0.50 U		13600		1.33
Cobalt	351			1.0 U		1.0 UJ		1.0 UJ		1.1
Copper	2.9			2.0 U		2.1 J		2.0 U		2.0 U
Iron	7390			870		1010 J		4250		2600
Lead	0.28 U			1.0 U		1.0 U		1.0 U		1.0 U
Magnesium	4420			3720		3670 J		9550 J		3710
Manganese	680 J			303		1010		98.6		294

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	MW-9S	MW-9S	MW-9S	PRB-03ED	PRB-03ED	PRB-03ES	PRB-03ES	PRB-03WD	PRB-03WD	PRB-03WS
Sample ID:	WL-GWF-MW-9S-2	WL-GW-MW-9S-1	WL-GW-MW-9S-2	WL-GWF-PRB-03ED-3	WL-GW-PRB-03ED-3	WL-GWF-PRB-03ES-3	WL-GW-PRB-03ES-3	WL-GWF-PRB-03WD-3	WL-GW-PRB-03WD-3	WL-GWF-PRB-03WS-3
Sample Date:	12/17/2014	8/20/2014	12/17/2014	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Parameter										
Mercury	0.20 UJ			0.20 UJ		0.20 U		0.20 U		0.20 UJ
Nickel	12.2			1.1		1.5 J		3.1 J		1.2
Potassium	17700 J			4190		5400 J		6730 J		3660
Selenium	5.0 U			5.0 U		0.34 J		5.0 U		5.0 U
Silver	1.0 U			1.0 U		1.0 UJ		1.0 U		1.0 U
Sodium	46400			51800		45000		106000		34100
Vanadium	5.0 U			5.0 U		5.0 U		5.0 U		5.0 U
Zinc	53.0			4.2		9.3 J		7.2 J		11.3
Inorganics (ug/L)										
Aluminum		20.0 UJ	109		211 J		41.1 J		21.2 J	
Antimony		2.0 U	2.8 U		2.0 U		0.07 J		2.0 U	
Arsenic		6.0	1.8		1.0 U		0.50 J		0.15 J	
Barium		179	120		44.8		55.9		78.8	
Beryllium		1.0 U	1.0 U		1.0 U		1.0 U		0.063 J	
Cadmium		0.040 UJ	0.74		1.0 U		0.13 J		0.17 J	
Calcium		22900	33900		17900 J		18200		37600	
Chromium		13.9 J	35.0		3130 J		19.5		14800	
Chromium, Hexavalent		0.50 U	0.50 U		2800		0.50 U		13700	
Cobalt		29.5	635 J		1.0 U		1.0 UJ		1.0 UJ	
Copper		2.0 U	21.8		2.0 U		2.5		2.0 U	
Cyanide		3.8 J+	12.0		10 U		10.0 U		10.0 U	
Iron		25800	4880		1060 J		854		4260	
Lead		0.31 J	6.1		1.0 U		1.0 U		1.0 U	
Magnesium		3250	3870		3800 J		3510 J		9770 J	
Manganese		955	442		312 J		951 J		95.4 J	
Mercury		0.20 UJ	0.20 UJ		0.20 U		0.20 U		0.20 U	
Nickel		1.4 J	20.1 J		1.2		1.6 J		3.0 J	
Potassium		13800	18400		4180 J		5080 J		6620 J	
Selenium		5.0 U	0.36 J		5.0 U		5.0 U		5.0 U	
Silver		1.0 U	1.0 U		1.0 U		1.0 U		0.067 J	
Sodium		42300	44300		52500 J		44600		109000	
Vanadium		5.0 U	5.0 U		5.0 U		5.0 U		5.0 U	
Zinc		2.0 UJ	82.2 J		4.1		10.7		7.6	
Other										
Dissolved oxygen, field (mg/L)		2.02	1.33		0.04		0.09		3.53	
ORP, field (mV)		-74.1	50.1		172.1		52.2		204.2	
pH, field (S.U.)		6.46	6.34		5.70		5.63		5.60	
Spec. cond., field (umho/cm)		505	554		446		391		915	
Temperature, field (deg C)		21.0	9.84		17.34		18.84		15.76	
Turbidity, field (N.T.U.)		1.69	6.48		6.08		2.43		1.88	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PRB-03WS	PRB-03WS	PRB-03WS	PRB-04E	PRB-04E	PRB-04W	PRB-04W	PZ-01D	PZ-01D	PZ-01D
Sample ID:	WL-GWF-PRB-03WS-3D	WL-GW-PRB-03WS-3	WL-GW-PRB-03WS-3D	WL-GWF-PRB-04E-3	WL-GW-PRB-04E-3	WL-GWF-PRB-04W-3	WL-GW-PRB-04W-3	WL-GWF-PZ-01D-1	WL-GWF-PZ-01D-2	WL-GW-PZ-01D-1
Sample Date:	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015	8/13/2014	12/9/2014	8/13/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane										0.50 U
1,1,2-Trichloroethane										0.50 U
1,1-Dichloroethane										0.50 U
1,1-Dichloroethene										0.50 U
1,2-Dibromo-3-chloropropane										0.50 U
1,2-Dichloroethane										0.50 U
2-Butanone										5.0 U
Acetone										5.0 U
Benzene										0.50 U
Bromodichloromethane										0.50 U
Bromoform										0.50 U
Carbon disulfide										0.50 U
Chloroethane										0.50 U
Chloroform										0.50 U
cis-1,2-Dichloroethene										0.50 U
Cyclohexane										0.50 U
Ethylbenzene										0.50 U
Isopropylbenzene										0.50 U
m,p-Xylene										0.50 U
Methyl tert-butyl ether										0.50 U
Methylcyclohexane										0.50 U
Methylene chloride										0.50 U
o-Xylene										0.50 U
Tetrachloroethene										0.50 U
Toluene										0.50 U
trans-1,2-Dichloroethene										0.50 U
Trichloroethene										0.15 U
Vinyl chloride										0.015 U
1,4-Dioxane (ug/L)										
1,4-Dioxane										0.10 U
Inorganics, Dissolved (ug/L)										
Aluminum	36.1			20.0 U		327		20.0 U	20.0 U	
Antimony	2.0 U			2.0 U		2.0 U		2.0 U	2.0 U	
Arsenic	1.0 U			1.0 U		1.0 U		0.32 J	1.0 U	
Barium	79.3			137		111		10.7	11.9	
Beryllium	1.0 U			1.0 U		1.0 U		1.0 U	1.0 U	
Cadmium	1.0 U			1.0 U		1.0 U		0.034 J	0.40 U	
Calcium	19900			41200		11800		21300	25000	
Chromium	119			259		6590		2.7 UJ	2.0 U	
Chromium, Hexavalent	2.15			110		5850		0.40 J	0.50 U	
Cobalt	1.2			1.0 U		2.4		1.0 U	1.0 U	
Copper	2.1			2.0 U		2.0 U		2.0 UJ	2.0 UJ	
Iron	2760			1590		1870		19.1 J	200 U	
Lead	1.0 U			1.0 U		1.2		0.20 U	0.20 U	
Magnesium	3730			5750		2830		5550	6500	
Manganese	298			639		249		3.4 J	1.6 U	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PRB-03WS	PRB-03WS	PRB-03WS	PRB-04E	PRB-04E	PRB-04W	PRB-04W	PZ-01D	PZ-01D	PZ-01D
Sample ID:	WL-GWF-PRB-03WS-3D	WL-GW-PRB-03WS-3	WL-GW-PRB-03WS-3D	WL-GWF-PRB-04E-3	WL-GW-PRB-04E-3	WL-GWF-PRB-04W-3	WL-GW-PRB-04W-3	WL-GWF-PZ-01D-1	WL-GWF-PZ-01D-2	WL-GW-PZ-01D-1
Sample Date:	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015	8/13/2014	12/9/2014	8/13/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury	0.20 UJ			0.20 UJ		0.20 UJ		0.20 UJ	0.20 UJ	
Nickel	1.3			1.0 U		1.7		0.58 J	0.73 J	
Potassium	3740			6310		2390		1920	2160	
Selenium	5.0 U			5.0 U		1.3 J		5.0 U	5.0 U	
Silver	1.0 U			1.0 U		1.0 U		1.0 U	1.0 UJ	
Sodium	34100			51700		38900		23500	24500	
Vanadium	5.0 U			5.0 U		5.0 U		5.0 U	5.0 U	
Zinc	10.6			6.1		54.5		5.9	2.8	
Inorganics (ug/L)										
Aluminum		1420 J	1250 J		67.1 J		381 J			20.0 UJ
Antimony		2.0 U	2.0 U		2.0 U		2.0 U			2.0 U
Arsenic		1.0 U	1.0 U		1.0 U		1.0 U			1.0 U
Barium		88.5	86.5		139		117			10.0
Beryllium		1.0 U	1.0 U		1.0 U		1.0 U			1.0 U
Cadmium		1.0 U	1.0 U		1.0 U		1.0 U			0.034 J
Calcium		20300 J	19800 J		41800 J		12200 J			21000
Chromium		127 J	127 J		274 J		6670 J			3.1 UJ
Chromium, Hexavalent		0.50 U	0.50 U				5960			1.0
Cobalt		1.9	1.8		1.0 U		2.5			0.11 J
Copper		3.3	3.1		2.0 U		2.0 U			2.0 UJ
Cyanide		10 U	10 U		10 U		10 U			3.6 U
Iron		4670 J	4010 J		1730 J		1990 J			200 UJ
Lead		2.0	1.8		1.0 U		1.0 U			0.20 U
Magnesium		4200 J	4120 J		5830 J		2900 J			5530 J
Manganese		338 J	328 J		658 J		263 J			1.8
Mercury		0.20 U	0.20 U		0.20 U		0.20 U			0.20 UJ
Nickel		5.3	3.4		1.0 U		1.6			1.7
Potassium		3940 J	3850 J		6320 J		2450 J			1890
Selenium		0.39 J	0.45 J		5.0 U		1.3 J			5.0 U
Silver		1.0 U	1.0 U		1.0 U		1.0 U			1.0 U
Sodium		34900 J	34200 J		52700 J		39900 J			22600
Vanadium		5.0 U	5.0 U		5.0 U		5.0 U			5.0 U
Zinc		16.9	16.8		6.3		56.7			8.4 J+
Other										
Dissolved oxygen, field (mg/L)		0.07			0.13		3.73			4.68
ORP, field (mV)		131.7			55.5		317.1			131.4
pH, field (S.U.)		5.39			6.10		4.71			5.46
Spec. cond., field (umho/cm)		357			559		341			304.0
Temperature, field (deg C)		18.93			20.74		19.58			14.5
Turbidity, field (N.T.U.)		11.2			3.19		3.46			3.76

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PZ-01D	PZ-01S	PZ-01S	PZ-01S	PZ-01S	PZ-02D	PZ-02D	PZ-02D	PZ-02D	PZ-02S
Sample ID:	WL-GW-PZ-01D-2	WL-GWF-PZ-01S-1	WL-GWF-PZ-01S-2	WL-GW-PZ-01S-1	WL-GW-PZ-01S-2	WL-GWF-PZ-02D-1	WL-GWF-PZ-02D-2	WL-GW-PZ-02D-1	WL-GW-PZ-02D-2	WL-GWF-PZ-02S-1
Sample Date:	12/9/2014	8/13/2014	12/9/2014	8/13/2014	12/9/2014	8/13/2014	12/8/2014	8/13/2014	12/8/2014	8/13/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 UJ			0.50 U	0.50 U			0.50 U	0.50 U	
1,1,2-Trichloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
1,1-Dichloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
1,1-Dichloroethene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
1,2-Dibromo-3-chloropropane	0.50 UJ			0.50 U	0.50 UJ			0.50 U	0.50 U	
1,2-Dichloroethane	0.50 UJ			0.50 U	0.50 U			0.50 U	0.50 U	
2-Butanone	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	
Acetone	5.0 U			5 U	5.0 U			5.0 U	5.0 U	
Benzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Bromodichloromethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Bromoform	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Carbon disulfide	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Chloroethane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Chloroform	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
cis-1,2-Dichloroethene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Cyclohexane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Ethylbenzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Isopropylbenzene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
m,p-Xylene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Methyl tert-butyl ether	0.50 UJ			0.50 U	0.50 U			0.50 U	0.50 U	
Methylcyclohexane	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Methylene chloride	0.50 UJ			0.50 U	0.50 U			0.50 U	0.50 U	
o-Xylene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Tetrachloroethene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Toluene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
trans-1,2-Dichloroethene	0.50 U			0.50 U	0.50 U			0.50 U	0.50 U	
Trichloroethene	0.50 U			0.15 U	0.50 U			0.15 U	0.50 U	
Vinyl chloride	0.50 U			0.015 U	0.50 U			0.015 U	0.50 U	
1,4-Dioxane (ug/L)										
1,4-Dioxane				0.10 U				0.10 U		
Inorganics, Dissolved (ug/L)										
Aluminum		20.0 U	20.0 U			20.0 U	20.0 U			
Antimony		2.0 U	2.0 U			2.0 U	2.0 U			
Arsenic		0.30 J	1.0 U			0.32 J	1.0 U			
Barium		13.4	14.6			12.7	15.3			
Beryllium		1.0 U	1.0 U			1.0 U	1.0 U			
Cadmium		0.025 J	0.40 U			0.013 J	0.40 U			
Calcium		21000	22500			20500	24000			
Chromium		2.0 UJ	2.0 U			5.4 UJ	3.7			
Chromium, Hexavalent		0.50 U	0.50 U			4.3	3.90 J+			0.50 U
Cobalt		1.0 U	1.0 U			1.0 U	1.0 U			
Copper		2.0 UJ	2.0 UJ			2.0 UJ	2.0 UJ			
Iron		10.8 J	200 U			2.5 J	200 U			
Lead		0.20 U	0.20 U			0.20 U	0.20 U			
Magnesium		5150	5500			5250	5980			
Manganese		1.7 J	1.8 U			1.1 J	19.7			

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PZ-01D	PZ-01S	PZ-01S	PZ-01S	PZ-01S	PZ-02D	PZ-02D	PZ-02D	PZ-02D	PZ-02S
Sample ID:	WL-GW-PZ-01D-2	WL-GWF-PZ-01S-1	WL-GWF-PZ-01S-2	WL-GW-PZ-01S-1	WL-GW-PZ-01S-2	WL-GWF-PZ-02D-1	WL-GWF-PZ-02D-2	WL-GW-PZ-02D-1	WL-GW-PZ-02D-2	WL-GWF-PZ-02S-1
Sample Date:	12/9/2014	8/13/2014	12/9/2014	8/13/2014	12/9/2014	8/13/2014	12/8/2014	8/13/2014	12/8/2014	8/13/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Mercury		0.20 UJ	0.20 UJ			0.20 UJ	0.20 UJ			
Nickel		0.61 J	0.90 J			0.86 J	0.93 J			
Potassium		2280	2480			2160	2760			
Selenium		5.0 U	5.0 U			5.0 U	5.0 U			
Silver		1.0 U	1.0 UJ			1.0 U	1.0 UJ			
Sodium		26000	26500			26200	28600			
Vanadium		5.0 U	5.0 U			5.0 U	5.0 U			
Zinc		7.5	2.0 U			9.8	2.5 U			
Inorganics (ug/L)										
Aluminum	20.0 U			20.0 UJ	22.6 U			20.0 UJ	20.0 U	
Antimony	2.0 U			2.0 U	2.0 U			2.0 U	2.0 U	
Arsenic	1.0 U			1.0 U	1.0 U			1.0 U	1.0 U	
Barium	12.3			14.3	13.7			13.1	15.2	
Beryllium	1.0 U			1.0 U	1.0 U			1.0 U	1.0 U	
Cadmium	0.40 U			0.017 J	0.40 U			0.015 J	0.40 U	
Calcium	25300			21000	20600			20700	24100	
Chromium	2.0 U			2.0 UJ	2.0 U			5.3 UJ	3.9	
Chromium, Hexavalent	0.50 U			0.40 J	0.50 U			4.4	3.70 J+	
Cobalt	1.0 U			0.091 J	1.0 U			0.086 J	1.0 U	
Copper	2.0 UJ			2.0 UJ	0.14 J			2.0 UJ	2.0 UJ	
Cyanide	2.5 U			3.8 U	1.3 J			3.9 U	1.3 J	
Iron	200 U			200 UJ	200 U			200 UJ	200 U	
Lead	0.20 U			0.20 U	0.20 U			0.20 U	0.20 U	
Magnesium	6650			5350 J	5090			5340 J	6050	
Manganese	2.5 U			1.7	2.7 U			1.3	19.8	
Mercury	0.20 UJ			0.20 UJ	0.20 UJ			0.20 UJ	0.20 UJ	
Nickel	1.0 U			0.55 J	1.0 U			0.64 J	1.0 U	
Potassium	2180			2340	2330			2180	2760	
Selenium	5.0 U			0.32 J	5.0 U			5.0 U	5.0 U	
Silver	1.0 UJ			1.0 U	1.0 UJ			1.0 U	1.0 UJ	
Sodium	25100			25500	25000			25700	29000	
Vanadium	5.0 U			5.0 U	5.0 U			5.0 U	5.0 U	
Zinc	2.9 J			6.2 J+	2.1 UJ			5.7 J+	2.0 UJ	
Other										
Dissolved oxygen, field (mg/L)	7.11			5.39	6.46			6.00	6.31	
ORP, field (mV)	198.3			157.6	219.3			260	232.5	
pH, field (S.U.)	5.70			5.50	5.72			5.22	5.82	
Spec. cond., field (umho/cm)	388			312.7	349			319	320	
Temperature, field (deg C)	10.65			15.0	11.67			13.0	12.63	
Turbidity, field (N.T.U.)	0.59			2.66	2.03			1.0	2.11	

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PZ-02S	PZ-02S	PZ-02S	RCA-19	RCA-19	RCA-19	RCA-19
Sample ID:	WL-GWF-PZ-02S1R	WL-GW-PZ-02S-1	WL-GW-PZ-02S-1R	WL-GWF-RCA-19-1	WL-GWF-RCA-19-2	WL-GW-RCA-19-1	WL-GW-RCA-19-2
Sample Date:	8/18/2014	8/13/2014	8/18/2014	8/13/2014	12/8/2014	8/13/2014	12/8/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter							
VOCs (ug/L)							
1,1,1-Trichloroethane		0.50 U				9.8	9.3
1,1,2-Trichloroethane		0.50 U				0.50 U	0.50 U
1,1-Dichloroethane		0.50 U				6.8	9.5
1,1-Dichloroethene		0.50 U				2.3	2.6
1,2-Dibromo-3-chloropropane		0.50 U				0.50 U	0.50 U
1,2-Dichloroethane		0.50 U				0.50 U	0.50 U
2-Butanone		5.0 U				5.0 U	5.0 U
Acetone		5.0 U				5.0 U	5.0 U
Benzene		0.50 U				0.50 U	0.50 U
Bromodichloromethane		0.50 U				0.50 U	0.50 U
Bromoform		0.50 U				0.50 U	0.50 U
Carbon disulfide		0.50 U				0.50 U	0.50 U
Chloroethane		0.50 U				0.50 U	0.50 U
Chloroform		0.50 U				0.50 U	0.50 U
cis-1,2-Dichloroethene		0.50 U				9.8	14
Cyclohexane		0.50 U				0.50 U	0.50 U
Ethylbenzene		0.50 U				0.50 U	0.50 U
Isopropylbenzene		0.50 U				0.50 U	0.50 U
m,p-Xylene		0.50 U				0.50 U	0.50 U
Methyl tert-butyl ether		0.50 U				0.16 J	0.18 J
Methylcyclohexane		0.50 U				0.50 U	0.50 U
Methylene chloride		0.50 U				0.50 U	0.50 U
o-Xylene		0.50 U				0.50 U	0.50 U
Tetrachloroethene		0.50 U				0.29 J	0.36 J
Toluene		0.13 J				0.50 U	0.50 U
trans-1,2-Dichloroethene		0.50 U				0.50 U	0.50 U
Trichloroethene		0.15 U				16	20
Vinyl chloride		0.015 U				0.069	0.50 U
1,4-Dioxane (ug/L)							
1,4-Dioxane			0.054 J			0.71	
Inorganics, Dissolved (ug/L)							
Aluminum	20.0 U			278	171		
Antimony	2.0 U			2.0 U	2.0 U		
Arsenic	5.2			0.85 J	1.0 U		
Barium	21.4			478	150		
Beryllium	1.0 U			0.14 J+	1.0 U		
Cadmium	0.10 U			1.8	0.48		
Calcium	4640			59900	18700		
Chromium	2.0 UJ			8250 J	9400		
Chromium, Hexavalent				7540	9570		
Cobalt	1.0 U			1.7	1.0 U		
Copper	2.0 UJ			2.0 UJ	2.0 UJ		
Iron	2710			1430 J	2810		
Lead	0.20 U			0.20 U	0.20 U		
Magnesium	1290			10700	3320		
Manganese	112			390 J	117		

TABLE 4-7
RI GROUNDWATER ANALYTICAL RESULTS, PHASES 1, 2, AND 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PZ-02S	PZ-02S	PZ-02S	RCA-19	RCA-19	RCA-19	RCA-19
Sample ID:	WL-GWF-PZ-02S1R	WL-GW-PZ-02S-1	WL-GW-PZ-02S-1R	WL-GWF-RCA-19-1	WL-GWF-RCA-19-2	WL-GW-RCA-19-1	WL-GW-RCA-19-2
Sample Date:	8/18/2014	8/13/2014	8/18/2014	8/13/2014	12/8/2014	8/13/2014	12/8/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter							
Mercury	0.20 UJ			0.20 UJ	0.20 UJ		
Nickel	1.3			4.5	1.0		
Potassium	505			6070	3950		
Selenium	5.0 U			0.44 J	5.0 U		
Silver	1.0 UJ			1.0 U	1.0 UJ		
Sodium	11000			659000	377000		
Vanadium	0.62 J			5.0 U	5.0 U		
Zinc	12.4			4.9	2.5 U		
Inorganics (ug/L)							
Aluminum			68.8			317 J	219
Antimony			0.49 J			2.0 U	2.0 U
Arsenic			5.5 J-			1.0 U	1.0 U
Barium			21.3			486	143
Beryllium			1.0 U			0.13 J+	1.0 U
Cadmium			0.22			1.8	0.47 J-
Calcium			4250			56900	17900
Chromium			1.1 J-			7740	9760
Chromium, Hexavalent		0.50 U				7480	9410
Cobalt			1.0 U			1.8	1.0 U
Copper			2.0 UJ			2.0 UJ	2.0 UJ
Cyanide			3.2 U			4.4 J+	2.7
Iron			1360			2280	2940
Lead			0.37			0.26	0.55
Magnesium			1130			9800 J	3230
Manganese			113			409	113
Mercury			0.20 U			0.20 UJ	0.20 UJ
Nickel			1.4			4.4	1.2
Potassium			521			5960	3840
Selenium			5.0 U			1.1 J	0.47 J
Silver			1.0 U			1.0 U	1.0 UJ
Sodium			12800			641000	381000
Vanadium			5.0 U			5.0 U	5.0 U
Zinc			10.4 J+			4.6 J+	2.9 J
Other							
Dissolved oxygen, field (mg/L)			0.79			6.03	5.80
ORP, field (mV)			45.2			327.6	290.7
pH, field (S.U.)			5.00			5.27	5.61
Spec. cond., field (umho/cm)			192			3435	1849
Temperature, field (deg C)			14.6			14.3	11.85
Turbidity, field (N.T.U.)			10.5			3.87	1.26

TABLE 4-8
RI PORE WATER ANALYTICAL RESULTS, PHASE 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-203	SD-205	SD-207	SD-208	SD-210	SD-211	SD-212	SD-212	SD-214	SD-218
Sample ID:	WL-PW-3-203	WL-PW-3-205	WL-PW-3-207	WL-PW-3-208	WL-PW-3-210	WL-PW-3-211	WL-PW-3-212	WL-PW-3-212D	WL-PW-3-214	WL-PW-3-218
Sample Date:	7/28/2015	7/28/2015	7/29/2015	7/29/2015	7/29/2015	7/28/2015	7/28/2015	7/28/2015	7/29/2015	7/23/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample
Parameter										
Inorganics, Dissolved (ug/L)										
Aluminum	20.0 U	23.7	26.7	26.3	41.9	20.0 U	59.5	40.7	27.2	20.0 U
Arsenic	1.7	1.0 U	18.7	4.2	3.1	1.0 U	1.4	2.3	1.0 U	3.3
Barium	111	143	142	220	100	69.3	54.1	61.9	67.3	18.7
Calcium	33100	36400	60500	63300	48100	30900	12600	15200	27800	9430
Chromium	10.8 J	17.0 J	2.4 J	19.5 J	15.7 J	16200 J	141 J	98.3 J	16.3 J	25.5
Chromium, Hexavalent	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	14900	1.52	0.69	0.50 U	0.50 U
Cobalt	1.0 UJ	7.7 J	4.1 J	1.4 J	1.0 UJ	1.1 J	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U
Copper	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Iron	26000	11200	44400	69900	9550	4750	6870	7300	10100	2970
Lead	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.3	1.0 U
Magnesium	7810	8120	8150	9160	7240	9980	1390	1800	5210	2130
Manganese	1380 J	1540 J	6320 J	3600 J	2040 J	48.7 J	292 J	365 J	807 J	200
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 J
Nickel	1.6	4.5	1.4	2.1	2.1	4.2	2.0	1.1	1.0 U	2.6
Potassium	3000	3010	5720	5970	4120	5940	1340	1460	3490	1440
Silver	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Sodium	241000	236000	94100	146000	106000	115000	80100	91600	65300	64500
Zinc	2.3 J+	6.2 J+	4.8 J+	7.2 J+	9.7 J+	15.4 J+	5.8 J+	8.1 J+	2.2 J+	5.6
Other										
Alkalinity (mg/L)	18	32	150	180	82	28	52	42	36	37
Dissolved Organic Carbon (mg/L)	6.1	6.6	13	12	4.8	1.2	5.5	4.7	4.8	1.7
Dissolved oxygen, field (mg/L)	4.99	4.47	0.24*	7.29	6.06	3.9	5.43		0.37*	4.39
Hardness as CaCO3, Calculated (mg/L)	114.8	124.3	184.7	195.8	149.9	118.2	37.2	45.4	90.9	32.3
ORP, field (mV)	-27.5	-29.8	-65.4	-66.1	-5.9	209.1	35.2		-15.9	1.4
pH, field (S.U.)	6.59	6.66	6.53	6.48	6.42	5.92	6.17		6.37	6.15
Spec. cond., field (umho/cm)	1.57	1521	1110	1308	949	874	538		606	427
Temperature, field (deg C)	21.12	23.72	24.54	27.3	21.26	24.5	25.02		24.09	21.55
Turbidity, field (N.T.U.)										
Water Depth, field (in.)	3	2	1	2	10	1	3		30	6

TABLE 4-8
RI PORE WATER ANALYTICAL RESULTS, PHASE 3 - DETECTED ANALYTES ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SD-220	SD-224	SD-240	SD-301
Sample ID:	WL-PW-3-220	WL-PW-3-224	WL-PW-3-240	WL-PW-3-301
Sample Date:	7/23/2015	7/23/2015	7/27/2015	7/27/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
Parameter				
Inorganics, Dissolved (ug/L)				
Aluminum	38.5	33.1	69.6	186
Arsenic	2.1	1.1	1.0 U	1.0 U
Barium	65.2	62.4	88.6	27.7
Calcium	22300	31700	30300	8640
Chromium	2.0 U	8.0	2.0 UJ	11.0 J
Chromium, Hexavalent	0.50 U	0.50 U	0.50 U	1.38
Cobalt	1.0 U	1.0 U	1.2 J	6.7 J
Copper	0.61 J	1.5 J	2.0 U	7.3
Iron	10100	11100	5710	200 U
Lead	1.4	1.0 U	1.0 U	1.7
Magnesium	3640	4520	6080	1890
Manganese	3190	3000	1260 J	24.1 J
Mercury	0.044 J	0.084 J	0.20 U	0.20 U
Nickel	1.3	5.8	3.8	6.3
Potassium	2080	9010	500 U	1670
Silver	0.026 J	0.084 J	1.0 U	1.0 U
Sodium	59400	86900	121000	83800
Zinc	2.8	6.5	12.1 J+	47.0 J+
Other				
Alkalinity (mg/L)	39	84	23	13
Dissolved Organic Carbon (mg/L)	9.7	8.0	7.2	12
Dissolved oxygen, field (mg/L)	6.91	6.79	3.65	7.08
Hardness as CaCO3, Calculated (mg/L)	70.7	97.8	100.7	29.3
ORP, field (mV)	-29.3	-35.4	92.9	188.7
pH, field (S.U.)	6.42	6.44	5.83	5.94
Spec. cond., field (umho/cm)	534	769	1.078	0.528
Temperature, field (deg C)	24.08	27.25	22.57	25.15
Turbidity, field (N.T.U.)	0.41			
Water Depth, field (in.)	12	12	1	3

TABLE 4-9
RI AIR ANALYTICAL RESULTS - DETECTS ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	A - Indoor - Basement	A - Indoor - First Floor	A - Sub-slab	B - Indoor - Basement	B - Indoor - First Floor	B - Sub-slab	D - Indoor - Basement	D - Indoor - First Floor	D - Sub-slab	E - Indoor - Basement
Sample ID:	6567	6579	15049	6580	1576	14891	6566	4743	20858	1587
Sample Date:	3/11/2015	3/11/2015	3/11/2015	3/11/2015	3/11/2015	3/11/2015	3/11/2015	3/11/2015	3/11/2015	3/11/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/m^3)										
1,1,1-Trichloroethane	0.51 U	0.48 U	0.429 U	0.453 U	0.527 U	0.464 U	0.47 U	1.2	24	0.47 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.72 U	0.674 U	0.601 U	0.636 U	0.739 U	0.651 U	1.2	1.1	1.1 U	0.66 U
1,1-Dichloroethane	0.38 U	0.356 U	0.317 U	0.335 U	0.39 U	0.343 U	0.35 U	0.45 U	0.57 U	0.35 U
1,1-Dichloroethene	0.37 U	0.348 U	0.311 U	0.329 U	0.382 U	0.337 U	0.34 U	0.44 U	0.56 U	0.34 U
1,2,4-Trimethylbenzene	0.59	0.682	0.633	3.126	2.282	2.204	10	8.8	0.78	0.42 U
1,2-Dichloroethane	0.53	0.377	0.317 U	0.335 U	0.39 U	0.343 U	0.45	0.76	0.57 U	0.35 U
1,3,5-Trimethylbenzene	0.46 U	0.431 U	0.385 U	1.026	0.658	0.604	3.6	3.1	0.69 U	0.42 U
1,3-Butadiene	0.42 U	0.389 U	0.347 U	0.367 U	0.427 U	1.120	1.4	2.2	0.62 U	0.38 U
1,4-Dichlorobenzene	0.57 U	0.528 U	0.471 U	0.498 U	0.579 U	0.51 U	1.4	1.0	0.84 U	0.52 U
2-Butanone	1.0 B	1.295 B	1.088 B	0.914 B	1.321 B	1.206 B	24	18	0.97 B	0.69 B
2-Hexanone	0.39 U	0.359 U	0.32 U	0.339 U	0.394 U	0.347 U	0.35 U	0.45 U	0.57 U	0.35 U
4-Ethyltoluene	0.46 U	0.456	0.407	2.724	1.934	1.683	7.0	6.9	0.69 U	0.42 U
Benzene	1.0	1.069	0.960	5.551	3.573	2.871	3.0	3.8	0.45 U	1.2
Bromodichloromethane	0.63 U	0.59 U	0.526 U	0.556 U	0.647 U	0.57 U	0.58 U	1.0	0.94 U	0.58 U
Carbon Tetrachloride	0.59 U	0.591	0.503	0.629	0.579	0.535 U	0.54 U	0.87	0.88 U	0.54 U
Chloroform	1.2	1.421	2.657	0.479	1.196	1.797	2.1	3.0	0.68 U	2.1
cis-1,2-Dichloroethene	0.37 U	0.348 U	0.311 U	0.329 U	0.382 U	0.337 U	0.34 U	0.44 U	0.56 U	0.34 U
Cyclohexane	0.45	0.395	0.392	1.422	0.907	0.697	1.4	1.3	0.48 U	0.30 U
Dichlorodifluoromethane	2.2	2.270	2.339	2.497	2.611	2.072	2.7	2.6	2.1	2.5
Ethylbenzene	0.48	0.503	0.464	4.379	2.991	2.285	2.5	2.0	0.61 U	0.41
Heptane	0.39 U	0.359 U	0.32 U	0.339 U	0.394 U	0.347 U	0.35 U	5.7	0.57 U	0.35 U
Hexane	1.1	1.280	1.045	7.527	5.698	4.362	5.8	5.5	0.49 U	0.88
m,p-Xylene	1.6	1.678	1.513	14.307	10.101	7.760	8.2	6.0	1.2 U	1.3
Methyl tert-butyl ether	0.34 U	0.31 U	0.276 U	0.542	0.324	0.299 U	0.31 U	0.40 U	0.50 U	0.31 U
Methylchloride	1.0	1.553	0.965	1.183	1.514	0.853	2.4	3.6	0.47	1.1
Methylene Chloride	0.38	0.382	0.278	23.091	15.070	9.375	0.55	0.67	0.49 U	0.38
o-Xylene	0.56	0.611	0.520	4.812	3.247	2.493	2.2	2.0	0.61 U	0.43
Styrene	0.40 U	0.375 U	0.334 U	0.354 U	0.411 U	0.362 U	0.41	0.82	0.60 U	0.37 U
Tetrachloroethene	0.64 U	0.597 U	0.532 U	0.997	2.896	0.970	0.58 U	0.75 U	0.98	0.58 U
Tetrahydrofuran	0.28 U	0.259 U	0.231 U	0.244 U	0.284 U	0.25 U	8.8	6.1	0.41 U	0.25 U
Toluene	2.7	3.387	2.333	45.153	28.973	20.996	17	13	0.60	4.1
Trichloroethene	0.64	0.494	2.263	0.478	0.519 U	2.198	0.46 U	0.64	0.75 U	0.46 U
Trichlorofluoromethane	1.3	1.259	1.219	1.298	1.472	1.186	1.4	1.6	1.0	1.4
Vinyl Chloride	0.24 U	0.225 U	0.201 U	0.212 U	0.247 U	0.218 U	0.22 U	0.28 U	0.36 U	0.22 U

TABLE 4-9
RI AIR ANALYTICAL RESULTS - DETECTS ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	E - Indoor - First Floor	E - Sub-slab	G - Indoor - Basement	G - Indoor - Basement	G - Indoor - First Floor	G - Sub-slab	G - Sub-slab	H - Indoor - Basement	H - Indoor - First Floor	H - Sub-slab
Sample ID:	6568	13501	12563	20848	15046	13483	14900	6462	5792	15046
Sample Date:	3/11/2015	3/11/2015	9/8/2016	9/8/2016	9/8/2016	9/8/2016	9/8/2016	3/11/2015	3/11/2015	3/11/2015
Sample Type:	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/m^3)										
1,1,1-Trichloroethane	0.49 U	0.63	0.53 U	0.554 U	0.554 U	0.814 U	0.868 U	0.53 U	0.516 U	0.726
1,1,2-Trichloro-1,2,2-trifluoroethane	0.69 U	0.65 U	0.743 U	0.777 U	0.777 U	1.14 U	1.22 U	0.743 U	0.724 U	0.597 U
1,1-Dichloroethane	0.36 U	0.34 U	0.392 U	0.41 U	0.41 U	0.602 U	0.642 U	0.392 U	0.382 U	0.315 U
1,1-Dichloroethene	0.36 U	0.34 U	0.384 U	0.402 U	0.402 U	0.59 U	0.63 U	0.384 U	0.374 U	0.309 U
1,2,4-Trimethylbenzene	0.44 U	0.59	11.975	11.092	3.004	7.951	0.779 U	2.027	1.536	0.382 U
1,2-Dichloroethane	0.36 U	0.34 U	0.392 U	0.41 U	0.41 U	0.602 U	0.642 U	0.972	0.777	0.315 U
1,3,5-Trimethylbenzene	0.44 U	0.42 U	4.206	3.956	1.006	2.768	0.779 U	0.648	0.463 U	0.382 U
1,3-Butadiene	0.40 U	0.38 U	0.429 U	0.449 U	0.449 U	0.659 U	0.703 U	0.429 U	0.418 U	0.345 U
1,4-Dichlorobenzene	0.54 U	0.51 U	0.775	0.715	0.609 U	0.894 U	0.954 U	0.582 U	0.567 U	0.468 U
2-Butanone	0.82 B	0.86 B	3.126	3.273	2.442 B	2.162 B	0.467 U	2.008 B	2.371 B	0.316 B
2-Hexanone	0.37 U	0.35 U	0.98	0.82	0.19	0.608 U	0.649 U	0.396 U	0.386 U	0.318 U
4-Ethyltoluene	0.44 U	0.42 U	11.19	10.405	3.185	7.313	0.779 U	1.840	1.340	0.382 U
Benzene	1.2	1.3	1.637	1.57	0.762	1.046	0.509 U	5.296	3.828	0.25 U
Bromodichloromethane	0.60 U	0.57 U	0.65 U	0.68 U	0.68 U	0.998 U	1.07 U	0.65 U	0.633 U	0.523 U
Carbon Tetrachloride	0.57 U	0.53 U	0.611 U	0.639 U	0.639 U	0.939 U	1 U	0.611 U	0.604	0.491 U
Chloroform	2.1	0.83	1.45	1.328	0.547	1.089	0.776 U	0.796	0.947	0.381
cis-1,2-Dichloroethene	0.36 U	0.34 U	0.384 U	0.402 U	0.402 U	0.59 U	0.63 U	0.384 U	0.374 U	0.309 U
Cyclohexane	0.31 U	0.29 U	10.479	10.341	3.573	7.077	0.547 U	4.879	2.827	0.268 U
Dichlorodifluoromethane	2.4	2.2	2.566	2.517	2.403	2.467	1.973	2.502	2.393	2.220
Ethylbenzene	0.50	0.48	11.229	10.448	3.434	7.457	0.69 U	3.130	1.955	0.339 U
Heptane	0.37 U	0.35 U	21.472	21.063	6.994	14.07	0.649 U	0.396 U	0.386 U	0.318 U
Hexane	0.88	1.0	16.989	16.004	5.839	12.24	0.56 U	14.843	9.040	0.380
m,p-Xylene	1.4	1.5	30	27	9.2	20	1.38 U	9.711	6.243	0.677 U
Methyl tert-butyl ether	0.32 U	0.31 U	0.341 U	0.357 U	0.357 U	0.524 U	0.56 U	0.341 U	0.333 U	0.275 U
Methylchloride	1.0	0.73	1.485	1.45	2.169	0.789	0.328 U	1.248	1.367	0.394
Methylene Chloride	0.39	0.33	0.41	0.406	0.399	0.519 U	0.553 U	0.420	0.417	0.271 U
o-Xylene	0.48	0.53	12.703	11.836	3.9	8.757	0.69 U	3.291	2.116	0.339 U
Styrene	0.38 U	0.36 U	0.413 U	0.432 U	0.432 U	1.706	0.677 U	0.413 U	0.404	0.332 U
Tetrachloroethene	0.61 U	0.79	0.658 U	0.688 U	0.688 U	1.01 U	1.08 U	0.658 U	0.641 U	0.529 U
Tetrahydrofuran	0.27 U	0.25 U	0.285 U	0.298 U	0.298 U	0.438 U	0.467 U	0.285 U	0.278 U	0.229 U
Toluene	3.6	3.4	32.398	30.328	10.762	20.996	0.598 U	24.308	16.820	0.293 U
Trichloroethene	0.48 U	0.67	0.522 U	0.546 U	0.546 U	0.802 U	1.333	0.522 U	0.508 U	0.42 U
Trichlorofluoromethane	1.4	1.3	1.394	1.321	1.321	1.309	1.186	1.264	1.371	1.124
Vinyl Chloride	0.23 U	0.22 U	0.248 U	0.26 U	0.26 U	0.381 U	0.407 U	0.248 U	0.242 U	0.20 U

TABLE 4-9
RI AIR ANALYTICAL RESULTS - DETECTS ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	L - Indoor - Basement	L - Indoor - First Floor	L - Sub-slab	M - Indoor - Basement	M - Indoor - Basement	M - Indoor - First Floor	M - Indoor - First Floor	M - Sub-slab	N - Indoor - Basement	N - Indoor - First Floor
Sample ID:	22684	14900	12562	4778	5786	6460	6555	14899	6558	1565
Sample Date:	3/11/2015	3/11/2015	3/11/2015	3/11/2015	3/11/2015	3/11/2015	3/11/2015	3/11/2015	3/11/2015	3/11/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/m^3)										
1,1,1-Trichloroethane	0.611	0.682	2.357	0.50 U	0.49 U	0.51 U	0.50 U	2.755	0.48 U	0.47 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.689 U	0.77 U	0.59 U	0.70 U	0.69 U	0.71 U	0.71 U	0.597 U	0.67 U	0.66 U
1,1-Dichloroethane	0.364 U	0.406 U	0.311 U	0.37 U	0.36 U	0.38 U	0.37 U	30.328	0.36 U	0.35 U
1,1-Dichloroethene	0.356 U	0.398 U	0.305 U	0.36 U	0.36 U	0.37 U	0.36 U	25.946	0.35 U	0.34 U
1,2,4-Trimethylbenzene	0.520	0.492 U	0.377 U	1.3	0.78	0.46 U	0.96	0.382 U	0.84	0.50
1,2-Dichloroethane	0.356	0.406 U	0.311 U	0.37 U	0.36 U	0.38 U	0.37 U	0.315 U	0.36 U	0.35 U
1,3,5-Trimethylbenzene	0.441 U	0.492 U	0.377 U	0.45 U	0.44 U	0.46 U	0.45 U	0.382 U	0.43 U	0.42 U
1,3-Butadiene	0.398 U	0.444 U	0.34 U	0.40 U	0.40 U	0.42	0.41 U	0.345 U	0.40 U	0.38 U
1,4-Dichlorobenzene	0.54 U	0.603 U	0.462 U	0.55 U	0.54 U	0.56 U	0.55 U	0.468 U	0.53 U	1.1
2-Butanone	1.047 B	1.300 B	0.292 B	0.78 B	0.55 B	1.2 B	0.83 B	0.528 B	0.62 B	0.68 B
2-Hexanone	0.367 U	0.41 U	0.314 U	0.37 U	0.37 U	0.38 U	0.38 U	0.318 U	0.36 U	0.35 U
4-Ethyltoluene	0.441 U	0.492 U	0.377 U	1.0	0.73	0.56	0.80	0.382 U	0.76	0.42
Benzene	1.321	1.324	0.246 U	1.8	1.8	2.0	1.5	0.25 U	1.8	1.4
Bromodichloromethane	0.603 U	0.673 U	0.516 U	0.61 U	0.60 U	0.62 U	0.62 U	0.523 U	0.59 U	0.58 U
Carbon Tetrachloride	0.567 U	0.633 U	0.485 U	0.57 U	0.57 U	0.59	0.58 U	0.491 U	0.61	0.54 U
Chloroform	0.630	1.050	0.869	1.4	1.4	1.4	1.0	1.582	1.3	1.7
cis-1,2-Dichloroethene	0.356 U	0.398 U	0.305 U	0.36 U	0.36 U	0.37 U	0.36 U	79.264	0.35 U	0.34 U
Cyclohexane	0.31 U	0.419	0.265 U	0.78	0.75	0.52	0.66	0.268 U	0.87	0.52
Dichlorodifluoromethane	2.294	2.354	0.38 U	2.5	2.5	3.1	2.5	2.408	2.5	2.4
Ethylbenzene	0.542	0.512	0.334 U	1.2	1.1	0.76	1.0	0.339 U	1.1	0.71
Heptane	0.367 U	0.41 U	0.314 U	0.37 U	0.37 U	0.38 U	0.38 U	0.318 U	0.36 U	0.35 U
Hexane	0.855	1.270	0.271 U	3.1	3.0	1.8	2.4	0.275 U	3.8	2.2
m,p-Xylene	1.630	1.530	0.668 U	4.0	3.6	2.6	3.5	0.677 U	4.2	2.5
Methyl tert-butyl ether	0.317 U	0.354 U	0.271 U	0.33 U	0.32 U	0.34 U	0.33 U	0.275 U	0.32 U	0.31 U
Methylchloride	1.258	1.894	0.295	0.93	1.0	1.3	1.1	0.345	0.92	1.0
Methylene Chloride	0.372	0.431	0.268 U	11	11	2.0	3.7	0.271 U	0.90	0.53
o-Xylene	0.555	0.512	0.334 U	1.3	1.2	0.82	1.2	0.339 U	1.3	0.81
Styrene	0.383 U	0.428 U	0.328 U	0.39 U	0.38 U	0.40 U	0.39 U	0.332 U	0.37 U	0.37 U
Tetrachloroethene	0.61 U	0.681 U	1.051	0.62 U	0.61 U	0.63 U	0.62 U	12.749	0.60 U	0.58 U
Tetrahydrofuran	0.265 U	0.295 U	0.226 U	0.27 U	0.27 U	0.27 U	0.27 U	0.229 U	0.26 U	0.25 U
Toluene	3.089	3.255	0.29 U	15	15	6.5	10	0.403	6.1	4.7
Trichloroethene	0.484 U	0.541 U	0.414 U	0.49 U	0.49	0.54	0.49 U	139.730	0.47 U	0.46 U
Trichlorofluoromethane	1.461	1.551	1.208	1.8	1.8	1.6	1.5	1.158	2.0	1.8
Vinyl Chloride	0.23 U	0.257 U	0.197 U	0.23 U	0.23 U	0.24 U	0.24 U	0.452	0.22 U	0.22 U

TABLE 4-9
RI AIR ANALYTICAL RESULTS - DETECTS ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	N - Sub-slab	O - Indoor - Basement	O - Indoor - First Floor	O - Sub-slab	Outside/Ambient	Outside/Ambient	Outside/Ambient	P - Indoor - First Floor	P - Sub-slab
Sample ID:	13493	1114	1577	20845	15057	22696	5790	1560	13499
Sample Date:	3/11/2015	3/11/2015	3/11/2015	3/11/2015	9/8/2016	3/11/2015	3/11/2015	3/11/2015	3/11/2015
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter									
VOCs (ug/m^3)									
1,1,1-Trichloroethane	11	0.565 U	0.532 U	0.437 U	0.748 U	1.495	0.48 U	0.521 U	0.48 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.67 U	0.793 U	0.747 U	0.613 U	1.05 U	0.858 U	0.67 U	0.732 U	0.674 U
1,1-Dichloroethane	8.4	0.418 U	0.394 U	0.323 U	0.553 U	0.452 U	0.36 U	0.386 U	0.356 U
1,1-Dichloroethene	0.82	0.41 U	0.386 U	0.317 U	0.543 U	0.444 U	0.35 U	0.378 U	0.348 U
1,2,4-Trimethylbenzene	1.2	4.398	0.550	0.392 U	0.671 U	0.549 U	0.43 U	0.468 U	0.515
1,2-Dichloroethane	0.36 U	0.418 U	0.394 U	0.323 U	0.553 U	0.452 U	0.36 U	0.386 U	0.356 U
1,3,5-Trimethylbenzene	0.43 U	1.394	0.478 U	0.392 U	0.671 U	0.549 U	0.43 U	0.468 U	0.431 U
1,3-Butadiene	0.39 U	0.457 U	0.431 U	0.354 U	0.606 U	0.495 U	0.39 U	0.422 U	0.389 U
1,4-Dichlorobenzene	0.53 U	0.621 U	0.585 U	0.48 U	0.822 U	0.672 U	0.53 U	0.573 U	0.528 U
2-Butanone	1.2 B	3.037	1.188 B	0.354 B	0.643 B	0.675 B	0.66 B	0.584 B	0.793 B
2-Hexanone	0.36 U	0.422 U	0.398 U	0.326 U	0.559 U	0.457 U	0.36 U	0.39 U	0.359 U
4-Ethyltoluene	0.91	3.642	0.501	0.392 U	0.671 U	0.549 U	0.43 U	0.468 U	0.431 U
Benzene	2.8	0.680	0.963	0.256 U	0.438 U	0.782	1.1	0.804	0.504
Bromodichloromethane	0.59 U	0.693 U	0.653 U	0.536 U	0.918 U	0.75 U	0.59 U	0.64 U	0.59 U
Carbon Tetrachloride	0.55 U	0.652 U	0.614 U	0.504 U	0.863 U	0.706 U	0.55 U	0.602 U	0.554 U
Chloroform	11	0.505 U	0.879	0.552	0.669 U	0.547 U	1.4	0.466 U	0.493
cis-1,2-Dichloroethene	5.9	0.41 U	0.386 U	0.317 U	0.543 U	0.444 U	0.35 U	0.378 U	0.348 U
Cyclohexane	0.30 U	0.356 U	0.335 U	0.275 U	0.471 U	0.385 U	0.30 U	0.385	0.303 U
Dichlorodifluoromethane	2.4	2.200	2.418	2.294	1.973	2.240	2.4	2.250	2.176
Ethylbenzene	1.3	1.821	0.525	0.347 U	0.595 U	0.486 U	0.38 U	0.414 U	0.382 U
Heptane	0.36 U	0.422 U	0.398 U	0.326 U	0.559 U	0.457 U	0.36 U	0.39 U	0.359 U
Hexane	4.1	0.364 U	0.623	0.282 U	0.482 U	0.587	0.63	0.830	0.401
m,p-Xylene	4.5	6.503	1.795	0.694 U	1.19 U	0.620	1.1	0.95	0.971
Methyl tert-butyl ether	0.32 U	0.364 U	0.343 U	0.282 U	0.482 U	0.394 U	0.32 U	0.336 U	0.31 U
Methylchloride	0.85	0.754	1.122	0.165 U	0.981	1.076	0.91	1.175	0.746
Methylene Chloride	0.47	0.365	0.413	0.278 U	0.477 U	0.39 U	0.34	0.365	0.306 U
o-Xylene	1.5	2.805	0.611	0.347 U	0.595 U	0.486 U	0.39	0.414 U	0.382 U
Styrene	0.37 U	0.441 U	0.415 U	0.341 U	0.584 U	0.477 U	0.37 U	0.407 U	0.375 U
Tetrachloroethene	1.3	0.702 U	0.661 U	0.909	0.929 U	0.759 U	0.60 U	0.647 U	0.597 U
Tetrahydrofuran	0.26 U	1.418	0.463	0.235 U	0.403 U	0.329 U	0.26 U	0.281 U	0.259 U
Toluene	6.9	1.644	2.039	0.301 U	0.651	1.148	1.9	2.167	1.182
Trichloroethene	70	0.557 U	0.525 U	0.43 U	0.737 U	0.603 U	0.47 U	0.514 U	0.473 U
Trichlorofluoromethane	1.9	1.219	1.293	1.293	1.079	1.259	1.2	1.231	1.427
Vinyl Chloride	0.22 U	0.265 U	0.25 U	0.205 U	0.351 U	0.287 U	0.22 U	0.244 U	0.225 U

TABLE 4-10
PHASE 4 ECOLOGICAL TOXICITY SOIL ANALYTICAL RESULTS - DETECTS ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-501	SO-501	SO-502	SO-503	SO-504	SO-505	SO-506	SO-507	SO-507	SO-508
Sample ID:	WL-SO-4-501	WL-SO-4-501-RS	WL-SO-4-502	WL-SO-4-503	WL-SO-4-504	WL-SO-4-505	WL-SO-4-506	WL-SO-4-507	WL-SO-4-507-RS	WL-SO-4-508
Sample Date:	10/18/2016	5/25/2017	10/18/2016	10/18/2016	10/20/2016	10/18/2016	10/20/2016	10/19/2016	5/25/2017	10/20/2016
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Combined Dupl.	Combined Dupl.	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (mg/kg)										
Aluminum	6040 J	7400	10200 J	7320 J	6310 J	11200 J	3850 J	5930 J	5200	9270 J
Antimony	19.3 J	2.0 U	7.0 UJ	7.1 UJ	0.23 J	8.3 UJ	75.2 J	160 J	8.0 U	49.9 J
Arsenic	3.075 J	4.5	4.6 J	3.4 J	2.4	3.9 J	2.3 J	2.5 UJ	16 U	1.9
Barium	56.85 J	66	41.0 J	42.1 J	46.6 J	120 J	75.9 J	102 J	35	63.8 J
Beryllium	0.95 U	0.80 U	0.58 U	0.59 U	0.41 J-	0.69 U	0.20 J-	1.3 U	3.2 U	0.29 J-
Cadmium	.55 J	1.0 U	0.27 J	0.42 J	0.67 UJ	0.75	2.6 J	1.3 U	4.0 U	0.78 UJ
Calcium	18240 J	15500	3070 J	2610 J	2950 J	2100 J	3850 J	3780 J	1400	1840 J
Chromium	2259.5 J	640	288 J	14.6 J	12.5 J	70.7 J	5350 J	16500 J	2600	3810 J
Chromium, Hexavalent	4 J	8.65 J	3.2 J-				176 J-	208 J-	30.5 J	26.5 J-
Cobalt	4.95 J	5.35	5.2 J	4.3 J	4.4 J	4.5 J	6.3 J	10.6 J	8.0 U	12.3 J
Copper	76.8 J	36.5	18.5 J	32.6 J	82.9 J	53.7 J	147 J	132 J	30.0	101 J
Iron	7930 J	11000	12600 J	11300 J	11200 J	14300 J	7920 J	7310 J	7900	6100 J
Lead	158.45 J	140 J	72.4 J	107 J	145	447 J	138	238 J	120.0	48.9
Magnesium	1465 J	2050	1810 J	1820 J	1750 J	1340 J	870 J	1370 J	1500	994 J
Manganese	181.5 J	280	239 J	202 J	274 J	293 J	134 J	297 J	89	162 J
Mercury	0.083 J	.0965	0.075 J	0.10 J	0.13 UJ	1.1	0.41 J	0.36	0.13	0.19 J
Nickel	13.9	14	8.8	11.3	11.6 J	9.6	50.4 J	18.4	12.0	19.3 J
Potassium	947 UJ		580 UJ	595 UJ	471 J	693 UJ	432 J	1260 UJ		513 J
Selenium	.8375 J	4.0 U	0.83	0.91	1.0	1.1	1.34 U	1.3	16 U	0.78 U
Silver	13.1 J	2.0 U	0.70 J	1.3 J	3.1 J	0.76 J	89.3 J	24.7 J	33	23.8 J
Sodium	947 U		580 U	595 U	334 J	693 U	1940 J	1540		545 J
Thallium	0.44 J	2.0 U	2.9 U	3.0 U	3.4 UJ	3.5 U	6.7 UJ	3.2 J	8.0 U	0.32 J-
Vanadium	11.325 J	16.5	4.4 J	11.7 J	12.7	16.6 J	6.7 U	6.3 UJ	16	3.9 U
Zinc	84.75	73	66.7	76.7	89.5	188	121	114	80 U	86.2
AVS/SEM (umol/g)										
Cadmium, SEM	.0016		0.00197	0.00215	0.00200	0.00499	0.0170 J	0.00829 J		0.00700
Copper, SEM	.27 J		0.273 J-	0.309 J-	1.05 J-	0.500 J-	1.08 J	2.94 J		2.52 J-
Lead, SEM	.2485		0.719	0.388	0.498	1.95	0.570 J	1.47 J		0.554
Mercury, SEM	0.0000084 UJ		0.0000097 UJ	0.0000467 J-	0.0000586 J-	0.000662 J-	0.0000717 J	0.0000791 J		0.0000723 J-
Nickel, SEM	.0717		0.0319	0.0376	0.0746	0.0494	0.422 J	0.274 J		0.246
Silver, SEM	.006585		0.0217	0.00943	0.0250	0.00468	0.282 J	0.178 J		0.586
Zinc, SEM	.4285 J		0.355 J	0.504 J	0.596 J	1.40 J	2.15 J	1.89 J		1.09 J
Total SEM Metals (det only)	1.027 J		1.40 J	1.25 J	2.25 J	3.91 J	4.52 J	6.76 J		5.00 J
Acid Volatile Sulfide	0.074 U		0.044 U	0.044 U	0.057 U	0.052 U	0.27 UJ	0.17 UJ		0.072 U
AVS/SEM	NC		NC	NC	NC	NC	NC	NC		NC
Other										
Ferrous Iron (%)									0.86 J	
ORP (mV)		454.5 J							566 J	
pH in Soil	7.46 J	7.45 J	6.63 J	5.74 J	5.81	5.53	4.72	5.45	4.82 J	5.36
Sulfide Screen									Negative J	
Total Organic Carbon (ug/g dry wt)	140000 J	150000 J	27000 J	42000 J	51000 J	64000 J	410000 J	220000 J	48500	65000 J

TABLE 4-10
PHASE 4 ECOLOGICAL TOXICITY SOIL ANALYTICAL RESULTS - DETECTS ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-509	SO-510	SO-511	SO-512	SO-513	SO-514	SO-515	SO-516	SO-517	SO-518
Sample ID:	WL-SO-4-509	WL-SO-4-510	WL-SO-4-511	WL-SO-4-512	WL-SO-4-513	WL-SO-4-514	WL-SO-4-515	WL-SO-4-516	WL-SO-4-517	WL-SO-4-518
Sample Date:	10/18/2016	10/19/2016	10/19/2016	10/19/2016	10/18/2016	10/19/2016	10/18/2016	10/18/2016	10/19/2016	10/19/2016
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (mg/kg)										
Aluminum	3140 J	5280 J	9060 J	6690 J	6330 J	7790 J	11600 J	6920 J	11100 J	8570 J
Antimony	14.0 UJ	11.5 J	10.3 UJ	7.8 UJ	9.4 UJ	8.6 UJ	6.9 UJ	6.5 UJ	8.6 UJ	10.3 UJ
Arsenic	2.3 UJ	1.2 UJ	1.9 J	1.9 J	2.7 J	4.0 J	13.2 J	32.0 J	5.4 J	7.9 J
Barium	46.7 UJ	23.8 UJ	43.4 J	25.9 UJ	39.0 J	53.3 J	58.1 J	31.1 J	97.2 J	67.0 J
Beryllium	1.2 U	0.60 U	0.86 U	0.65 U	0.79 U	0.72 U	0.58 U	0.54 U	0.72 U	0.86 U
Cadmium	1.1 J	0.13 J	0.33 J	0.16 J	0.43 J	0.65 J	0.51 J	0.27 J	0.45 J	0.59 J
Calcium	3520 J	1520 J	1030 J	1190 J	1580 J	4270 J	1730 J	911 J	1220 J	2090 J
Chromium	98.9 J	1590 J	264 J	55.6 J	312 J	170 J	17.7 J	224 J	49.9 J	647 J
Chromium, Hexavalent	56.0 J-	53.4 J-		2.9 J-	19.3 J-	3.4 J-	0.65 J-	13.3 J-		7.5 J-
Cobalt	2.4 J	3.8 J	4.3 J	4.7 J	3.6 J	5.3 J	6.4 J	3.3 J	5.3 J	8.7 J
Copper	35.7 J	15.3 J	13.3 J	5.0 J	17.9 J	18.0 J	17.1 J	18.0 J	75.1 J	38.1 J
Iron	6080 J	9490 J	12700 J	10100 J	12700 J	13800 J	17000 J	8770 J	12800 J	15200 J
Lead	132 J	91.1 J	96.7 J	7.3 J	52.5 J	131 J	101 J	289 J	292 J	748 J
Magnesium	808 J	1760 J	1890 J	1370 J	1540 J	2070 J	2200 J	1140 J	1360 J	1950 J
Manganese	225 J	137 J	110 J	101 J	125 J	364 J	320 J	205 J	264 J	806 J
Mercury	0.12 J	0.082 J	0.13 J	0.013 J	0.12 J	0.074 J	0.082 J	0.24	0.44	0.17 UJ
Nickel	8.0 J	7.2	13.2	6.7	8.1	9.9	11.9	7.1	8.9	17.1
Potassium	1170 UJ	595 UJ	861 UJ	648 UJ	786 UJ	715 UJ	575 UJ	541 UJ	719 UJ	861 UJ
Selenium	1.2 U	1.2 U	1.1	0.70	1.1	1.2	1.0	0.74	0.87	0.98
Silver	4.2 J	16.3 J	0.65 J	1.3 UJ	0.12 J	0.25 J	0.071 J	3.5 J	1.1 J	19.3 J
Sodium	1170 U	595 U	861 U	648 U	786 U	715 U	575 U	541 U	719 U	861 U
Thallium	5.8 U	3.0 U	4.3 U	3.2 U	3.9 U	3.6 U	2.9 U	2.7 U	3.6 U	4.3 U
Vanadium	5.8 UJ	6.0 UJ	9.6 J	10.3 J	3.9 UJ	10.6 J	14.1 J	7.5 J	3.6 UJ	4.3 UJ
Zinc	109	35.1	41.8	23.6	41.4	197	144	41.1	108	84.3
AVS/SEM (umol/g)										
Cadmium, SEM	0.0157 J	0.00147	0.00104	0.00121	0.00143	0.00684	0.00226	0.00105	0.00306	0.00279
Copper, SEM	1.13 J	0.162 J-	0.0881 J-	0.117 J-	0.151 J-	0.691 J-	0.145 J-	0.192 J-	0.620 J-	0.405 J-
Lead, SEM	0.869 J	0.434	0.221	0.0758	0.161	0.633	0.371	0.787	1.39	2.85
Mercury, SEM	0.000024 UJ	0.0000153 J-	0.0000313 J-	0.0000208 J-	0.0000264 J-	0.0000040 UJ	0.0000844 J-	0.000266 J-	0.000398 J-	0.000201 J-
Nickel, SEM	0.212 J	0.0369	0.0311	0.0536	0.0312	0.112	0.0276	0.0292	0.0618	0.103
Silver, SEM	0.0496 J	0.0702	0.00257	0.00227	0.00130	0.120	0.00127	0.0116	0.0122	0.108
Zinc, SEM	3.86 J	0.391 J	0.170 J	0.387 J	0.194 J	0.898 J	0.880 J	0.203 J	0.723 J	0.478 J
Total SEM Metals (det only)	6.14 J	1.10 J	0.514 J	0.637 J	0.540 J	2.46 J	1.43 J	1.22 J	2.81 J	3.95 J
Acid Volatile Sulfide	0.30 UJ	0.048 U	0.053 U	0.048 U	0.058 U	0.29 J+	0.043 U	0.050 U	0.056 U	0.062 U
AVS/SEM	NC	NC	NC	NC	NC	0.12 J	NC	NC	NC	NC
Other										
Ferrous Iron (%)										
ORP (mV)										
pH in Soil	5.34	4.74	4.38	4.12	5.35	6.98	6.15 J	4.65	4.66	4.73
Sulfide Screen										
Total Organic Carbon (ug/g dry wt)	450000 J	53000 J	34000 J	10000 J	56000 J	28000 J	28000 J	38000 J	41000 J	64000 J

TABLE 4-10
PHASE 4 ECOLOGICAL TOXICITY SOIL ANALYTICAL RESULTS - DETECTS ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	SO-519	SO-520
Sample ID:	WL-SO-4-519	WL-SO-4-520
Sample Date:	10/20/2016	10/19/2016
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample
Parameter		
Inorganics (mg/kg)		
Aluminum	7030 J	13600 J
Antimony	48.3 J	17.6 UJ
Arsenic	5.0	7.2 J
Barium	144 J	92.4 J
Beryllium	0.70 J-	1.5 U
Cadmium	1.9 J	0.52 J
Calcium	6920 J	55100 J
Chromium	3820 J	731 J
Chromium, Hexavalent	42.6 J-	35.9 J-
Cobalt	17.7 J	8.8 J
Copper	72.2 J	40.8 J
Iron	24100 J	18100 J
Lead	236	125 J
Magnesium	1870 J	4470 J
Manganese	2330 J	455 J
Mercury	0.11 J	0.29 UJ
Nickel	19.3 J	20.2
Potassium	659 J	1470 UJ
Selenium	1.3	2.4
Silver	16.6 J	1.8 J
Sodium	1010 J	1470 U
Thallium	0.60 J-	7.3 U
Vanadium	5.3 U	7.3 UJ
Zinc	166	129
AVS/SEM (umol/g)		
Cadmium, SEM	0.0126	0.0175 J
Copper, SEM	0.780 J-	0.716 J
Lead, SEM	1.01	1.72 J
Mercury, SEM	0.0000704 J-	0.0000993 J
Nickel, SEM	0.173	0.172 J
Silver, SEM	0.123	0.00982 J
Zinc, SEM	1.91 J	8.47 J
Total SEM Metals (det only)	4.01 J	11.1 J
Acid Volatile Sulfide	0.086 U	0.21 UJ
AVS/SEM	NC	NC
Other		
Ferrous Iron (%)		
ORP (mV)		
pH in Soil	4.79	5.28
Sulfide Screen		
Total Organic Carbon (ug/g dry wt)	170000 J	240000 J

TABLE 4-11
PHASE 4 ECOLOGICAL TOXICITY TISSUE ANALYTICAL RESULTS
WALTON LONSBURY SUPERFUND SITE

Location:	Lab Control Rep A	Lab Control Rep B	Lab Control Rep C	Lab Control Rep D	Lab Control Rep E	SO-501	SO-501	SO-501	SO-501	SO-501
Sample ID:	Lab Control Rep A	Lab Control Rep B	Lab Control Rep C	Lab Control Rep D	Lab Control Rep E	WL-SO-4-501 Rep A	WL-SO-4-501 Rep B	WL-SO-4-501 Rep C	WL-SO-4-501 Rep D	WL-SO-4-501 Rep E
Sample Date:						10/18/2016	10/18/2016	10/18/2016	10/18/2016	10/18/2016
Sample Type:	Lab Control	Lab Control	Lab Control	Lab Control	Lab Control	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (mg/kg)										
Aluminum	78.2	104	136	107 J	214 J	250	319	97.6 J	551 J	522 J
Antimony	0.05 J	0.11 J	0.11 J	0.09 UJ	0.092 J	0.16 J	0.19 J	0.27 J	0.37 J	0.26 J
Arsenic	17.8	16.9	17.3	24.1	26.0	25.1	21.7	20.7	33.9	28.8
Barium	2.95	3.83	4.24	4.33 J	7.55	3.51	4.01	2.28 J	6.76	6.16
Beryllium	0.07 U	0.08 U	0.09 U	0.09 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
Cadmium	2.46	2.44	2.65	2.59	2.65	2.36	2.97	2.59	2.81	2.44
Calcium	6220 J	6340 J	6550	7960 J	9960	4890 J	4870	4610 J	7140	6470
Chromium	18.0	31.2	35.5	25.7 J	52.3 J	41.9	86.6	43.2 J	111 J	94.2 J
Cobalt	5.93	5.61	5.25	6.01	6.44	7.64	7.55	6.75	8.20	7.76
Copper	7.86	7.97	18.6	9.63	12.2	11.8	10.9	11.2	15.9	13.4
Iron	568	623	607	733 J	909	817	990	624 J	1480	1310
Lead	0.60	0.81	0.87	0.43 J	1.84	5.25	6.23	2.73 J	10.2	9.36
Magnesium	1230	1270	1350	1470	1710	881	826	837	1100	1010
Manganese	25.5	32.8	35.1	33.4 J	58.8	14.8	19.1	9.80 J	30.5	27.5
Mercury	0.044	0.041	0.044	0.059	0.060	0.057	0.051	0.054	0.072	0.068
Nickel	11.8	21.5	13.1	17.7	26.4	16.5	40.8	20.2	50.3	40.7
Potassium	9250	9110	9360	9630	9020	9110	8850	9140	9400	8690
Selenium	6.23	5.75	5.99	8.09 J	8.26	7.36	6.13	6.39 J	9.17	8.27
Silver	0.19 J	0.21 J	0.20 J	0.21 J	0.47 J	0.31 J	0.35 J	0.41 J	0.55 J	0.46 J
Sodium	5340	5450	5540	5680	5460	5090	4780	4870	5370	4930
Thallium	0.06 U	0.06 U	0.07 U	0.07 U	0.06 U	0.06 U	0.06 U	0.07 U	0.06 U	0.06 U
Vanadium	0.57	0.64	0.67	0.75 J	1.13	1.06	1.23	0.74 J	1.90	1.80
Zinc	126	119	129	152	155	123	115	122	145	135

TABLE 4-11
PHASE 4 ECOLOGICAL TOXICITY TISSUE ANALYTICAL RESULTS
WALTON LONSBURY SUPERFUND SITE

Location:	SO-502	SO-502	SO-502	SO-502	SO-502	SO-503	SO-503	SO-503	SO-503	SO-503
Sample ID:	WL-SO-4-502 Rep A	WL-SO-4-502 Rep B	WL-SO-4-502 Rep C	WL-SO-4-502 Rep D	WL-SO-4-502 Rep E	WL-SO-4-503 Rep A	WL-SO-4-503 Rep B	WL-SO-4-503 Rep C	WL-SO-4-503 Rep D	WL-SO-4-503 Rep E
Sample Date:	10/18/2016	10/18/2016	10/18/2016	10/18/2016	10/18/2016	10/18/2016	10/18/2016	10/18/2016	10/18/2016	10/18/2016
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (mg/kg)										
Aluminum	982	317	215 J	179 J	1870 J	480	440	94.3	561 J	435 J
Antimony	0.28 J	0.14 J	0.13 J	0.13 J	0.35 J	0.12 J	0.13 J	0.08 UJ	0.11 J	0.091 J
Arsenic	19.5	22.8	19.3	29.0	25.4	19.6	18.3	17.7	23.1	23.8
Barium	6.31	3.36	3.08 J	3.55 J	11.6	7.44	6.93	4.36	12.5 J	8.51
Beryllium	0.08 U	0.08 U	0.08 U	0.08 U	0.085	0.08 U	0.08 U	0.08 U	0.08 U	0.07 U
Cadmium	2.26	2.46	2.45	2.79	2.35	3.28	3.06	3.33	3.23	3.37
Calcium	4460 J	4550	4150 J	5740 J	5870	4700 J	4260	4420	5760 J	5590
Chromium	129	50.9	59.5 J	38.5 J	207 J	46.3	56.4	23.7	125 J	67.8 J
Cobalt	7.68	7.83	7.05	7.84	8.39	7.13	6.86	6.12	7.34	6.89
Copper	13.4	12.3	11.6	13.4	17.3	14.5	22.3	17.1	16.5	14.9
Iron	1800	884	884 J	832 J	2930	992	1030	565	1570 J	1160
Lead	11.0	4.42	4.27 J	4.02 J	17.5	18.2	16.9	10.2	19.7 J	18.3
Magnesium	896	825	780	939	1110	828	839	804	979	956
Manganese	33.5	14.3	14.3 J	11.9 J	57.2	18.7	19.6	8.47	29.1 J	22.9
Mercury	0.089	0.093	0.086	0.118	0.127	0.115	0.120	0.111	0.132	0.139
Nickel	75.5	31.2	37.5	22.8	110	35.0	43.7	18.5	80.9	51.5
Potassium	8650	9200	8890	9800	8540	8730	9010	9150	9060	8920
Selenium	7.39	8.75	7.47 J	11.0 J	9.60	7.59	6.81	6.86	7.77 J	8.31
Silver	0.46 J	0.31 J	0.28 J	0.36 J	0.57 J	1.08 J	1.00 J	0.80 J	1.12 J	1.10 J
Sodium	4830	5170	4730	5910	4630	4950	5120	5010	4960	5130
Thallium	0.080	0.074	0.075	0.10	0.11	0.06 U	0.062	0.07 U	0.068	0.074
Vanadium	2.35	1.15	0.96 J	0.98 J	4.03	1.85	1.66	0.71	2.34 J	1.83
Zinc	114	119	110	143	132	113	123	123	135	130

TABLE 4-11
PHASE 4 ECOLOGICAL TOXICITY TISSUE ANALYTICAL RESULTS
WALTON LONSBURY SUPERFUND SITE

Location:	SO-506	SO-506	SO-506	SO-506	SO-506	SO-507	SO-507	SO-507	SO-507	SO-507
Sample ID:	WL-SO-4-506 Rep A	WL-SO-4-506 Rep B	WL-SO-4-506 Rep C	WL-SO-4-506 Rep D	WL-SO-4-506 Rep E	WL-SO-4-507 Rep A	WL-SO-4-507 Rep B	WL-SO-4-507 Rep C	WL-SO-4-507 Rep D	WL-SO-4-507 Rep E
Sample Date:	10/20/2016	10/20/2016	10/20/2016	10/20/2016	10/20/2016	10/19/2016	10/19/2016	10/19/2016	10/19/2016	10/19/2016
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (mg/kg)										
Aluminum	146	193	192 J	196 J	245 J	158	321	291	272 J	315 J
Antimony	2.26 UJ	2.35 J	2.82 J	2.96 J	3.45 J	0.84 J	1.62 J	0.10 J	1.54 J	1.43 J
Arsenic	16.0	17.1	20.2	22.2	22.4	18.5	16.7	16.5	24.6	26.8
Barium	6.26	7.47	8.80 J	8.27 J	9.76	5.70	9.14	5.79	9.60	10.3
Beryllium	0.08 U	0.08 U	0.09 U	0.08 U	0.08 U	0.09 U	0.08 U	0.08 U	0.08 U	0.07 U
Cadmium	10.6	9.84	10.5	10.0	9.57	3.18	3.00	4.50	3.16	3.03
Calcium	5560 J	5260 J	6520 J	6750 J	6200	5090 J	4650	4260	6390	6180
Chromium	581	721	753 J	893 J	964 J	506	1070	51.0	929 J	979 J
Cobalt	8.82	8.68	9.23	8.86	9.30	6.64	6.97	6.38	7.17	7.29
Copper	27.4	30.2	31.2	30.5	34.4	18.1	24.4	10.9	21.7	22.9
Iron	842	957	1050 J	1200 J	1540	649	856	966	896	926
Lead	45.6	45.7	57.7 J	61.5 J	59.4	18.9	26.8	15.8	25.3	25.7
Magnesium	870	842	963	955	898	895	838	897	943	931
Manganese	23.9	27.0	29.2 J	33.2 J	34.0	18.4	30.3	12.4	27.3	29.4
Mercury	0.058	0.062	0.068	0.084	0.076	0.050	0.051	0.101	0.059	0.066
Nickel	26.2	25.6	28.5	38.3	31.1	18.3	31.7	21.6	27.2	21.0
Potassium	9320	8790	9290	8710	8510	9450	8970	9190	9000	8490
Selenium	6.15	5.92	6.87 J	7.38 J	7.79	7.05	6.20	7.76	8.61	9.33
Silver	19.5 J	22.3 J	22.2 J	24.2 J	27.6 J	2.43 J	3.59 J	0.24 J	3.52 J	3.80 J
Sodium	7100	6740	6890	6290	6380	6750	6500	5170	6290	6290
Thallium	0.07 U	0.067	0.074	0.083	0.076	0.07 U	0.07 U	0.093	0.06 U	0.06 U
Vanadium	1.14	1.43	1.59 J	1.76 J	2.01	0.99	1.75	1.30	1.68	1.82
Zinc	128	125	140	143	142	129	118	113	141	135

TABLE 4-11
PHASE 4 ECOLOGICAL TOXICITY TISSUE ANALYTICAL RESULTS
WALTON LONSBURY SUPERFUND SITE

Location:	SO-510	SO-510	SO-510	SO-510	SO-510	SO-513	SO-513	SO-513	SO-513	SO-513
Sample ID:	WL-SO-4-510 Rep A	WL-SO-4-510 Rep B	WL-SO-4-510 Rep C	WL-SO-4-510 Rep D	WL-SO-4-510 Rep E	WL-SO-4-513 Rep A	WL-SO-4-513 Rep B	WL-SO-4-513 Rep C	WL-SO-4-513 Rep D	WL-SO-4-513 Rep E
Sample Date:	10/19/2016	10/19/2016	10/19/2016	10/19/2016	10/19/2016	10/18/2016	10/18/2016	10/18/2016	10/18/2016	10/18/2016
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (mg/kg)										
Aluminum	228	620	358	505 J	409 J	717	157	398	438 J	1000 J
Antimony	0.45 J	1.06 J	0.69 J	1.00 J	0.81 J	0.15 J	0.78 J	0.086 J	0.13 J	0.16 J
Arsenic	18.5	17.8	19.7	21.7	19.1	18.8	18.3	13.8	24.1	23.5
Barium	4.29	8.03	5.45	7.20 J	6.55	10.8	5.26	6.31	10.7 J	13.2
Beryllium	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.083
Cadmium	2.39	2.50	2.42	2.45	2.35	4.78	3.16	4.88	4.85	5.01
Calcium	4920 J	4960	4950	6030 J	5660	5120 J	4560	3990	7400 J	6200
Chromium	190	555	310	506 J	344 J	99.5	488	73.9	98.6 J	211 J
Cobalt	7.86	8.48	8.82	8.55	7.92	6.53	6.71	5.99	6.87	7.44
Copper	11.5	15.1	14.4	14.5	12.9	13.0	17.5	10.9	13.3	16.3
Iron	879	1820	1190	1720 J	1300	1830	627	1190	1530 J	2670
Lead	59.5	73.3	59.4	74.2 J	68.5	22.6	16.4	15.3	24.4 J	24.7
Magnesium	898	983	908	1020	960	1080	818	879	1160	1270
Manganese	14.2	31.9	19.2	29.3 J	21.9	22.6	17.2	15.3	20.8 J	37.2
Mercury	0.071	0.089	0.080	0.098	0.088	0.126	0.043	0.093	0.147	0.142
Nickel	26.5	93.1	40.0	94.6	48.9	33.8	17.9	33.2	47.6	99.2
Potassium	8870	8690	8590	8580	8490	9380	9080	8870	9620	9580
Selenium	6.60	6.25	6.93	7.66 J	6.80	8.97	6.72	6.57	10.8 J	9.56
Silver	4.27 J	6.76 J	5.05 J	6.93 J	5.63 J	0.28 J	2.23 J	0.22 J	0.30 J	0.38 J
Sodium	5830	5880	5500	5600	5480	5160	6420	5170	5100	5520
Thallium	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.12	0.06 U	0.085	0.10	0.13
Vanadium	1.22	2.59	1.84	2.49 J	1.95	2.67	1.03	1.64	1.97 J	3.84
Zinc	121	120	121	129	126	129	116	107	151	138

TABLE 4-11
PHASE 4 ECOLOGICAL TOXICITY TISSUE ANALYTICAL RESULTS
WALTON LONSBURY SUPERFUND SITE

Location:	SO-516	SO-516	SO-516	SO-516	SO-516	SO-517	SO-517	SO-517	SO-517	SO-517
Sample ID:	WL-SO-4-516 Rep A	WL-SO-4-516 Rep B	WL-SO-4-516 Rep C	WL-SO-4-516 Rep D	WL-SO-4-516 Rep E	WL-SO-4-517 Rep A	WL-SO-4-517 Rep B	WL-SO-4-517 Rep C	WL-SO-4-517 Rep D	WL-SO-4-517 Rep E
Sample Date:	10/18/2016	10/18/2016	10/18/2016	10/18/2016	10/18/2016	10/19/2016	10/19/2016	10/19/2016	10/19/2016	10/19/2016
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (mg/kg)										
Aluminum	582	235	309 J	872 J	1270 J	429	592	940 J	1100 J	1250 J
Antimony	0.16 J	0.24 J	0.14 J	0.17 J	0.25 J	0.095 J	0.09 J	0.13 J	0.14 J	0.16 J
Arsenic	28.5	22.9	22.9	34.2	39.9	22.5	16.9	21.1	22.5	23.7
Barium	6.07	4.10	4.41 J	8.38 J	10.9	10.9	10.8	17.0 J	22.0 J	21.1
Beryllium	0.07 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.07 U
Cadmium	2.72	2.71	2.83	2.28	3.13	3.08	2.51	2.88	2.58	2.68
Calcium	4630 J	4390	4290 J	5200 J	6460	4740 J	3660 J	4970 J	5610 J	5700
Chromium	60.3	44.9	70.7 J	159 J	147 J	50.9	98.2	83.9 J	162 J	137 J
Cobalt	7.26	6.99	7.11	7.92	8.10	8.04	7.32	7.38	7.69	7.65
Copper	11.3	12.1	10.9	14.4	15.3	16.5	16.7	20.0	23.1	23.8
Iron	1200	751	939 J	1930 J	2290	1010	1280	1600 J	2160 J	2120
Lead	263	258	260 J	210 J	405	287	210	322 J	295 J	333
Magnesium	824	775	744	960	1050	782	721	845	933	1060
Manganese	34.1	21.8	27.8 J	48.5 J	63.0	27.4	32.6	42.8 J	51.5 J	55.4
Mercury	0.165	0.152	0.149	0.171	0.237	0.335	0.264	0.358	0.385	0.356
Nickel	32.2	29.4	45.2	101	81.8	38.2	74.1	58.3	119	95.0
Potassium	8620	9300	8600	8220	8560	9050	8380	8640	8580	8550
Selenium	7.67	6.82	7.56 J	9.53 J	9.87	9.71	7.01	8.97 J	8.69 J	9.19
Silver	1.23 J	1.04 J	1.00 J	1.31 J	1.83 J	0.51 J	0.43 J	0.60 J	0.61 J	0.68 J
Sodium	5150	5310	5200	5050	5350	5490	5090	5370	5110	5300
Thallium	0.16	0.16	0.16	0.16	0.22	0.13	0.11	0.13	0.14	0.13
Vanadium	1.96	0.96	1.32 J	3.13 J	3.89	1.41	1.76	2.50 J	3.03 J	3.23
Zinc	133	130	127	138	148	141	123	141	151	150

TABLE 4-11
PHASE 4 ECOLOGICAL TOXICITY TISSUE ANALYTICAL RESULTS
WALTON LONSBURY SUPERFUND SITE

Location:	SO-518	SO-518	SO-518	SO-518	SO-518	SO-519	SO-519	SO-519	SO-519	SO-519
Sample ID:	WL-SO-4-518 Rep A	WL-SO-4-518 Rep B	WL-SO-4-518 Rep C	WL-SO-4-518 Rep D	WL-SO-4-518 Rep E	WL-SO-4-519 Rep A	WL-SO-4-519 Rep B	WL-SO-4-519 Rep C	WL-SO-4-519 Rep D	WL-SO-4-519 Rep E
Sample Date:	10/19/2016	10/19/2016	10/19/2016	10/19/2016	10/19/2016	10/20/2016	10/20/2016	10/20/2016	10/20/2016	10/20/2016
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics (mg/kg)										
Aluminum	528	587	300	682 J	653 J	404	583	371 J	362 J	426 J
Antimony	0.19 J	0.23 J	0.11 J	0.30 J	0.23 J	0.41 J	0.48 J	0.26 J	0.23 J	0.34 J
Arsenic	22.7	18.3	18.3	26.5	26.1	24.1	18.3	18.0	21.7	20.6
Barium	8.13	8.79	5.60	11.0	10.6	9.08	11.3	8.24 J	9.65 J	10.2
Beryllium	0.08 U	0.08 U	0.07 U	0.08 U	0.07 U	0.09 U	0.08 U	0.08 U	0.08 U	0.08 U
Cadmium	3.24	3.57	3.69	4.08	3.81	5.07	4.84	4.53	5.17	5.68
Calcium	5290 J	4730	4460	6430	6590	5780 J	5050	5210 J	6540 J	6150
Chromium	122	226	96.1	229 J	183 J	292	425	269 J	365 J	320 J
Cobalt	7.46	7.03	7.39	8.90	8.08	10.1	9.04	8.06	9.43	9.29
Copper	14.5	14.6	14.4	16.9	15.9	15.3	15.6	13.9	15.4	14.7
Iron	1500	1700	1030	2030	1800	1940	2440	1790 J	2160 J	1960
Lead	218	292	206	407	360	21.1	25.6	18.0 J	19.4 J	22.2
Magnesium	956	827	790	989	1040	1010	969	943	1100	1080
Manganese	72.7	92.6	49.6	105	103	95.0	132	89.2 J	125 J	109
Mercury	0.114	0.114	0.099	0.148	0.148	0.082	0.082	0.074	0.096	0.086
Nickel	36.6	81.1	40.0	75.2	55.9	45.3	50.7	37.9	108	31.7
Potassium	8890	8550	8610	8720	8710	9230	8680	9300	9300	9550
Selenium	8.74	7.48	7.25	9.58	9.53	8.90	7.22	7.00 J	8.74 J	8.33
Silver	3.83 J	4.17 J	2.86 J	6.02 J	4.64 J	3.45 J	3.92 J	2.91 J	3.27 J	3.54 J
Sodium	5530	5270	5300	5160	5310	6040	5910	5780	5810	6080
Thallium	0.098	0.068	0.066	0.078	0.084	0.07 U	0.06 U	0.06 U	0.07 U	0.07 U
Vanadium	2.53	2.77	1.60	3.33	3.11	2.07	2.68	1.79 J	2.19 J	2.28
Zinc	132	125	125	144	148	138	120	122	139	134

TABLE 4-11
PHASE 4 ECOLOGICAL TOXICITY TISSUE ANALYTICAL RESULTS
WALTON LONSBURY SUPERFUND SITE

Location:	SO-520	SO-520	SO-520	SO-520	SO-520
Sample ID:	WL-SO-4-520 Rep A	WL-SO-4-520 Rep B	WL-SO-4-520 Rep C	WL-SO-4-520 Rep D	WL-SO-4-520 Rep E
Sample Date:	10/19/2016	10/19/2016	10/19/2016	10/19/2016	10/19/2016
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter					
Inorganics (mg/kg)					
Aluminum	320	409	297	250 J	491 J
Antimony	0.45 J	0.42 J	0.35 J	0.34 J	0.54 J
Arsenic	18.2	16.0	16.7	18.4	22.3
Barium	8.43	8.63	7.44	6.54 J	10.8
Beryllium	0.08 U	0.08 U	0.09 U	0.08 U	0.08 U
Cadmium	4.42	4.33	4.40	4.21	4.74
Calcium	5080 J	4980 J	5220	4920 J	6180
Chromium	265	336	250	202 J	405 J
Cobalt	7.03	6.66	7.31	7.40	7.24
Copper	18.5	27.4	20.3	16.0	21.8
Iron	916	1030	882	805 J	1200
Lead	39.9	41.6	37.2	34.5 J	51.3
Magnesium	1020	958	1040	985	1060
Manganese	17.6	21.7	16.9	16.8 J	26.0
Mercury	0.040	0.045	0.038	0.039	0.052
Nickel	18.8	25.2	19.4	18.4	22.7
Potassium	8630	8520	8930	8570	8420
Selenium	6.71	5.59	5.94	6.51 J	7.25
Silver	2.66 J	3.25 J	2.53 J	2.09 J	3.90 J
Sodium	5680	5550	5740	5540	5640
Thallium	0.067	0.065	0.07 U	0.06 U	0.080
Vanadium	2.06	2.31	1.86	1.70 J	2.94
Zinc	128	130	129	127	140

TABLE 4-12
RI GROUNDWATER ANALYTICAL RESULTS, NOVEMBER/DECEMBER 2017 - DETECTS ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PZ-01	PZ-01	PZ-02	PZ-02	PZ-02	PZ-02	PZ-03	PZ-03	PZ-04	PZ-04
Sample ID:	WL-PZ-01	WL-PZF-01	WL-PZ-02	WL-PZ-02-CS	WL-PZF-02	WL-PZF-02-CS	WL-PZ-03	WL-PZF-03	WL-PZ-04	WL-PZF-04
Sample Date:	11/28/2017	11/28/2017	11/27/2017	11/27/2017	11/27/2017	11/27/2017	11/28/2017	11/28/2017	11/29/2017	11/29/2017
Sample Type:	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics, Dissolved (ug/L)										
Aluminum		20.0 U			194	251		20.0 U		36.6
Arsenic		1.0 U			1.0 U	1.0 U		1.0 U		1.0 U
Barium		283			561	565		71.6		86.8
Cadmium		1.0 U			1.3	1.3		1.0 U		1.0 U
Calcium		28700			51400	51600		28700		17000
Chromium		6.4			3.9	4.3		40.8		2.0 U
Chromium, Hexavalent		0.016 J-			0.11	0.079		0.19		0.025 UJ
Cobalt		1.0 U			142	143		1.0 U		5.5
Copper		2.0 UJ			3.5	3.6		2.2 J		3.0
Iron		61700			407	490		21400		3000
Lead		1.0 U			1.0 U	1.0 U		1.0 U		2.5
Magnesium		4490			8020	8030		6310		5660
Manganese		2460			14300	14300		1320		112
Nickel		1.4			23.4	23.6		1.3		19.1
Potassium		7690			6660	6670		2540		5900
Selenium		5.0 U			5.0 U	5.0 U		5.0 U		5.0 U
Sodium		565000			627000	621000		190000		24900
Vanadium		5.0 U			5.0 U	5.0 U		5.0 U		5.0 U
Zinc		1610 J			602 J	642 J		102 J		1130 J
Inorganics (ug/L)										
Aluminum	438 J		4130 J	6090 J			154 J		3180 J	
Antimony	2.0 U		2.0 U	2.0 U			2.0 U		2.0 U	
Arsenic	1.0 U		1.8	2.5			1.0 U		1.1	
Barium	275		582	584			73.4		103	
Cadmium	1.0 U		1.4	1.4			1.0 U		1.0 U	
Calcium	28800		53400	53000			29000		17700	
Chromium	8.8 J		18.8 J	26.8 J			227 J		22.1 J	
Chromium, Hexavalent	0.0090 J-		0.037 J-	0.019 J			0.44		0.10	
Cobalt	1.0 U		148	148			1.0 U		6.9	
Copper	2.0 UJ		5.7	8.2			14.2		58.2	
Iron	60800 J		7050 J	10200 J			21800 J		6540 J	
Lead	1.3		3.0	4.4			10.6		41.8	
Magnesium	4530		9030	9330			6340		6530	
Manganese	2390		14700	14900			1290		154	
Nickel	1.9		28.4	29.9			9.6		23.9	
Potassium	7800		7150	7200			2560		6420	
Selenium	5.0 U		5.0 U	5.0 U			5.0 U		5.0 U	
Silver	1.0 U		1.0 U	1.0 U			14.1		1.0 U	
Sodium	577000		650000	650000			191000		25800	
Vanadium	5.0 U		7.1	10.4			5.0 U		7.5	
Zinc	1960 J		884 J	1140 J			301 J		1970 J	

TABLE 4-12
RI GROUNDWATER ANALYTICAL RESULTS, NOVEMBER/DECEMBER 2017 - DETECTS ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PZ-05	PZ-05	PZ-06	PZ-06	PZ-07	PZ-07	PZ-08	PZ-08	PZ-09	PZ-09
Sample ID:	WL-PZ-05	WL-PZF-05	WL-PZ-06	WL-PZF-06	WL-PZ-07	WL-PZF-07	WL-PZ-08	WL-PZF-08	WL-PZ-09	WL-PZF-09
Sample Date:	11/29/2017	11/29/2017	11/30/2017	11/30/2017	11/28/2017	11/28/2017	11/28/2017	11/28/2017	11/30/2017	11/30/2017
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics, Dissolved (ug/L)										
Aluminum		20.0 U		42.2		36.8		213		168
Arsenic		1.6		1.0 U		1.0 U		1.0 U		5.5
Barium		81.7		78.2		117		63.1		93.7
Cadmium		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U
Calcium		35200		31800		65900		35000		40300
Chromium		2.0 U		2.0 U		20.4		82.0		68.3
Chromium, Hexavalent		0.14		0.020 J		0.20 J-		0.15		0.65
Cobalt		3.7		1.0 U		1.0 U		1.8		1.5
Copper		2.0 UJ		5.4		2.0 UJ		5.4		2.0 UJ
Iron		17500		3880		16900		40100		9290
Lead		1.0 U		1.0 U		6.3		4.7		4.8
Magnesium		10600		6050		15100		9710		5970
Manganese		1120		2050		2130		1590		1640
Nickel		28.2		6.3		5.6		3.1		26.3
Potassium		3650		8700		2440		2180		81200
Selenium		5.0 U		0.46 J		0.49 J		5.0 U		0.63 J
Sodium		99500		82100		221000		190000		155000
Vanadium		5.0 U		0.65 J		0.63 J		5.0 U		1.6 J
Zinc		6060 J		3020 J		2980 J		768 J		587 J
Inorganics (ug/L)										
Aluminum	552 J		1220 J		10200 J		4090 J		824 J	
Antimony	2.0 U		2.0 U		5.8		2.3		2.0 U	
Arsenic	1.8		1.0 U		2.5		1.2		6.3	
Barium	99.9		85.8		220		88.0		101	
Cadmium	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U	
Calcium	42900		32700		69200		36900		41800	
Chromium	29.0 J		2.5 J		2090 J		1600 J		95.7 J	
Chromium, Hexavalent	0.31		0.0060 J		1.7		3.5 J-		0.72	
Cobalt	5.2		1.1		8.1		13.4		2.1	
Copper	4.6		3.9		56.1		48.6		3.9	
Iron	21900 J		5000 J		26500 J		46300 J		10800 J	
Lead	23.7		2.4		330		29.0		10.2	
Magnesium	13100		6500		17800		10800		6260	
Manganese	1270		2100		2270		1680		1670	
Nickel	47.6		9.5		31.7		10.1		30.8	
Potassium	3980		9100		3290		2500		88400	
Selenium	0.94 J		5.0 U		1.2 J		5.0 U		0.90 J	
Silver	1.0 U		1.0 U		107		13.8		1.0 U	
Sodium	93300		88400		226000		196000		167000	
Vanadium	0.96 J		2.3 J		33.1		25.3		2.8 J	
Zinc	11500 J		3360 J		6290 J		1110 J		917 J	

TABLE 4-12
RI GROUNDWATER ANALYTICAL RESULTS, NOVEMBER/DECEMBER 2017 - DETECTS ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PZ-10	PZ-10	PZ-11	PZ-11	PZ-12	PZ-12	PZ-13	PZ-13	PZ-14	PZ-14
Sample ID:	WL-PZ-10	WL-PZF-10	WL-PZ-11	WL-PZF-11	WL-PZ-12	WL-PZF-12	WL-PZ-13	WL-PZF-13	WL-PZ-14	WL-PZF-14
Sample Date:	11/30/2017	11/30/2017	11/30/2017	11/30/2017	11/29/2017	11/29/2017	11/29/2017	11/29/2017	11/29/2017	11/29/2017
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Inorganics, Dissolved (ug/L)										
Aluminum		20.0 U		39.3		135		20.0 U		20.0 U
Arsenic		1.0 U		1.0 U		79.0		1.0 U		1.0 U
Barium		23.4		87.3		45.9		108		66.1
Cadmium		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U
Calcium		19900		35800		22300		28500		31400
Chromium		1230		23.2		23.5		802		6810
Chromium, Hexavalent		1300		0.026 J-		0.017 J-		864		6880
Cobalt		1.0 U		1.0 U		5.2		8.5		1.2
Copper		2.0 UJ		2.0 UJ		2.0 UJ		2.5		2.4 J
Iron		108 J		13100		7600		152 J		135 J
Lead		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U
Magnesium		5010		8440		4340		8520		9990
Manganese		53.7		1540		270		74.8		37.1
Nickel		3.0		9.9		12.0		18.4		12.6
Potassium		2410		4160		3080		5290		5080
Selenium		5.0 U		0.82 J		1.5 J		5.0 U		5.0 U
Sodium		59900		43100		39700		68400		93400
Vanadium		4.7 J		5.0 U		6.4		5.0 U		5.0 U
Zinc		917 J		242 J		967 J		240 J		647 J
Inorganics (ug/L)										
Aluminum	1180 J		1770 J		384 J		67.8 J		375 J	
Antimony	2.0 U		2.0 U		2.0 U		2.0 U		2.0 U	
Arsenic	1.0 U		1.6		78.5		1.0 U		1.0 U	
Barium	31.7		111		46.3		106		70.3	
Cadmium	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U	
Calcium	20800		39100		22800		29600		32500	
Chromium	1820 J		216 J		33.1 J		798 J		7260 J	
Chromium, Hexavalent	1350 J-		0.11 J-		0.043 J-		834		6870	
Cobalt	1.5		2.1		5.4		8.7		1.5	
Copper	5.2		6.5		2.0 UJ		4.0		9.9	
Iron	2380 J		16500 J		7990 J		219 J		1050 J	
Lead	9.9		18.6		1.2		1.7		5.2	
Magnesium	5300		9140		4490		8710		10400	
Manganese	80.5		1690		271		75.6		43.4	
Nickel	6.3		17.6		12.6		19.2		15.1	
Potassium	2640		4550		3120		5430		5190	
Selenium	0.43 J		0.99 J		1.8 J		5.0 U		0.48 J	
Silver	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U	
Sodium	63000		44300		41800		72300		99400	
Vanadium	20.7		4.1 J		6.9		2.0 J		35.3	
Zinc	1320 J		2110 J		1410 J		303 J		883 J	

TABLE 4-12
RI GROUNDWATER ANALYTICAL RESULTS, NOVEMBER/DECEMBER 2017 - DETECTS ONLY
WALTON LONSBURY SUPERFUND SITE

Location:	PZ-15	PZ-15
Sample ID:	WL-PZ-15	WL-PZF-15
Sample Date:	11/29/2017	11/29/2017
Sample Type:	Field Sample	Field Sample
Parameter		
Inorganics, Dissolved (ug/L)		
Aluminum		20.0 U
Arsenic		1.0 U
Barium		66.8
Cadmium		1.0 U
Calcium		36700
Chromium		2.0 U
Chromium, Hexavalent		0.020 J
Cobalt		1.0 U
Copper		2.0 UJ
Iron		142 J
Lead		1.0 U
Magnesium		7880
Manganese		110
Nickel		3.7
Potassium		8280
Selenium		5.0 U
Sodium		157000
Vanadium		5.0 U
Zinc		312 J
Inorganics (ug/L)		
Aluminum	203 J	
Antimony	2.0 U	
Arsenic	1.0 U	
Barium	67.3	
Cadmium	1.0 U	
Calcium	37600	
Chromium	2.2 J	
Chromium, Hexavalent	0.029	
Cobalt	1.0 U	
Copper	3.1	
Iron	602 J	
Lead	2.7	
Magnesium	8020	
Manganese	138	
Nickel	4.3	
Potassium	8650	
Selenium	5.0 U	
Silver	1.0 U	
Sodium	163000	
Vanadium	5.0 U	
Zinc	373 J	

TABLE 4-13
RI SOIL ANALYTICAL RESULTS, NOVEMBER/DECEMBER 2017 - ALL ANALYTES
WALTON LONSBURY SUPERFUND SITE

Location:	SO-601	SO-602	SO-602	SO-603	SO-604	SO-605	SO-606	SO-607	SO-608	SO-609
Sample ID:	WL-SO-601	WL-SO-602	WL-SO-602-CS	WL-SO-603	WL-SO-604	WL-SO-605	WL-SO-606	WL-SO-607	WL-SO-608	WL-SO-609
Sample Date:	12/5/2017	12/5/2017	12/5/2017	12/5/2017	12/5/2017	12/5/2017	12/5/2017	12/5/2017	12/5/2017	12/5/2017
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
IVBA Lead										
Extractable Lead (mg/kg)	142 J	85.5 J	93.4 J	36.7 J	226 J	73.2 J	107 J	39.3 J	81.5 J	75.3 J
IVBA Lead (%)	64.5 J	63.3 J	64.9 J	65.9 J	77.9 J	67.2 J	65.6 J	69.1 J	72.1 J	4.1 J
Lead in Soil < 150 µm (mg/kg)	220	135	144	55.7	290	109	163	56.9	113	1820 J-
Inorganics (mg/kg)										
Aluminum	6900 J	4100 J	9440 J	8440 J	8270 J	7740 J	10500 J	1560 J	10800 J	1660 J
Antimony	39.9 EB	45.2 EB	9.7 UJ	7.7 U	0.63 JEB	5.2 U	17.6 U	14.9 UJ	9.0 U	5.7 UJ
Arsenic	5.6	6.2	7.6	4.1	4.3	2.9	8.2	2.5 U	3.4	1.6 J
Barium	44.7	47.3	40.9 J	29.2	47.6	25.2	85.8	49.7 UJ	83.6	32.1 J
Beryllium	1.0 U	1.2 U	0.81 U	0.64 U	0.45 U	0.47	1.5 U	1.2 U	0.75 U	0.47 UJ
Cadmium	1.1	1.3	0.81 U	0.64 U	0.45 U	0.43 U	1.5 U	1.2 U	0.75 U	0.47 UJ
Calcium	1380	1780	3030 J	1820	2190	1550	9830	4020 J	3690	3660 J
Chromium	14400 J	16000 J	35.0 J	22.2 J	15.9 J	16.9 J	72.7 J	18.9 J	329 J	96.0 J
Chromium, Hexavalent	482 J	3.6 UJ	3.8 UJ	1.1 J	0.15 J	0.58 J-	3.9 UJ	9.4 UJ	12 J-	11.9 J
Cobalt	13.8	15.3	8.1 UJ	5.0 J	5.4	4.0 J	4.4 J	12.4 UJ	7.7	4.7 UJ
Copper	56.9	62.4	79.4	38.7	156	57.5	32.7	14.4	66.9	30.1 J
Iron	11800 J	8670 J	60000 J	28300 J	13200 J	12800 J	20600 J	3950 J	10900 J	7090 J
Lead	184	207	138 J	76.1	157	57.0	163	59.1 J	142	23.8 J
Magnesium	1030 U	1160 U	2170 JEB	2070 EB	2410 EB	2290 EB	1870 EB	1240 UJ	1260 EB	538 JEB
Manganese	76.6	76.5	570 J	344	239	186	415	121 J	341	70.8 J
Mercury	0.23 J-	0.18 J-	0.15 J-	0.068 J-	0.20	0.060 J-	0.12 J-	0.16 J-	0.20	0.069 J
Nickel	9.5	9.3	17.0 J	11.1	13.7	10.2	15.5	9.9 UJ	18.5	6.5 J
Potassium	1030 U	1160 U	809 U	638 U	459	432 U	1470 U	1240 U	754 U	1060 J
Selenium	1.5 J-	1.9 J-	5.7 UJ	4.5 UJ	0.44 J-	3.0 UJ	10.3 UJ	8.7 UJ	0.73 J-	3.3 UJ
Silver	20.2 J+	18.9 J+	1.3 J	0.52 J+	4.0 J+	1.2 J+	1.2 J+	0.82 J	3.7 J+	3.0 J
Sodium	1030 U	1160 U	809 U	638 U	448 U	432 U	1470 U	1240 U	754 U	1350 J
Thallium	5.2 U	5.8 U	4.0 U	3.2 U	2.2 U	2.2 U	7.3 U	6.2 U	3.8 U	2.4 UJ
Vanadium	34.4	28.7	28.4	22.0	15.5	15.8	22.7	12.4 U	21.2	6.9 J
Zinc	75.6 EB	86.5 EB	90.8 J	53.6 EB	105 EB	47.2 EB	130 EB	21.8 J	173 EB	52.3 J

TABLE 4-13
RI SOIL ANALYTICAL RESULTS, NOVEMBER/DECEMBER 2017 - ALL ANALYTES
WALTON LONSBURY SUPERFUND SITE

Location:	SO-610	SO-611	SO-612	SO-613	SO-614	SO-615	SO-616	SO-617	SO-618	SO-619
Sample ID:	WL-SO-610	WL-SO-611	WL-SO-612	WL-SO-613	WL-SO-614	WL-SO-615	WL-SO-616	WL-SO-617	WL-SO-618	WL-SO-619
Sample Date:	12/4/2017	12/5/2017	12/4/2017	12/5/2017	12/4/2017	12/4/2017	12/4/2017	12/4/2017	12/4/2017	12/4/2017
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
IVBA Lead										
Extractable Lead (mg/kg)	163 J	384 J	364 J	277 J	71.6 J	26.2 J	220 J	432 J	84.9 J	67.0 J
IVBA Lead (%)	76.2 J	81 J	76.2 J	58.4 J	NC	72.6 J	61.6 J	61.3 J	71.9 J	60.4 J
Lead in Soil < 150 µm (mg/kg)	214 J-	474	478	474	50.8 J-	36.1 J-	357	705	118	111
Inorganics (mg/kg)										
Aluminum	5330 J	10800 J	8680 J	4360 J	3060 J	1810 J	10200 J	6080 J	8470 J	6530 J
Antimony	7.9 J	6.5 UJ	6.4 UJ	25.2 J	5.5 UJ	5.7 UJ	48.0 J	11.2 UJ	5.7 UJ	5.8 UJ
Arsenic	4.5 J	4.7	3.6	4.2 J	1.7 J	1.6 J	8.1 J	4.0	7.2	2.8
Barium	185 J	155 J	83.0 J	152 J	110 J	134 J	219 J	95.1 J	43.5 J	28.0 J
Beryllium	0.48 UJ	0.54 U	0.53 U	0.50 UJ	0.46 UJ	0.47 UJ	0.90 J	0.93 U	0.47 U	0.48 U
Cadmium	2.2 J	1.0 U	0.53 U	1.5 J	0.88 UJ	0.47 UJ	2.4 J	0.93 U	0.47 U	0.48 U
Calcium	9540 J	2630 J	1730 J	8800 J	8830 J	11600 J	9520 J	8110 J	2730 J	1270 J
Chromium	3790 J	70.1 J	42.1 J	10300 J	99.0 J	98.8 J	14400 J	882 J	207 J	15.0 J
Chromium, Hexavalent	100 J	11.3 J-	1.8 J	284 J	11 UJ	15.9 J	435 J	10.7 J-	19.3 J	0.47 UJ
Cobalt	23.7 J	5.4 UJ	5.3 UJ	14.9 J	10.5 J	11.8 J	25.5 J	9.3 UJ	4.7 UJ	4.8 UJ
Copper	226 J	57.3	29.2	297 J	45.1 J	30.4 J	393 J	83.3	24.9	12.5
Iron	21900 J	15600 J	14900 J	22400 J	6360 J	7050 J	21100 J	15700 J	15700 J	9760 J
Lead	301 J	549 J	225 J	323 J	51.8 J	43.3 J	369 J	554 J	74.9 J	59.4 J
Magnesium	1970 JEB	1470 JEB	2320 JEB	1300 JEB	955 JEB	1250 JEB	2590 JEB	1780 JEB	2080 JEB	2050 JEB
Manganese	809 J	373 J	312 J	502 J	436 J	638 J	667 J	346 J	249 J	224 J
Mercury	0.51 J	1.0 J-	0.67 J-	0.39 J	0.11 J	0.094 J	0.34 J	0.13 J-	0.061 J-	0.018 J-
Nickel	80.5 J	10.2 J	11.4 J	53.1 J	16.4 J	13.1 J	55.0 J	16.2 J	9.8 J	10.3 J
Potassium	752 J	538 U	530 U	778 J	1110 J	981 J	807 J	930 U	474 U	480 U
Selenium	3.4 UJ	3.8 UJ	3.7 UJ	3.5 UJ	3.2 UJ	3.3 UJ	3.3 UJ	6.5 UJ	3.3 UJ	3.4 UJ
Silver	18.1 J	0.98 J	0.38 J	124 J	5.8 J	4.4 J	175 J	2.6 J	0.87 J	0.074 J
Sodium	1550 J	538 U	530 U	2350 J	1870 J	2050 J	2420 J	930 U	474 U	480 U
Thallium	2.4 UJ	2.7 U	2.7 U	2.5 UJ	2.3 UJ	2.4 UJ	2.4 UJ	4.7 U	2.4 U	2.4 U
Vanadium	27.1 J	23.8	16.7	27.0 J	9.1 J	7.6 J	39.7 J	25.5	26.9	13.8
Zinc	428 J	231 J	126 J	380 J	61.4 J	43.2 J	220 J	367 J	65.7 J	41.0 J

TABLE 4-13
RI SOIL ANALYTICAL RESULTS, NOVEMBER/DECEMBER 2017 - ALL ANALYTES
WALTON LONSBURY SUPERFUND SITE

Location:	SO-620	SO-621	SO-622	SO-622	SO-623	SO-624	SO-625	SO-626	SO-627	SO-628
Sample ID:	WL-SO-620	WL-SO-621	WL-SO-622	WL-SO-622-CS	WL-SO-623	WL-SO-624	WL-SO-625	WL-SO-626	WL-SO-627	WL-SO-628
Sample Date:	12/4/2017	12/4/2017	12/5/2017	12/5/2017	12/5/2017	12/5/2017	12/6/2017	12/6/2017	12/6/2017	12/6/2017
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
IVBA Lead										
Extractable Lead (mg/kg)	157 J	286 J	135 J	131 J	156 J	103 J	46.8 J	55.1 J	38.8 J	41.6
IVBA Lead (%)	65.4 J	66.8 J	67.8 J	64.5 J	59.3 J	69.1 J	67.8 J	71.8 J	59.8 J	62.6
Lead in Soil < 150 µm (mg/kg)	240	428	199	203	263	149	69.0	76.7	64.9	66.5
Inorganics (mg/kg)										
Aluminum	6810 J	6870 J	7640 J	7280	10000 J	9350 J	9940 J	8710 J	9530 J	9010 J
Antimony	7.8 UJ	5.1 UJ	0.55 JEB	5.8 UJ	0.73 JEB	1.1 JEB	1.4 JEB	1.9 JEB	0.93 JEB	1.2 JEB
Arsenic	2.2	4.6	2.6	3.3 J	5.6	4.4	4.5	3.8	3.7	3.5
Barium	65.8 J	25.6 J	20.1	20.5	46.8	68.0	60.8	57.3	46.7	47.1
Beryllium	0.65 U	0.43 U	0.44 U	0.49 U	0.42	0.44	0.48 U	0.66 U	0.56 U	0.52 U
Cadmium	0.65 U	0.43 U	0.44 U	0.49 U	0.40 U	0.44 U	0.48 U	0.66 U	0.56 U	0.52 U
Calcium	2340 J	1240 J	1260	1200	1250	1590	4410	4130	2720	2700
Chromium	1150 J	57.0 J	35.3 J	39.7	37.8 J	182 J	16.5 J	14.9 J	16.5 J	14.2 J
Chromium, Hexavalent	15.7 J-	1.9 J-	3.7 J	3.9 J	6.0 J	4.7 J	0.52 UJ	0.54 UJ	0.15 J-	1.9 UJ
Cobalt	6.5 UJ	4.5 J	4.4	4.9 U	5.4	4.6	5.4	4.9 J	5.8	4.7 J
Copper	28.7	19.9	15.8	18.5 EB	39.3	27.0	24.2	20.5	19.0	17.3
Iron	13500 J	15500 J	13300 J	13300	17100 J	12100 J	16400 J	13100 J	17000 J	12800 J
Lead	110 J	160 J	75.8	86.6 J	141	73.5	54.5	51.6	40.5	41.2
Magnesium	2610 JEB	2130 JEB	2650 EB	2270	2300 EB	1820 EB	2750 EB	2310 EB	3340 EB	2200 EB
Manganese	219 J	269 J	223	222	262	237	311	282	269	248
Mercury	0.080 J-	0.017 J-	0.071 J-	0.072 J-	0.15	0.14	0.044 J-	0.058 J-	0.044 J-	0.052 J-
Nickel	13.5 J	10.0 J	10.1	9.2	14.2	10.3	11.6	9.8	10.2	9.8
Potassium	653 U	427 U	448	486 U	401 U	439 U	951	908	607	708
Selenium	4.6 UJ	3.0 UJ	3.1 UJ	3.4 U	0.72 J-	0.89 J-	1.0 J-	4.6 UJ	0.80 J-	0.56 J-
Silver	52.6 J	0.83 J	0.35 J+	0.97 U	0.25 J+	0.32 J+	0.96 U	1.3 U	1.1 U	1.0 U
Sodium	653 U	427 U	440 U	486 U	401 U	439 U	482 U	661 U	560 U	525 U
Thallium	3.3 U	2.1 U	2.2 U	0.30 J	2.0 U	2.2 U	2.4 U	3.3 U	2.8 U	2.6 U
Vanadium	14.8	19.3	17.1	18.6	20.1	19.3	23.1	19.5	24.0	20.7
Zinc	73.3 J	51.1 J	41.8 EB	44.9 EB	77.6 EB	85.4 EB	89.6 EB	83.1 EB	69.2 EB	66.2 EB

TABLE 4-13
RI SOIL ANALYTICAL RESULTS, NOVEMBER/DECEMBER 2017 - ALL ANALYTES
WALTON LONSBURY SUPERFUND SITE

Location:	SO-629	SO-630	SO-631	SO-632	SO-633	SO-634	SO-634	SO-635	SO-636	SO-637
Sample ID:	WL-SO-629	WL-SO-630	WL-SO-631	WL-SO-632	WL-SO-633	WL-SO-634	WL-SO-634	WL-SO-635	WL-SO-636	WL-SO-637
Sample Date:	12/6/2017	12/6/2017	12/6/2017	12/6/2017	12/6/2017	12/4/2017	12/6/2017	12/6/2017	12/6/2017	12/6/2017
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
IVBA Lead										
Extractable Lead (mg/kg)	77.9	29.4 J	548 J	53.4 J	33.8 J		3.7 U	147 J	73.2	229
IVBA Lead (%)	70.8	57.1 J	59.5 J	63.9 J	58.2 J		NC	73.5 J	69.7	65.8
Lead in Soil < 150 µm (mg/kg)	110	51.5	921	83.6	58.1		7.7	200	105	348
Inorganics (mg/kg)										
Aluminum	9890 J	4380 J	5870 J	5570 J	4900 J	8090 J		6290 J	6550 JEB	8310 J
Antimony	10.6 U	5.2 U	2.7 JEB	1.5 JEB	6.5 U	6.2 UJ		11.6 UJ	17.2 UJ	6.7 UJ
Arsenic	3.6	2.5	33.7	2.4	3.2	2.0		9.3	6.8	6.0
Barium	96.2	17.2 U	53.9	17.7 U	21.6 U	25.1 J		71.2 J	95.0 J	37.1 J
Beryllium	0.89 U	0.43 U	0.52 U	0.44 U	0.54 U	0.51 U		0.97 U	1.4 U	0.55 U
Cadmium	0.89 U	0.43 U	0.52 U	0.44 U	0.54 U	0.51 U		0.97 U	1.4 U	0.55 U
Calcium	1470	539	1340	747	922	1340 J		2660 J	6450 J	903 J
Chromium	71.9 J	8.9 J	19.6 J	8.7 J	11.2 J	70.4 J		531 J	1150 J	27.6 J
Chromium, Hexavalent	2.9 J	0.81 J-	0.88 J-	0.64 J-	1.3 J-		9.4 J	12.7 J-	20.5 J-	3.2 J-
Cobalt	5.2 J	2.8 J	3.8 J	3.6 J	3.5 J	5.1 UJ		9.7 UJ	14.4 UJ	8.3 J
Copper	30.9	10.8	190	16.2	14.4	10.4		42.5	41.8	74.3
Iron	13600 J	9360 J	20600 J	11500 J	11000 J	13200 J		13100 J	13700 J	20600 J
Lead	96.1	16.9	389	33.2	28.9	9.3 J		127 J	119 J	177 J
Magnesium	1420 EB	1390 EB	1370 EB	1870 EB	1640 EB	1920 JEB		1480 JEB	1750 JEB	2020 JEB
Manganese	97.5	134	179	211	209	161 J		483 J	698 J	271 J
Mercury	0.19 J-	0.0094 J-	0.62	0.11	0.029 J-	0.012 J-		0.36 J-	0.27 J-	0.34 J-
Nickel	13.0	5.5	8.8	7.5	6.3	8.8 J		11.2 J	13.1 J	18.0 J
Potassium	886 U	431 U	516 U	443 U	539 U	514 U		966 U	1440 U	555 U
Selenium	0.94 J-	0.46 J-	4.4 J-	3.1 UJ	3.8 UJ	3.6 UJ		6.8 UJ	10.0 UJ	3.9 UJ
Silver	0.94 J+	0.86 U	0.32 J+	0.89 U	1.1 U	1.0 UJ		0.29 J	0.58 J	0.41 J
Sodium	886 U	431 U	516 U	443 U	539 U	514 U		966 U	1440 U	555 U
Thallium	4.4 U	2.2 U	2.6 U	2.2 U	2.7 U	2.6 U		4.8 U	7.2 U	2.8 U
Vanadium	26.1	13.5	13.3	13.3	15.3	20.9		16.6	22.2	16.9
Zinc	75.4 EB	30.6 EB	149 EB	43.4 EB	66.0 EB	27.9 J		180 J	82.1 J	91.2 J

TABLE 4-13
RI SOIL ANALYTICAL RESULTS, NOVEMBER/DECEMBER 2017 - ALL ANALYTES
WALTON LONSBURY SUPERFUND SITE

Location:	SO-638	SO-639	SO-640	SO-641	SO-642	SO-642	SO-643	SO-644	SO-645	SO-646
Sample ID:	WL-SO-638	WL-SO-639	WL-SO-640	WL-SO-641	WL-SO-642	WL-SO-642-CS	WL-SO-643	WL-SO-644	WL-SO-645	WL-SO-646
Sample Date:	12/7/2017	12/7/2017	12/7/2017	12/7/2017	12/7/2017	12/7/2017	12/6/2017	12/7/2017	12/7/2017	12/7/2017
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
IVBA Lead										
Extractable Lead (mg/kg)	167 J	51.6 J	211	117	1010	1000	276	303	203	356
IVBA Lead (%)	64.5 J	43.0 J	68.5	70.1	75.9	76.3	61.5	75.9	70.2	82.4
Lead in Soil < 150 µm (mg/kg)	259	120	308	167	1330	1310	449	399	289	432
Inorganics (mg/kg)										
Aluminum	8370	6740	9130	12400	8070	8190	8820 J	8600	9670	13000 J
Antimony	5.8 UJ	9.3 UJ	6.8 UJ	6.4 UJ	7.7 UJ	8.7 UJ	8.7 UJ	10.4 UJ	6.6 UJ	20.2 UJ
Arsenic	3.8 J	8.9 J	5.3 J	10.7 J	14.3 J	15.1 J	26.9	5.3 J	4.5 J	13.1 J
Barium	52.4	72.8	105	62.4	618	609	66.5 J	84.8	51.5	138 J
Beryllium	0.49 U	0.77 U	0.56 U	0.53 U	2.4	2.4	0.73 U	0.87 U	0.55 U	1.7 UJ
Cadmium	0.49 U	0.77 U	0.56 U	0.53 U	0.70	0.73 U	0.73 U	0.87 U	0.55 U	1.7 UJ
Calcium	2490	3180	3100	1960	4330	4450	1750 J	2290	1130	7430 J
Chromium	150	87.8	142	27.0	25.8	29.2	813 J	738	83.7	1380 J
Chromium, Hexavalent	34.4 J	0.26 J	1.6 J-	3.3 J	2.3 UJ	1.3 J-	6.4 J	8.3 J-	19.8 J-	14.7 J
Cobalt	5.5	7.7 U	5.6 U	7.0	9.0	9.2	7.3 UJ	8.7 U	5.5 U	16.8 UJ
Copper	27.4 EB	20.0 EB	79.0 EB	21.0 EB	127 EB	102 EB	45.4	58.3 EB	39.9 EB	187 JEB
Iron	17100	36800	12700	19000	12700	16400	14900 J	15100	17300	23200 J
Lead	133 J	115 J	243 J	128 J	836 J	700 J	429 J	389 J	226 J	694 J
Magnesium	2590	2220	1860	3070	1030	850	1820 JEB	2010	2300	3070 J
Manganese	445	975	475	396	253	200	940 J	447	177	354 J
Mercury	0.091 J-	0.11 J-	0.23	0.087 J-	0.089 J-	0.069 J-	0.31 J-	0.39	0.62	0.49 J
Nickel	12.1	11.3	12.0	14.3	27.5	26.2	12.8 J	20.2	12.3	23.0 J
Potassium	485 U	771 U	564 U	530 U	644 U	726 U	727 U	866 U	551 U	1680 UJ
Selenium	0.45 J	0.70 J	1.1 J	1.2 J	0.89 J	1.4 J	5.1 UJ	0.60 J	1.3 J	3.1 J
Silver	0.97 U	1.5 U	1.1 U	1.1 U	1.3 U	1.5 U	11.6 J	33.3	3.4	22.9 J
Sodium	485 U	771 U	564 U	530 U	644 U	726 U	727 U	866 U	551 U	1680 UJ
Thallium	0.55 J	0.36 J	0.24 J	0.23 J	0.43 J	0.57 J	3.6 U	4.3 U	0.32 J	0.82 J
Vanadium	18.5	22.9	17.2	22.2	28.9	25.2	26.9	29.1	23.9	67.4 J
Zinc	168 EB	156 EB	271 EB	198 EB	210 EB	195 EB	86.8 J	104 EB	67.9 EB	128 JEB

TABLE 4-13
RI SOIL ANALYTICAL RESULTS, NOVEMBER/DECEMBER 2017 - ALL ANALYTES
WALTON LONSBURY SUPERFUND SITE

Location:	SO-647	SO-648
Sample ID:	WL-SO-647	WL-SO-648
Sample Date:	12/7/2017	12/7/2017
Sample Depth:	0-0.5 (ft bgs)	0-0.5 (ft bgs)
Sample Type:	Field Sample	Field Sample
Parameter		
IVBA Lead		
Extractable Lead (mg/kg)	277	262
IVBA Lead (%)	90.2	91.6
Lead in Soil < 150 µm (mg/kg)	307	286
Inorganics (mg/kg)		
Aluminum	19700 J	2870 J
Antimony	27.9 UJ	26.7 UJ
Arsenic	7.4 J	5.1 J
Barium	189 J	203 J
Beryllium	2.3 UJ	2.2 UJ
Cadmium	2.3 UJ	2.2 UJ
Calcium	6500 J	11200 J
Chromium	601 J	323 J
Chromium, Hexavalent	10.9 J	16.1 J
Cobalt	23.3 UJ	22.2 UJ
Copper	110 JEB	50.9 JEB
Iron	12500 J	13200 J
Lead	485 J	181 J
Magnesium	2350 J	2220 UJ
Manganese	115 J	207 J
Mercury	0.86 J	0.28 J
Nickel	24.6 J	17.8 UJ
Potassium	2330 UJ	2220 UJ
Selenium	2.2 J	15.6 UJ
Silver	17.5 J	5.5 J
Sodium	2330 UJ	2220 UJ
Thallium	1.7 J	0.71 J
Vanadium	61.3 J	22.2 UJ
Zinc	161 JEB	216 JEB

Table 4-14. Reasonable Maximum Exposure Concentrations for Reference Soil Samples: Chromium, Lead, Silver, Copper, and PAHs (from Table 18 of BERA)

Chemical	RME Concentration (mg/kg)
Chromium (total)	16
Lead	101
Silver	3.4
Copper	40
Polyaromatic Hydrocarbons (PAHs):	
Benzo(a)anthracene	0.39
Benzo(a)pyrene	0.44
Benzo(b)fluoranthene	1.1
Benzo(g,h,i)perylene	0.56
Benzo(k)fluoranthene	0.37
Chrysene	0.64
Fluorene	0.020
Indeno(1,2,3-cd)pyrene	0.66
Pyrene	0.69
Total PAHs (sum of above individual compounds):	4.87

Table 4-15

December 2017 Surface Soil Sampling for Lead Risk Evaluation:

Results for Total Lead, IVBA Lead, and Total Chromium

Location\AECOM ID	Total Lead, Whole Sample (Not Sieved), dry weight (mg/Kg)		Results for Fine Fraction (< 150 µm) Samples: Total Lead, dry weight (mg/Kg)		Extractable Lead, dry weight (mg/Kg)		IVBA Lead, %	Total Chromium, Whole Sample (Not Sieved), dry weight (mg/Kg)	
	Result	Qualifier	Result	Qualifier	Result	Qualifier		Result	Qualifier
Exposure Point: Residential Area West of North Avenue									
SO-605	57		109		73.2	J	67.2	16.9	J
SO-606	163		163		107	J	65.6	72.7	J
SO-612	225	J	478		364	J	76.2	42.1	J
SO-611	549	J	474		384	J	81	70.1	J
SO-618	74.9	J	118		84.9	J	71.9	207	J
SO-617	554	J	705		432	J	61.3	882	J
SO-624	73.5		149		103	J	69.1	182	J
SO-622 (FD)	86.6	J	199		135	J	67.8	39.7	
SO-622 (FD)	75.8		203		131	J	64.5	35.3	J
SO-623	141		263		156	J	59.3	37.8	J
SO-619	59.4	J	111		67	J	60.4	15.0	J
SO-621	160	J	428		286	J	66.8	57.0	J
SO-603	76.1		55.7		36.7	J	65.9	22.2	J
Average	185		271						
Exposure Point: Southern Wetland									
SO-609	23.8	J	1820		75.3	J	4.1	96.0	J
SO-613	323	J	474		277	J	58.4	10300	J
SO-614	51.8	J	50.8		71.6	J	NC	99.0	J
SO-616	369	J	357		220	J	61.6	14400	J
SO-615	43.3	J	36.1		26.2	J	72.6	98.8	J
SO-620	110	J	240		157	J	65.4	1150	J
SO-610	301	J	214		163	J	76.2	3790	J
SO-607	59.1	J	56.9		39.3	J	69.1	18.9	J
SO-602 (FD)	207		135		85.5	J	63.3	16000	J
SO-602 (FD)	138	J	144		93.4	J	64.9	35.0	J
SO-601	184		220		142	J	64.5	14400	J
SO-604	157		290		226	J	77.9	15.9	J
SO-608	142		113		81.5	J	72.1	329	J
Average*	174		199						
Exposure Point: Residential Area East of North Avenue									
SO-628	41.2		66.5		41.6		62.6	14.2	J
SO-635	127	J	200		147	J	73.5	531	J
SO-632	33.2		83.6		53.4	J	63.9	8.7	J
SO-630	16.9		51.5		29.4	J	57.1	8.9	J
SO-634	9.3	J	7.7		3.7	U	--	70.4	J
SO-639	115	J	120		51.6	J	43	87.8	
SO-638	133	J	259		167	J	64.5	150	
SO-640	243	J	308		211		68.5	142	
SO-642 (FD)	836	J	1330		1010		75.9	25.8	
SO-642 (FD)	700	J	1310		1000		76.3	29.2	
SO-627	40.5		64.9		38.8	J	59.8	16.5	J
SO-626	51.6		76.7		55.1	J	71.8	14.9	J
SO-625	54.5		69		46.8	J	67.8	16.5	J
Average	136		219						
Exposure Point: Bliss Brook									
SO-643	429	J	449		276		61.5	813	J
SO-645	226	J	289		203		70.2	83.7	
SO-631	389		921		548	J	59.5	19.6	J
SO-633	28.9		58.1		33.8	J	58.2	11.2	J
SO-637	177	J	348		229		65.8	27.6	J
SO-641	128	J	167		117		70.1	27.0	

Table 4-15

December 2017 Surface Soil Sampling for Lead Risk Evaluation:

Results for Total Lead, IVBA Lead, and Total Chromium

Location\AECOM ID	Total Lead, Whole Sample (Not Sieved), dry weight (mg/Kg)		Results for Fine Fraction (< 150 µm) Samples					Total Chromium, Whole Sample (Not Sieved), dry weight (mg/Kg)	
			Total Lead, dry weight (mg/Kg)		Extractable Lead, dry weight (mg/Kg)		IVBA Lead, %		
	Result	Qualifier	Result	Qualifier	Result	Qualifier		Result	Qualifier
SO-648	181	J	286		262		91.6	323	J
SO-646	694	J	432		356		82.4	1380	J
SO-647	485	J	307		277		90.2	601	J
SO-629	96.1		110		77.9		70.8	71.9	J
SO-636	119	J	105		73.2		69.7	1150	J
SO-644	389	J	399		303		75.9	738	
Average	279		323						

NC = Lab notation, assumed to mean that the extractable lead result > lead in soil result, therefore Not Calculated.

-- = Not determinable because extractable lead was not detected.

IVBA = In Vitro Bioaccessibility, calculated as Extractable Lead/Total Lead x 100 (expressed as a percentage)

mg/Kg = milligram per kilogram

FD = Field duplicate collected at this location.

Qualifier = qualifier applied by AECOM during data validation:

J = result is estimated due to limitations identified in the data validation memorandum

U = not detected; reported value is the reporting limit

*Average for Southern Wetland excludes SO-609. This location is evaluated separately in the HHRA.

Total lead (unsieved sample) concentration exceeds the RME concentration for soil samples from reference areas (101 mg/kg).

Total chromium (unsieved sample) concentration exceeds the RME concentration for soil samples from reference areas (16 mg/kg).

Table 4-16

December 2017 and October 2018 Surface Soil Sampling for Lead Risk Evaluation

Residential Area West of North Avenue:

Results for Total Lead, Total Chromium, and Total Fine Fraction Lead for Residential Soil Samples

Location/ID	Soil Sample Type	Total Lead, Whole Sample (Not Sieved), dry weight (mg/Kg)		Results for Fine Fraction (< 150 µm) Samples: Total Lead, dry weight (mg/Kg)		Total Chromium, Whole Sample (Not Sieved), dry weight (mg/Kg)	
		Result	Qualifier	Result	Qualifier	Result	Qualifier
60 North Avenue							
SO-605	residential above flood plain	57		109		16.9	J
SO-606	residential flood plain	163		163		72.7	J
48 North Avenue							
48NO-01	residential flood plain	383		372		26.7	J
48NO-02	residential flood plain	153		280		16.8	J
48NO-03	residential flood plain	663		781		30	J
48NO-04	residential flood plain	191		163		47.7	J
48NO-05	residential flood plain	214	J	241		22.5	
Mass Electric Parcel							
ME-01	residential flood plain	345	J	490		21	
ME-02	residential flood plain	520	J	790		57.3	
42 North Avenue							
42NO-01	residential flood plain	192		369		33.1	J
42NO-02 (FD)	residential flood plain	228		397		23.5	J
42NO-02 (FD)	residential flood plain	178		411		17.5	J
42NO-03	residential flood plain	202		409		16.1	J
42NO-04	residential flood plain	194		511		18.8	J
SO-611	residential flood plain	549	J	474		70.1	J
SO-612	residential flood plain	225	J	478		42.1	J
34 North Avenue							
34NO-01	residential flood plain	318	J	471		40.1	
34NO-02 (FD)	residential flood plain	50.0		109		14.1	J
34NO-02 (FD)	residential flood plain	49.3		90.8		15	J
34NO-03	residential flood plain	200		472		104	J
34NO-04	residential flood plain	145		303		12.5	J
SO-617	residential flood plain	554	J	705		882	J
SO-618	residential above flood plain	74.9	J	118		207	J
SO-619	residential above flood plain	59.4	J	111		15.0	J
SO-621	residential above flood plain	160	J	428		57.0	J
10 Deanville Road							
10DE-01	residential flood plain	46.2	J	89.1		14.5	
10DE-02	residential flood plain	81.5	J	172		18.2	
10DE-03	residential flood plain	141	J	272		54.9	
10DE-04	residential flood plain	169	J	308		39.3	
10DE-05	residential flood plain	63.5	J	142		42	
10DE-06	residential flood plain	62.9	J	136		27.4	

Table 4-16

December 2017 and October 2018 Surface Soil Sampling for Lead Risk Evaluation

Residential Area West of North Avenue:

Results for Total Lead, Total Chromium, and Total Fine Fraction Lead for Residential Soil Samples

Location/ID	Soil Sample Type	Total Lead, Whole Sample (Not Sieved), dry weight (mg/Kg)		Results for Fine Fraction (< 150 µm) Samples: Total Lead, dry weight (mg/Kg)		Total Chromium, Whole Sample (Not Sieved), dry weight (mg/Kg)	
		Result	Qualifier	Result	Qualifier	Result	Qualifier
10DE-07	residential flood plain	59.7	J	89.8		20.9	
10DE-08	residential flood plain	101	J	172		18.9	
10DE-09	residential flood plain	98.1	J	220		17.7	
10DE-10	residential flood plain	568	J	1240		42.8	
10DE-11	residential flood plain	84.2	J	198		34.6	
10DE-12	residential flood plain	73.3	J	131		15.9	
SO-622 (FD)	residential flood plain	86.6	J	199		39.7	
SO-622 (FD)	residential flood plain	75.8		203		35.3	J
SO-623	residential flood plain	141		263		37.8	J
28 North Avenue							
28NO-01	residential flood plain	682	J	1170		35	
28NO-02	residential flood plain	90.2	J	127		22.1	
28NO-03	residential flood plain	68.3		162		11.5	J
28NO-04	residential flood plain	40.6		68.5		14.7	J
28NO-05	residential flood plain	79.9		124		40.1	J
28NO-06	residential flood plain	192		360		24.9	J
28NO-07	residential flood plain	68.9		126		23.7	J
28NO-08	residential flood plain	100		228		27.9	J
28NO-09	residential flood plain	170		358		145	J
SO-624	residential flood plain	73.5		149		182	J

mg/Kg = milligram per kilogram

FD = Field duplicate collected at this location.

Qualifier = qualifier applied by AECOM during data validation:

J = result is estimated due to limitations identified in the data validation memorandum

U = not detected; reported value is the reporting limit

Total lead (fine fraction) concentration exceeds the screening value for residential soil (200 mg/kg). Not flagged if sample is not residential soil (that is, if sample is wetland soil), as the screening value does not apply to wetland soil.

Total chromium (unsieved sample) concentration exceeds the RME exposure point concentration for soil samples from reference areas (16 mg/kg) as calculated in the BERA.

TABLE 4-17
SOIL ANALYTICAL RESULTS FOR SELECTED CHLORINATED VOCs
WALTON & LONSBURY SUPERFUND SITE

Location:	P-78-SB-03	P-78-SB-03	P-78-SB-03	P-78-SB-09	P-78-SB-09	P-78-SB-09
Sample ID:	P-78-SB-03A	P-78-SB-03B	P-78-SB-03C	P-78-SB-09A	P-78-SB-09B	P-78-SB-09C
Sample Date:	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter						
VOCs (ug/kg)						
1,1,1-Trichloroethane	7.4	8.9	20	33	22	78
1,1-Dichloroethane	3.9 U	3.0 U	3.8 U	10	25	65
Chloroethane	3.9 U	3.0 U	3.8 U	5.9 U	5.6 U	9.7
cis-1,2-Dichloroethene	3.9 U	3.0 U	3.8 U	5.9 U	5.6 U	5.3 U
Tetrachloroethene	2.8 J	3.0 U	6.1	5.9 U	5.6 U	5.3 U
Trichloroethene	3.9 U	3.0 U	3.8 U	5.9 U	7.5	5.3 U
Total cVOCs*	10.2	8.9	26.1	43.0	54.5	152.7

*Total of above-listed VOCs, with non-detected results assigned a value of zero.
U - not detected; value is the reporting limit
J - estimated value
R - result was rejected

TABLE 4-17
SOIL ANALYTICAL RESULTS FOR SELECTED CHLORINATED VOCs
WALTON & LONSBURY SUPERFUND SITE

Location:	P-78-SB-14	P-78-SB-14	P-78-SB-14	P-78-SB-19	P-78-SB-19	P-78-SB-19
Sample ID:	P-78-SB-14A	P-78-SB-14B	P-78-SB-14C	P-78-SB-19A	P-78-SB-19B	P-78-SB-19C
Sample Date:	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010	12/15/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter						
VOCs (ug/kg)						
1,1,1-Trichloroethane	5.9 U	3.2 J	4.8 U	4.3 U	4.1 U	5.5
1,1-Dichloroethane	5.9 U	4.3 U	5.0	4.3 U	4.1 U	5.1
Chloroethane	5.9 U	4.3 U	4.8 U	4.3 U	4.1 U	4.0 U
cis-1,2-Dichloroethene	5.6 J	5.2	43	4.3 U	4.1 U	4.2
Tetrachloroethene	5.9 U	4.3 U	3.0 J	4.3 U	4.1 U	4.0 U
Trichloroethene	48	110	850	53	27	46
Total cVOCs*	53.6	118.4	901.0	53.0	27.0	60.8

*Total of above-listed VOCs, with non-detected results assigned a value of zero.
U - not detected; value is the reporting limit
J - estimated value
R - result was rejected

TABLE 4-17
SOIL ANALYTICAL RESULTS FOR SELECTED CHLORINATED VOCs
WALTON & LONSBURY SUPERFUND SITE

Location:	P-78-SB-24	P-78-SB-24	P-78-SB-24	P-78-SB-29	P-78-SB-29	P-78-SB-29
Sample ID:	P-78-SB-24A	P-78-SB-24B	P-78-SB-24C	P-78-SB-29A	P-78-SB-29B	P-78-SB-29C
Sample Date:	12/15/2010	12/15/2010	12/15/2010	12/16/2010	12/16/2010	12/16/2010
Sample Depth:	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)	0-0.5 (ft bgs)	0.75-1.25 (ft bgs)	1.5-2 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter						
VOCs (ug/kg)						
1,1,1-Trichloroethane	7.1 U	4.2 U	9.5	5.5 U	18	15
1,1-Dichloroethane	7.1 U	4.2 U	7.2 U	5.5 U	5.9	5.0
Chloroethane	7.1 U	4.2 U	7.2 U	5.5 U	3.6 U	3.3 U
cis-1,2-Dichloroethene	7.1 U	4.2 U	7.2 U	5.5 U	4.7	4.6
Tetrachloroethene	7.1 U	4.2 U	7.2 U	5.5 U	3.6 U	3.3 U
Trichloroethene	7.1 U	3.8 J	11	8.0	18	18
Total cVOCs*	ND	3.8	20.5	8.0	46.6	42.6

*Total of above-listed VOCs, with non-detected results assigned a value of zero.
U - not detected; value is the reporting limit
J - estimated value
R - result was rejected

TABLE 4-17
SOIL ANALYTICAL RESULTS FOR SELECTED CHLORINATED VOCs
WALTON & LONSBURY SUPERFUND SITE

Location:	SO-102	SO-105	SO-105	SO-106	SO-107	SO-107
Sample ID:	WL-SO-102-0.5-1.5	WL-SO-105-0.5-1.5	WL-SO-105-09-10	WL-SO-106-0.5-1.5	WL-SO-107-0.5-1.5	WL-SO-107-05-06
Sample Date:	6/18/2014	6/17/2014	6/17/2014	6/18/2014	6/18/2014	6/18/2014
Sample Depth:	0.5-1.5 (ft bgs)	0.5-1.5 (ft bgs)	9-10 (ft bgs)	0.5-1.5 (ft bgs)	0.5-1.5 (ft bgs)	5-6 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter						
VOCs (ug/kg)						
1,1,1-Trichloroethane	6.9 U	5.4 U	5.2 U	5.7 U	5.2 U	5.5 U
1,1-Dichloroethane	R	5.4 U	5.2 U	5.7 U	5.2 U	5.5 U
Chloroethane	6.9 U	5.4 U	5.2 U	5.7 U	5.2 U	5.5 U
cis-1,2-Dichloroethene	6.9 U	5.4 U	5.2 U	5.7 U	5.2 U	5.5 U
Tetrachloroethene	6.9 U	0.39 J	5.2 U	0.56 J	5.2 U	5.5 U
Trichloroethene	41	5.4 U	5.2 U	4.9 J	5.2 U	0.38 J
Total cVOCs*	41.0	0.39	ND	5.46	ND	0.38

*Total of above-listed VOCs, with non-detected results assigned a value of zero.
U - not detected; value is the reporting limit
J - estimated value
R - result was rejected

TABLE 4-17
SOIL ANALYTICAL RESULTS FOR SELECTED CHLORINATED VOCs
WALTON & LONSBURY SUPERFUND SITE

Location:	SO-108	SO-109	SO-110	SO-116	SO-148	SO-150
Sample ID:	WL-SO-108-08-10	WL-SO-109-00-01	WL-SO-110-00-01	WL-SO-116-00-01	WL-SO-148-0.5-1.5	WL-SO-150-5.4-6.4
Sample Date:	6/18/2014	6/26/2014	6/26/2014	6/17/2014	6/19/2014	6/19/2014
Sample Depth:	8-10 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0.5-1.5 (ft bgs)	5.4-6.4 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter						
VOCs (ug/kg)						
1,1,1-Trichloroethane	5.5 U	17 U	8.2 U	8.7 U	24 J	8.6 U
1,1-Dichloroethane	5.5 U	17 U	8.2 U	8.7 U	320 U	8.6 U
Chloroethane	5.5 U	17 U	8.2 U	8.7 U	320 U	8.6 U
cis-1,2-Dichloroethene	1.2 J	17 U	0.51 J	8.7 U	320 U	0.68 J
Tetrachloroethene	5.5 U	17 U	8.2 U	8.7 U	320 U	8.6 U
Trichloroethene	0.97 J	0.67 J	8.2 U	0.54 J	18 J	8.6 U
Total cVOCs*	2.17	0.67	0.51	0.54	42.0	0.68

*Total of above-listed VOCs, with non-detected results assigned a value of zero.
U - not detected; value is the reporting limit
J - estimated value
R - result was rejected

Table 4-18. Reasonable Maximum Exposure Concentrations for Reference Sediment Samples: Chromium, Lead, Silver, Copper, and PAHs (from Table 11 of BERA)

Chemical	RME Concentration (mg/kg)
Chromium	23
Lead	212
Silver	24
Copper	399
Polyaromatic Hydrocarbons (PAHs):	
2-Methylnaphthalene	0.046
Acenaphthene	0.098
Acenaphthylene	0.11
Anthracene	0.37
Benzo(a)anthracene	2.6
Benzo(a)pyrene	1.8
Benzo(b)fluoranthene	3.4
Benzo(g,h,i)perylene	1.3
Benzo(k)fluoranthene	1.2
Chrysene	2.1
Dibenz(a,h)anthracene	0.47
Fluoranthene	4.1
Fluorene	0.11
Indeno(1,2,3-cd)pyrene	1.6
Phenanthrene	2.5
Pyrene	3.3
Total PAHs (sum of above individual compounds):	25.1

TABLE 4-19
RI SEDIMENT ANALYTICAL RESULTS, PHASE 1 - CHLORINATED VOCS
WALTON & LONSBURY SUPERFUND SITE

Site Property and Southern Wetland

Location:	SD-201	SD-201	SD-202	SD-203	SD-204	SD-205
Sample ID:	WL-SD-201	WL-SD-201D	WL-SD-202	WL-SD-203	WL-SD-204	WL-SD-205
Sample Date:	6/18/2014	6/18/2014	7/1/2014	6/19/2014	6/25/2014	6/25/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Parameter						
Chlorinated VOCs (ug/kg)						
1,1,1-Trichloroethane	7.7 U	6.3 U	14 U	5.9 U	42 UJ	21 UJ
1,1-Dichloroethane	7.7 U	6.3 U	14 U	5.9 U	42 UJ	21 UJ
1,1-Dichloroethene	7.7 U	6.3 U	14 U	5.9 U	42 UJ	21 UJ
Chloroform	7.7 U	6.3 U	14 U	5.9 U	42 UJ	21 UJ
cis-1,2-Dichloroethene	7.7 U	6.3 U	14 U	5.9 U	42 UJ	21 UJ
Trichloroethene	7.7 U	6.3 U	14 U	5.9 U	42 UJ	21 UJ
Total chlorinated VOCs	ND	ND	ND	ND	ND	ND

Bliss Brook

Location:	SD-208	SD-209	SD-210	SD-211	SD-212	SD-213	SD-214	SD-215	SD-216	SD-217	SD-218
Sample ID:	WL-SD-208	WL-SD-209	WL-SD-210	WL-SD-211	WL-SD-212	WL-SD-213	WL-SD-214	WL-SD-215	WL-SD-216	WL-SD-217	WL-SD-218
Sample Date:	6/20/2014	6/20/2014	6/25/2014	6/25/2014	6/24/2014	6/24/2014	6/24/2014	6/24/2014	6/24/2014	6/24/2014	6/27/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter											
Chlorinated VOCs (ug/kg)											
1,1,1-Trichloroethane	R	21 UJ	8.4 U	210 J	14 U	6.0 U	29 UJ	6.6 U	5.6 U	6.5 U	6.3 U
1,1-Dichloroethane	15 U	21 UJ	8.4 U	130 J	14 U	6.0 U	2.0 J	6.6 U	5.6 U	6.5 U	6.3 U
1,1-Dichloroethene	15 U	21 UJ	8.4 U	120 J	14 U	6.0 U	29 UJ	6.6 U	5.6 U	6.5 U	6.3 U
Chloroform	15 U	21 UJ	8.4 U	30 JEB	14 U	6.0 U	29 UJ	6.6 U	5.6 U	6.5 U	6.3 U
cis-1,2-Dichloroethene	15 U	1.0 J	8.4 U	250 J	14 U	6.0 U	29 UJ	6.6 U	5.6 U	6.5 U	6.3 U
Trichloroethene	R	21 UJ	8.4 U	950	1.5 J	0.18 J	6.1 J	6.6 U	0.13 J	6.5 U	6.3 U
Total chlorinated VOCs	ND	1.0	ND	1690	1.5	0.18	8.1	ND	0.13	ND	ND

Mechanics Pond and Bungay River

Location:	SD-219	SD-221	SD-221	SD-222	SD-223	SD-224	SD-225	SD-226	SD-227	SD-228
Sample ID:	WL-SD-219	WL-SD-221	WL-SD-221D	WL-SD-222	WL-SD-223	WL-SD-224	WL-SD-225	WL-SD-226	WL-SD-227	WL-SD-228
Sample Date:	7/1/2014	6/27/2014	6/27/2014	6/27/2014	7/1/2014	7/1/2014	6/27/2014	7/1/2014	7/1/2014	6/27/2014
Sample Depth:	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)	0-1 (ft bgs)
Sample Type:	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Chlorinated VOCs (ug/kg)										
1,1,1-Trichloroethane	17 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	6.1 U	35 UJ	7.0 U	8.3 U
1,1-Dichloroethane	17 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	6.1 U	35 UJ	7.0 U	8.3 U
1,1-Dichloroethene	17 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	6.1 U	35 UJ	7.0 U	8.3 U
Chloroform	17 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	6.1 U	35 UJ	7.0 U	8.3 U
cis-1,2-Dichloroethene	17 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	6.1 U	35 UJ	7.0 U	8.3 U
Trichloroethene	17 UJ	9.6 U	10 U	9.0 U	12 U	20 UJ	6.1 U	35 UJ	7.0 U	8.3 U
Total chlorinated VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Detected concentration

TABLE 4-20
GROUNDWATER ELEVATIONS FOR ALL RI PHASES
Walton & Lonsbury Superfund Site
Attleboro, Massachusettes

Well No.	ELEVATION MP (circa 2016 survey)	ELEVATION MP (2018 Comprehensive Survey)	CHANGE IN MP ELEVATION (from 2016 to 2018)[5]	PHASE 1 - AUGUST 2014[3] DEPTH TO WATER BELOW MP	PHASE 1 - AUGUST 2014[3] GROUND WATER ELEVATION	PHASE 2 - DECEMBER 2014[3] DEPTH TO WATER BELOW MP	PHASE 2 - DECEMBER 2014[3] GROUND WATER ELEVATION	PHASE 3 - SEPTEMBER 2015[3] DEPTH TO WATER BELOW MP	PHASE 3 - SEPTEMBER 2015[3] GROUND WATER ELEVATION	PHASE 5 - JANUARY 2018 POST SURVEY DEPTH TO WATER BELOW MP	PHASE 5 - JANUARY 2018 POST SURVEY GROUND WATER ELEVATION	PHASE 5 - 4/5/2018 DEPTH TO WATER BELOW MP	PHASE 5 - 4/5/2018 GROUND WATER ELEVATION
	(ft. NAVD88) - 2016	(ft. NAVD88) - 2018	(ft.)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)
Wells Installed By AECOM During Phase 1, 2, & 3													
AE-01S	131.19	131.21	-0.02	7.36	123.85	6.43	124.78	7.57	123.64	5.64	125.57	6.09	125.12
AE-01D	131.15	131.13	0.02	7.08	124.05	6.18	124.95	7.35	123.78	5.49	125.64	5.09	126.04
AE-01B	131.44	131.46	-0.02	7.33	124.13	6.42	125.04	7.54	123.92	5.74	125.72	6.13	125.33
AE-02B	131.70	131.72	-0.02	7.10	124.62	6.30	125.42	7.48	124.24	5.81	125.91	6.14	125.58
AE-03B	128.04	128.04	0.00	4.69	123.35	4.05	123.99	4.91	123.13	3.69	124.35	3.76	124.28
AE-04S	132.48	132.51	-0.03	9.99	122.52	8.95	123.56	10.24	122.27	8.28	124.23	8.91	123.60
AE-04D	132.70	132.71	-0.01	10.21	122.50	9.40	123.31	10.44	122.27	9.12	123.59	9.28	123.43
AE-04B	132.53	132.53	0.00	10.07	122.46	9.24	123.29	10.31	122.22	8.96	123.57	9.11	123.42
AE-05B	129.16	129.20	-0.04	9.53	119.67	8.02	121.18	10.18	119.02	7.87	121.33	7.98	121.22
AE-06B	126.43	126.51	-0.08	7.31	119.20	5.94	120.57	7.77	118.74	5.83	120.68	5.85	120.66
AE-07D	122.33	122.38	-0.05	3.51	118.87	2.24	120.14	4.01	118.37	2.16	120.22	2.21	120.17
AE-07B	122.36	122.45	-0.09	3.55	118.90	2.27	120.18	3.91	118.54	2.29	120.16	2.15	120.30
AE-08D	121.22	121.20	0.02	2.01	119.19	0.73	120.47	2.53	118.67	0.65	120.55	0.64	120.56
AE-08B	121.41	121.38	0.03	2.18	119.20	0.88	120.50	2.73	118.65	0.86	120.52	0.82	120.56
AE-09S	131.68	131.64	0.04	9.42	122.22	8.45	123.19	-	-	7.91	123.73	8.33	123.31
AE-10S	130.39	130.38	0.01	8.06	122.32	7.21	123.17	8.31	122.07	6.85	123.53	7.06	123.32
AE-11B	129.94	129.96	-0.02	-	-	8.51	121.45	10.81	119.15	8.36	121.60	8.56	121.40
AE-12B	123.47	123.47	0.00	-	-	3.14	120.33	4.91	118.56	3.13	120.34	3.07	120.40
AE-13B	120.89	120.93	-0.04	-	-	0.90	120.03	2.63	118.30	0.74	120.19	0.80	120.13
AE-14D	131.50	131.53	-0.03	-	-	11.22	120.31	13.01	118.52	11.06	120.47	11.15	120.38
AE-14B	131.29	131.30	-0.01	-	-	10.98	120.32	12.79	118.51	10.81	120.49	10.91	120.39
AE-15S	133.58	133.63	-0.05	-	-	10.87	122.76	13.42	120.21	10.5	123.13	10.69	122.94
AE-15D	133.77	133.82	-0.05	-	-	10.84	122.98	13.65	120.17	10.78	123.04	10.92	122.90
AE-15B	133.78	133.83	-0.05	-	-	10.5	123.33	13.68	120.15	10.83	123.00	10.96	122.87
AE-16S	128.64	128.65	-0.01	-	-	8.51	120.14	10.23	118.42	8.34	120.31	8.45	120.20
AE-17S	128.27	128.28	-0.01	-	-	8.41	119.87	10.11	118.17	2.01	126.27	1.85	126.43
AE-18S	131.93	131.96	-0.03	-	-	11.68	120.28	13.5	118.46	11.65	120.31	11.59	120.37
AE-19S	136.46	-	-	-	-	16.09	120.37	Destroyed	-	Destroyed	-	Destroyed	-
AE-20B	134.79	134.77	0.02	-	-	14.40	120.37	16.31	118.46	14.48	120.29	14.30	120.47
Multilevel Bedrock Wells Installed By AECOM During Phase 3													

TABLE 4-20
GROUNDWATER ELEVATIONS FOR ALL RI PHASES
Walton & Lonsbury Superfund Site
Attleboro, Massachusettes

Well No.		ELEVATION MP (circa 2016 survey)	ELEVATION MP (2018 Comprehensive Survey)	CHANGE IN MP ELEVATION (from 2016 to 2018)[5]	PHASE 1 - AUGUST 2014[3]		PHASE 2 - DECEMBER 2014[3]		PHASE 3 - SEPTEMBER 2015[3]		PHASE 5 - JANUARY 2018 POST SURVEY		PHASE 5 - 4/5/2018	
					DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION
		(ft. NAVD88) - 2016	(ft. NAVD88) - 2018	(ft.)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)
AE-	**ML-01A**	130.90	131.11	**-0.21**	-	-	-	-	7.14	123.97	5.27	125.84	5.46	125.65
AE-	**ML-01B**	130.90	131.11	**-0.21**	-	-	-	-	7.60	123.51	5.53	125.58	5.76	125.35
AE-	**ML-01C**	130.90	131.11	**-0.21**	-	-	-	-	7.68	123.43	5.57	125.54	5.82	125.29
AE-	**ML-01D**	130.90	131.11	**-0.21**	-	-	-	-	7.88	123.23	5.80	125.31	6.11	125.00
AE-	**ML-02**	132.16	132.17	-0.01	-	-	-	-	9.67	122.50	8.48	123.69	8.54	123.63
AE-	**ML-03A**	123.44	123.42	0.02	-	-	-	-	5.04	118.38	3.20	120.22	3.00	120.42
AE-	**ML-03B**	123.44	123.42	0.02	-	-	-	-	5.03	118.39	3.03	120.39	2.99	120.43
AE-	**ML-03C**	123.44	123.42	0.02	-	-	-	-	5.04	118.38	3.11	120.31	2.99	120.43
AE-	**ML-03D**	123.44	123.42	0.02	-	-	-	-	5.08	118.34	3.12	120.30	3.00	120.42
AE-	**ML-04A**	125.35	125.34	0.01	-	-	-	-	6.40	118.94	4.32	121.02	4.32	121.02
AE-	**ML-04B**	125.35	125.34	0.01	-	-	-	-	6.36	118.98	4.33	121.01	4.33	121.01
AE-	**ML-04C**	125.35	125.34	0.01	-	-	-	-	6.41	118.93	4.38	120.96	4.37	120.97
AE-	**ML-04D**	125.35	125.34	0.01	-	-	-	-	6.43	118.91	4.41	120.93	4.39	120.95
AE-	**ML-04E**	125.38	125.39	-0.01	-	-	-	-	6.69	118.70	4.75	120.64	4.72	120.67
Piezometers, Surface Water Staff Gauges, and Permeable Reactive Barrier Wells Installed By AECOM During Phase 3 and Phase 5														
SG-	**1**	124.98	125.87	-	-	-	-	-	2.93	122.05	0.88	123.42	0.93	123.47
SG-	**2**	125.70	125.63	-	-	-	-	-	dry	-	1.12	123.42	1.17	123.47
SG-	**3**	122.75	124.13	-	-	-	-	-	dry	-	1.78	122.58	2.12	122.92
SG-	**4**	120.94	121.21	-	-	-	-	-	2.85	118.09	0.6	118.48	0.62	118.50
SG-	**5**	119.07	119.31	-	-	-	-	-	1.40	117.67	2.39	118.37	2.43	118.41
SG-	**6**	120.69	120.81	-	-	-	-	-	2.41	118.28	1.4	118.88	1.48	118.96
SG-	**7**		125.27	-	-	-	-	-	-	-	1.48	123.42	-	-
SG-	**8**		125.15	-	-	-	-	-	-	-	1.17	122.99	1.28	123.10
SG-	**10**		121.32	-	-	-	-	-	-	-	0.75	118.74	0.82	118.81
SG-	**11**		121.15	-	-	-	-	-	-	-	0.85	118.67	0.96	118.78
PZ-	**1**	-	126.46	-	-	-	-	-	-	-	3.01	123.45	2.92	123.54
PZ-	**2**	-	126.51	-	-	-	-	-	-	-	2.87	123.64	2.79	123.72
PZ-	**3**	-	124.63	-	-	-	-	-	-	-	2.24	122.39	1.92	122.71
PZ-	**4**	-	121.64	-	-	-	-	-	-	-	1.94	119.70	1.98	119.66
PZ-	**5**	-	120.86	-	-	-	-	-	-	-	2.40	118.46	2.49	118.37
PZ-	**6**	-	121.43	-	-	-	-	-	-	-	2.56	118.87	2.41	119.02

TABLE 4-20
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Attleboro, Massachusettes

Well No.		ELEVATION MP (circa 2016 survey)	ELEVATION MP (2018 Comprehensive Survey)	CHANGE IN MP ELEVATION (from 2016 to 2018)[5]	PHASE 1 - AUGUST 2014[3]		PHASE 2 - DECEMBER 2014[3]		PHASE 3 - SEPTEMBER 2015[3]		PHASE 5 - JANUARY 2018 POST SURVEY		PHASE 5 - 4/5/2018	
					DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION
		(ft. NAVD88) - 2016	(ft. NAVD88) - 2018	(ft.)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)
PZ-	**7**	-	125.25	-	-	-	-	-	-	-	1.82	123.43	-	-
PZ-	**8**	-	126.00	-	-	-	-	-	-	-	2.99	123.01	2.90	123.10
PZ-	**9**	-	121.50	-	-	-	-	-	-	-	2.66	118.84	2.56	118.94
PZ-	**10**	-	121.94	-	-	-	-	-	-	-	3.23	118.71	3.13	118.81
PZ-	**11**	-	121.36	-	-	-	-	-	-	-	2.73	118.63	2.57	118.79
PZ-	**12**	-	121.50	-	-	-	-	-	-	-	2.67	118.83	2.54	118.96
PZ-	**13**	-	121.11	-	-	-	-	-	-	-	2.25	118.86	2.17	118.94
PZ-	**14**	-	121.85	-	-	-	-	-	-	-	2.98	118.87	2.85	119.00
PZ-	**15**	-	121.32	-	-	-	-	-	-	-	1.93	119.39	2.02	119.30
PRB-	**01E**	121.30	121.33	-0.03	-	-	-	-	-	-	2.23	119.10	2.13	119.20
PRB-	**01W**	121.56	121.57	-0.01	-	-	-	-	-	-	1.4	120.17	1.34	120.23
PRB-	**02E**	121.15	121.16	-0.01	-	-	-	-	-	-	2.02	119.14	1.96	119.20
PRB-	**02W**	121.47	121.48	-0.01	-	-	-	-	-	-	1.47	120.01	1.38	120.10
PRB-	**03ES**	122.41	122.42	-0.01	-	-	-	-	3.87	118.55	2.1	120.32	2.07	120.35
PRB-	**03ED**	122.35	122.36	-0.01	-	-	-	-	3.84	118.52	2.03	120.33	2.02	120.34
PRB-	**03WS[2]**	122.80	122.81	-0.01	-	-	-	-	4.18	118.63	2.45	120.36	2.41	120.40
PRB-	**03WD[2]**	122.81	122.82	-0.01	-	-	-	-	4.15	118.67	2.05	120.77	-	-
PRB-	**04E**	122.94	122.95	-0.01	-	-	-	-	-	-	2.61	120.34	2.6	120.35
PRB-	**04W**	123.43	123.44	-0.01	-	-	-	-	-	-	3.09	120.35	3.09	120.35
Wells Installed By Others During Previous Investigations														
RCA-	**19**	135.85	135.84	0.01	17.03	118.81	15.52	120.32	17.59	118.25	15.58	120.26	15.56	120.28
MW-	**5S**	127.50	127.59	-0.09	3.93	123.66	4.41	123.18	4.2	123.39	2.63	124.96	2.85	124.74
MW-	**5D**	127.93	127.89	0.04	4.29	123.60	3.60	124.29	4.52	123.37	3.12	124.77	3.24	124.65
MW-	**6S**	127.18	127.20	-0.02	4.34	122.86	3.11	124.09	4.16	123.04	2.75	124.45	2.88	124.32
MW-	**6D**	127.20	127.23	-0.03	3.94	123.29	3.25	123.98	4.14	123.09	2.88	124.35	2.98	124.25
MW-	**7**	133.59	133.63	-0.04	9.52	124.11	8.42	125.21	9.82	123.81	7.11	126.52	8.15	125.48
MW-	**9S**	135.30	135.33	-0.03	9.24	126.09	8.45	126.88	9.45	125.88	7.52	127.81	8.05	127.28
MW-	**9D**	134.13	134.16	-0.03	8.62	125.54	7.97	126.19	8.93	125.23	7.51	126.65	7.72	126.44
MW-	**10S**	133.55	133.67	**-0.12**	7.00	126.67	6.04	127.63	7.30	126.37	4.29	129.38	5.35	128.32
MW-	**10D**	134.15	134.05	**0.10**	7.88	126.17	7.12	126.93	8.13	125.92	6.33	127.72	6.77	127.28
MW-	**12S**	129.97	129.94	0.03	6.36	123.58	5.14	124.80	6.89	123.05	4.17	125.77	4.45	125.49

TABLE 4-20
GROUNDWATER ELEVATIONS FOR ALL RI PHASES
Walton & Lonsbury Superfund Site
Attleboro, Massachusettes

Well No.		ELEVATION MP (circa 2016 survey)	ELEVATION MP (2018 Comprehensive Survey)	CHANGE IN MP ELEVATION (from 2016 to 2018)[5]	PHASE 1 - AUGUST 2014[3]		PHASE 2 - DECEMBER 2014[3]		PHASE 3 - SEPTEMBER 2015[3]		PHASE 5 - JANUARY 2018 POST SURVEY		PHASE 5 - 4/5/2018	
					DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION
		(ft. NAVD88) - 2016	(ft. NAVD88) - 2018	(ft.)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)
MW-	**12D**	130.02	129.96	0.06	5.93	124.03	5.13	124.83	6.21	123.75	4.59	125.37	4.86	125.10
MW-	**13**	129.17	129.25	-0.08	9.65	119.60	7.69	121.56	10.3	118.95	7.60	121.65	7.79	121.46
MW-	**14**	130.42	130.47	-0.05	8.37	122.10	6.66	123.81	8.67	121.80	6.30	124.17	6.71	123.76
MW-	**15**	130.86	-	-	8.4	122.46	Destroyed	-	Destroyed	-	Destroyed	-	Destroyed	-
MW-	**16**	122.37	122.70	**-0.33**	4.23	118.47	3.12	119.58	4.51	118.19	3.22	119.48	3.18	119.52
DEP-	**1S**	133.31	133.34	-0.03	14.38	118.96	12.82	120.52	14.84	118.50	12.73	120.61	12.82	120.52
DEP-	**1D**	133.22	133.21	0.01	14.24	118.97	12.69	120.52	14.72	118.49	12.74	120.47	12.68	120.53
DEP-	**2S**	121.10	121.16	-0.06	4.97	116.19	2.17	118.99	3.41	117.75	2.46	118.70	2.41	118.75
DEP-	**2D**	120.52	120.58	-0.06	3.71	116.87	0.62	119.96	2.27	118.31	0.39	120.19	0.45	120.13
DEP-	**3S**	124.49	124.45	0.04	3.23	121.22	2.88	121.57	3.77	120.68	2.23	122.22	1.98	122.47
DEP-	**3D**	124.52	124.53	-0.01	4.48	120.05	3.12	121.41	4.86	119.67	2.64	121.89	2.76	121.77
DEP-	**4S**	128.24	128.32	-0.08	5.06	123.26	4.39	123.93	5.27	123.05	4.07	124.25	4.16	124.16
DEP-	**4D**	128.45	128.45	0.00	5.30	123.15	4.69	123.76	5.49	122.96	4.36	124.09	4.40	124.05
DEP-	**5S**	132.94	132.96	-0.02	5.38	127.58	4.52	128.44	5.68	127.28	3.64	129.32	3.92	129.04
DEP-	**5D**	133.26	133.29	-0.03	5.72	127.57	4.92	128.37	6.03	127.26	4.55	128.74	4.43	128.86
DEP-	**6S[4]**	-	131.14	-	-	-	-	-	-	-	5.48	125.66	5.49	125.65
DEP-	**6D[4]**	-	129.97	-	-	-	-	-	-	-	4.11	125.86	3.81	126.16
DEP-	**7S**	129.24	129.30	-0.06	10.31	118.99	8.93	120.37	10.82	118.48	8.74	120.56	8.76	120.54
DEP-	**7D**	128.84	128.90	-0.06	9.91	118.99	8.51	120.39	10.41	118.49	8.59	120.31	8.42	120.48
DEP-	**8S**	134.18	134.23	-0.05	-	-	-	-	10.69	123.54	5.83	128.40	9.94	124.29
DEP-	**8D**	134.32	134.37	-0.05	-	-	-	-	10.81	123.56	5.87	128.50	10.06	124.31
DEP-	**12S**	-	127.06	-	-	-	-	-	-	-	6.85	120.21	6.86	120.20
DEP-	**12D**	-	127.04	-	-	-	-	-	-	-	6.75	120.29	6.79	120.25
MW-	**100S**	126.83	126.77	0.06	7.08	119.69	5.79	120.98	7.69	119.08	5.75	121.02	5.66	121.11
MW-	**100D**	126.41	126.36	0.05	6.65	119.71	5.30	121.06	7.29	119.07	5.21	121.15	5.32	121.04
MW-	**101S**	125.43	125.42	0.01	6.01	119.41	4.51	120.91	6.59	118.83	4.22	121.20	4.45	120.97
MW-	**101D**	125.30	125.31	-0.01	5.86	119.45	4.43	120.88	6.45	118.86	4.3	121.01	4.37	120.94
MW-	**102S**	132.04	132.10	-0.06	12.85	119.25	11.46	120.64	13.36	118.74	11.28	120.82	11.33	120.77
MW-	**102D**	132.12	132.13	-0.01	12.75	119.38	11.43	120.70	13.3	118.83	11.23	120.90	11.31	120.82
MW-	**103S**	122.39	122.37	0.02	4.05	118.32	3.19	119.18	4.18	118.19	3.32	119.05	3.21	119.16
MW-	**103D**	122.96	122.94	0.02	3.97	118.97	2.67	120.27	4.45	118.49	2.61	120.33	3.59	119.35

TABLE 4-20
GROUNDWATER ELEVATIONS FOR ALL RI PHASES
Walton & Lonsbury Superfund Site
Attleboro, Massachusettes

Well No.	ELEVATION MP (circa 2016 survey)	ELEVATION MP (2018 Comprehensive Survey)	CHANGE IN MP ELEVATION (from 2016 to 2018)[5]	PHASE 1 - AUGUST 2014[3]		PHASE 2 - DECEMBER 2014[3]		PHASE 3 - SEPTEMBER 2015[3]		PHASE 5 - JANUARY 2018 POST SURVEY		PHASE 5 - 4/5/2018	
				DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION	DEPTH TO WATER BELOW MP	GROUND WATER ELEVATION
	(ft. NAVD88) - 2016	(ft. NAVD88) - 2018	(ft.)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)	(ft.)	(ft. NAVD88)
PZ-01S	124.15	124.16	-0.01	4.67	119.49	3.51	120.65	5.2	118.96	3.58	120.58	3.58	120.58
PZ-01D	124.15	124.14	0.01	4.85	119.29	3.56	120.58	5.24	118.90	3.37	120.77	3.36	120.78
PZ-02S	123.78	123.63	**0.15**	4.60	119.03	4.25	119.38	5.06	118.57	4.03	119.60	3.85	119.78
PZ-02D	123.82	123.82	0.00	4.58	119.24	3.27	120.55	5.03	118.79	3.13	120.69	3.11	120.71
Stergis Site Wells (upgradient of Walton)[1]													
Sage-02D	132.59	-	-	-	-	# -	-	3.87	128.72	-	-	-	-
Sage-08D	133.35	-	-	-	-	# -	-	4.11	129.24	-	-	-	-
Sage-08S	133.52	-	-	-	-	# -	-	4.37	129.15	-	-	-	-
Sage-09D	132.75	-	-	-	-	# -	-	3.65	129.10	-	-	-	-
Sage-09S	132.99	-	-	-	-	# -	-	3.50	129.49	-	-	-	-
Sage-10D	131.69	-	-	-	-	# -	-	3.48	128.21	-	-	-	-
Sage-10S	131.81	-	-	-	-	# -	-	3.47	128.34	-	-	-	-
Sage-11D	132.92	-	-	-	-	# -	-	4.57	128.35	-	-	-	-
Sage-11S	132.76	-	-	-	-	# -	-	4.77	127.99	-	-	-	-
AW-16	132.65	-	-	-	-	# -	-	4.34	128.31	-	-	-	-
AW-16D	132.44	-	-	-	-	# -	-	3.44	129.00	-	-	-	-
AW-16I	132.33	-	-	-	-	# -	-	3.96	128.37	-	-	-	-

1 - Stergis water levels taken during March 2016 Survey

2 - Due to well issues, the depth to water recorded for September 2015 was taken from field sample sheets dated 9/17/2015 (7 days prior to sitewide water level round on 9/24/15).

3 - All elevations recalculated based on 2018 comprehensive survey MP elevations. Exceptions are Staff Gauges 1 through 6, which were repaired or reinstalled.

4 - Elevations from ESM 2012 Draft LSI Letter. Analyses of elevation compared to 2018 elevations indicates that DEP-6 elevations may be 0.12' high on average. These wells are located approximately 800 feet west and slightly north of DEP-3S and 3D (off the scale of RI report figures).

Water levels were recorded in January 2018 and April 2018 but the wells were never sampled for the RI due to their location far to the west of the contaminant plumes.

5 - Elevation comparison to previous surveys conducted by AECOM in January of 2015 and March of 2016. Where no comparison exists, it is because well is newly surveyed or in the case of staff gauges, they were repaired/replaced or new.

Elevations in red are suspect due to need to thaw piezometers in order to obtain reading. For this reason, the April 5, 2018 event was performed and those results were used to evaluate groundwater/surface water interactions at Bliss Brook.

TABLE 4-21
DIRECTIONS OF VERTICAL GRADIENTS FOR ALL RI PHASES
Walton & Lonsbury Superfund Site
Attleboro, Massachusetts

Well No.	PHASE 1 - AUGUST 2014			PHASE 2 - DECEMBER 2014			PHASE 3 - SEPTEMBER 2015			PHASE 5 - JANUARY 2018 POST SURVEY			PHASE 5 - 4/5/2018		
	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient
	(ft. NAVD88)	(ft.)		(ft. NAVD88)	(ft.)		(ft. NAVD88)	(ft.)		(ft. NAVD88)	(ft.)		(ft. NAVD88)	(ft.)	
Walton & Lonsbury Property															
AE- 01S	123.85	-0.20	U	124.78	-0.17	U	123.64	-0.14	U	125.57	-0.07	U	125.12	-0.92	U
AE- 01D	124.05	-0.08	U	124.95	-0.09	U	123.78	-0.14	U	125.64	-0.08	U	126.04	0.71	D
AE- 01B	124.13	-	-	125.04	-	-	123.92	-0.05	E	125.72	-0.12	U	125.33	-0.32	U
AE- ML-01A	-	-	-	-	-	-	123.97	0.46	D	125.84	0.26	D	125.65	0.30	D
AE- ML-01B	-	-	-	-	-	-	123.51	0.08	D	125.58	0.04	E	125.35	0.06	D
AE- ML-01C	-	-	-	-	-	-	123.43	0.20	D	125.54	0.23	D	125.29	0.29	D
AE- ML-01D	-			-			123.23			125.31			125.00		
DEP- 4S	123.26	0.11	D	123.93	0.17	D	123.05	0.09	D	124.25	0.16	D	124.16	0.11	D
DEP- 4D	123.15	-0.20	U	123.76	-0.23	U	122.96	-0.17	U	124.09	-0.26	U	124.05	-0.23	U
AE- 03B	123.35			123.99			123.13			124.35			124.28		
MW- 5S	123.66	0.06	D	123.18	-1.11	U	123.39	0.02	E	124.96	0.19	D	124.74	0.09	D
MW- 5D	123.60			124.29			123.37			124.77			124.65		
MW- 6S	122.86	-0.43	U	124.09	0.11	D	123.04	-0.05	E	124.45	0.10	D	124.32	0.07	D
MW- 6D	123.29			123.98			123.09			124.35			124.25		
MW- 9S	126.09	0.55	D	126.88	0.69	D	125.88	0.65	D	127.81	1.16	D	127.28	0.84	D
MW- 9D	125.54			126.19			125.23			126.65			126.44		
MW- 10S	126.67	0.50	D	127.63	0.70	D	126.37	0.45	D	129.38	1.66	D	128.32	1.04	D
MW- 10D	126.17			126.93			125.92			127.72			127.28		
MW- 12S	123.58	-0.45	U	124.80	-0.03	E	123.05	-0.70	U	125.77	0.40	D	125.49	0.39	D
MW- 12D	124.03			124.83			123.75			125.37			125.10		
DEP- 5S	127.58	0.01	E	128.44	0.07	D	127.28	0.02	E	129.32	0.58	D	129.04	0.18	D
DEP- 5D	127.57			128.37			127.26			128.74			128.86		
North Avenue Corridor															
AE- 04S	122.52	0.02	E	123.56	0.25	D	122.27	0.00	E	124.23	0.64	D	123.60	0.17	D
AE- 04D	122.50	0.04	E	123.31	0.02	E	122.27	0.05	E	123.59	0.02	E	123.43	0.01	E
AE- 04B	122.46	-	-	123.29	-	-	122.22	-0.28	U	123.57	-0.12	U	123.42	-0.21	U
AE- ML-02	-			-			122.50			123.69			123.63		

TABLE 4-21
DIRECTIONS OF VERTICAL GRADIENTS FOR ALL RI PHASES
Walton & Lonsbury Superfund Site
Attleboro, Massachusetts

Well No.	PHASE 1 - AUGUST 2014			PHASE 2 - DECEMBER 2014			PHASE 3 - SEPTEMBER 2015			PHASE 5 - JANUARY 2018 POST SURVEY			PHASE 5 - 4/5/2018		
	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient
	(ft. NAVD88)	(ft.)		(ft. NAVD88)	(ft.)		(ft. NAVD88)	(ft.)		(ft. NAVD88)	(ft.)		(ft. NAVD88)	(ft.)	
MW- 13	119.60	-0.07	U	121.56	0.38	D	118.95	-0.07	U	121.65	0.32	D	121.46	0.24	D
AE- 05B	119.67			121.18			119.02			121.33			121.22		
AE- 14D	-	-	-	120.31	-0.01	E	118.52	0.01	E	120.47	-0.02	E	120.38	-0.01	E
AE- 14B	-			120.32			118.51			120.49			120.39		
AE- 15S	-	-	-	122.76	-0.22	U	120.21	0.04	E	123.13	0.09	D	122.94	0.04	E
AE- 15D	-	-	-	122.98	-0.35	U	120.17	0.02	E	123.04	0.04	E	122.90	0.03	E
AE- 15B	-			123.33			120.15			123.00			122.87		
DEP- 1S	118.96	-0.01	E	120.52	0.00	E	# 118.50	0.01	E	120.61	0.14	D	120.52	-0.01	E
DEP- 1D	118.97			120.52			118.49			120.47			120.53		
DEP- 3S	121.22	1.17	D	121.57	0.16	D	120.68	1.01	D	122.22	0.33	D	122.47	0.70	D
DEP- 3D	120.05			121.41			119.67			121.89			121.77		
DEP- 8S	-	-	-	-	-	-	123.54	-0.02	E	128.40	-0.10	U	124.29	-0.02	E
DEP- 8D	-			-			123.56			128.50			124.31		
MW- 102S	119.25	-0.13	U	120.64	-0.06	U	118.74	-0.09	U	120.82	-0.08	U	120.77	-0.05	E
MW- 102D	119.38			120.70			118.83			120.90			120.82		
Bliss Brook Corridor															
AE- 06B	119.20	-	-	120.57	-	-	118.74	0.04	E	120.68	0.04	E	120.66	-0.01	E
AE- ML-04E	-	-	-	-	-	-	118.70	-0.24	U	120.64	-0.38	U	120.67	-0.35	U
AE- ML-04A	-	-	-	-	-	-	118.94	-0.04	E	121.02	0.01	E	121.02	0.01	E
AE- ML-04B	-	-	-	-	-	-	118.98	0.05	E	121.01	0.05	E	121.01	0.04	E
AE- ML-04C	-	-	-	-	-	-	118.93	0.02	E	120.96	0.03	E	120.97	0.02	E
AE- ML-04D	-			-			118.91			120.93			120.95		
MW- 16	118.47	-0.40	U	119.58	-0.56	U	118.19	-0.18	U	119.48	-0.74	U	119.52	-0.65	U
AE- 07D	118.87	-0.03	E	120.14	-0.04	E	118.37	-0.17	U	120.22	0.06	D	120.17	-0.13	U
AE- 07B	118.90			120.18			118.54			120.16			120.30		
AE- 08D	119.19	-0.01	E	120.47	-0.03	E	118.67	0.02	E	120.55	0.03	E	120.56	0.00	E
AE- 08B	119.20			120.50			118.65			120.52			120.56		

TABLE 4-21
DIRECTIONS OF VERTICAL GRADIENTS FOR ALL RI PHASES
Walton & Lonsbury Superfund Site
Attleboro, Massachusetts

Well No.	PHASE 1 - AUGUST 2014			PHASE 2 - DECEMBER 2014			PHASE 3 - SEPTEMBER 2015			PHASE 5 - JANUARY 2018 POST SURVEY			PHASE 5 - 4/5/2018		
	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient	GROUND WATER ELEVATION	Difference in Potentio-metric Heads	Direction of Vertical Gradient
	(ft. NAVD88)	(ft.)		(ft. NAVD88)	(ft.)		(ft. NAVD88)	(ft.)		(ft. NAVD88)	(ft.)		(ft. NAVD88)	(ft.)	
MW- 103S	118.32	-0.65	U	119.18	-1.09	U	118.19	-0.30	U	119.05	-1.28	U	119.16	-0.19	U
MW- 103D	118.97	-	-	120.27	-0.06	U	118.49	-0.07	U	120.33	-0.01	E	119.35	-1.05	U
AE- 12B	-	-	-	120.33	-	-	118.56	0.18	D	120.34	0.12	D	120.40	-0.02	E
AE- ML-03A	-	-	-	-	-	-	118.38	-0.01	E	120.22	-0.17	U	120.42	-0.01	E
AE- ML-03B	-	-	-	-	-	-	118.39	0.01	E	120.39	0.08	D	120.43	0.00	E
AE- ML-03C	-	-	-	-	-	-	118.38	0.04	E	120.31	0.01	E	120.43	0.01	E
AE- ML-03D	-			-			118.34			120.30			120.42		
DEP- 2S	116.19	-0.68	U	118.99	-0.97	U	117.75	-0.56	U	118.70	-1.49	U	118.75	-1.38	U
DEP- 2D	116.87	-	-	119.96	-0.07	U	118.31	0.01	E	120.19	0.00	E	120.13	0.00	E
AE- 13B	-			120.03			118.30			120.19			120.13		
PRB- 03ES	-	-	-	-	-	-	118.55	0.03	E	120.32	-0.01	E	120.35	0.01	E
PRB- 03ED	-			-			118.52			120.33			120.34		
PRB- 03WS	-	-	-	-	-	-	118.63	-0.04	E	120.36	-0.41	U	120.40		
PRB- 03WD	-			-			118.67			120.77			-		
DEP- 7S	118.99	0.00	E	120.37	-0.02	E	118.48	-0.01	E	120.56	0.25	D	120.54	0.06	D
DEP- 7D	118.99			120.39			118.49			120.31			120.48		
MW- 100S	119.69	-0.02	E	120.98	-0.08	U	119.08	0.01	E	121.02	-0.13	U	121.11	0.07	D
MW- 100D	119.71			121.06			119.07			121.15			121.04		
MW- 101S	119.41	-0.04	E	120.91	0.03	E	118.83	-0.03	E	121.20	0.19	D	120.97	0.03	E
MW- 101D	119.45			120.88			118.86			121.01			120.94		
PZ- 01S	119.49	0.20	D	120.65	0.07	D	118.96	0.06	D	120.58	-0.19	U	120.58	-0.20	U
PZ- 01D	119.29			120.58			118.90			120.77			120.78		
PZ- 02S	119.03	-0.21	U	119.38	-1.17	U	118.57	-0.22	U	119.60	-1.09	U	119.78	-0.93	U
PZ- 02D	119.24			120.55			118.79			120.69			120.71		

U - Upward
D - Downward
E - Head difference is 0.05 ft or less, so gradient direction is not certain

TABLE 4-22
TOTAL AND HEXAVALENT CHROMIUM RESULTS FOR PRB WELLS

Location:	PRB-03WS	PRB-03WS	PRB-03ES	PRB-03WD	PRB-03ED	PRB-04W	PRB-04E
	Phase 3	Phase 3	Phase 3	Phase 3	Phase 3	Phase 3	Phase 3
Sample Date:	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015	9/17/2015
Sample Type:	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter	UP GRADIENT		DOWN GRADIENT	UP GRADIENT	DOWN GRADIENT	UP GRADIENT	DOWN GRADIENT
Inorganics, Dissolved (ug/L)							
Chromium	122	119	21.0	14600	3070	6590	259
Chromium, Hexavalent	1.33	2.15	0.50 U	13600	2780	5850	110
Inorganics (ug/L)							
Chromium	127 J	127 J	19.5	14800	3130 J	6670 J	274 J
Chromium, Hexavalent	0.50 U	0.50 U	0.50 U	13700	2800	5960	R
Other							
Dissolved oxygen, field (mg/L)	0.07		0.09	3.53	0.04	3.73	0.13
ORP, field (mV)	131.7		52.2	204.2	172.1	317.1	55.5
pH, field (S.U.)	5.39		5.63	5.60	5.70	4.71	6.10
Spec. cond., field (umho/cm)	357		391	915	446	341	559
Temperature, field (deg C)	18.93		18.84	15.76	17.34	19.58	20.74
Turbidity, field (N.T.U.)	11.2		2.43	1.88	6.08	3.46	3.19

Table 4-23. Ranges and Median Concentrations for Selected Contaminants in Groundwater

Groundwater Sampling Rounds	1,1,1-TCA (ppb)	1,4-Dioxane (ppb)	TCE (ppb)	Chromium (Total - ppb)	Hexavalent Chromium (Total - ppb)	Chromium (Dissolved-ppb)	Hexavalent Chromium (Dissolved - ppb)
Phase 1, 2, & 3 Data							
MIN	0.11	0.03	0.07	0.14	0.40	0.21	0.40
MAX	2,600	23	1,300	86,400	83,000	87,900	86,500
MEDIAN	8.70	0.57	6.20	127	906	111	746.5
Phase 1 Data							
MIN	0.17	0.026	0.069	0.14	0.4	0.21	0.4
MAX	2,600	23	1,300	86,400	83,000	87,900	86,500
MEDIAN	12	0.45	6.1	66.7	576	54.35	568
Phase 2 Data							
MIN	0.11	-	0.16	1.0	0.9	0.29	1.0
MAX	650	-	390	71,300	64,500	78,500	65,000
MEDIAN	5.5	-	6.2	106.1	785	57.4	664
Phase 3 Data*							
MIN	0.57	0.10	0.46	4.80	27.7	4.10	2.15
MAX	23.0	13.0	20.0	18,900	17,700	19,500	17,900
MEDIAN	3.75	1.20	6.20	781	2985	2575	2345

* Phase 3 sampling was predominantly deep overburden and bedrock wells.

TABLE 4-24
RI SURFACE WATER ANALYTICAL RESULTS FOR BLISS BROOK, PHASES 1 AND 2 - CHROMIUM AND FIELD PARAMETERS
WALTON LONSBURY SUPERFUND SITE

Phase 1 - Summer 2014

Location:	SD-208	SD-209	SD-210	SD-211	SD-212	SD-213	SD-214	SD-215	SD-216	SD-217	SD-218
Sample Date:	7/1/2014	7/1/2014	6/25/2014	6/25/2014	6/24/2014	6/24/2014	6/24/2014	6/24/2014	6/24/2014	6/24/2014	6/27/2014
Parameter											
Dissolved (field-filtered) (ug/L)											
Chromium	2.9	81.6	248 J	195 J	259 J	16.8 J	17.4 J	9.7 J	7.4 J	13.2 J	9.4
Chromium, Hexavalent	0.50 U	59.2	223 J	177 J	238 J	2.3 J	1.4 J	0.50 J	0.08 J	0.60 J	0.27
Total (unfiltered) (ug/L)											
Chromium	1810	24.0	273	219	260 J-	262 J-	153 J-	209 J-	68.2 J-	81.8 J-	52.6
Chromium, Hexavalent	0.50 U	18.2	211 J	213 J	219 J	2.47 J	1.37 J	0.50 UJ	0.50 UJ	0.50 J	0.37
Other											
Dissolved oxygen, field (mg/L)	4.91	6.78	11.54	10.71	10.57	2.45	5.94	3.48	5.64	6.02	6.54
ORP, field (mV)	26	96.1	170.4	156.3	139.8	47	45.4	73	125.6	128.5	109
pH, field (S.U.)	6.63	6.56	6.57	6.71	6.9	6.81	6.94	6.71	7.04	7.13	6.85
Spec. cond., field (umho/cm)	907	949	887	876	811	744	737	713	755	755	851
Temperature, field (deg C)	22.79	21.57	26.73	24.29	22.82	17.75	17.2	17.66	17.16	17.16	18.95
Turbidity, field (N.T.U.)	5.68	6.3	16.5	17.9	9.91	20.2	6.71	20.8	6.45	6.28	7.18
Water Depth, field (in.)	4	8	8	6	8	7	12	8	5	10	8

Phase 2 - Fall 2014

Location:	SD-208	SD-209	SD-210	SD-211	SD-212	SD-213	SD-214	SD-215	SD-217	SD-218
Sample Date:	10/29/2014	10/29/2014	10/29/2014	10/29/2014	10/29/2014	10/28/2014	10/28/2014	10/28/2014	11/5/2014	11/5/2014
Parameter										
Dissolved (field-filtered) (ug/L)										
Chromium	2.0 U	2.0 U	170	253	236	73.8	119	131	67.3	47.8
Chromium, Hexavalent	0.50 U	0.90	158	181	163	31.0	79.5	82.4	38.9	27.6
Total (unfiltered) (ug/L)										
Chromium	104 J	26.7 J	161 J	184 J	271 J	2270 J	156 J	140 J	123 J	115 J
Chromium, Hexavalent	0.50 U	14.3	198	174	160	78.0	79.1	91.4	44.1	29.4
Other										
Dissolved oxygen, field (mg/L)	7.56	9.67	9.83	7.63	2.53	6.11	5.91	5.90	6.60	6.33
ORP, field (mV)	50.6	106.6	116.7	113.7	14.6	77	84.4	105.9	100.5	101.4
pH, field (S.U.)	6.84	6.56	6.59	6.38	6.40	6.63	7.10	6.83	6.65	6.56
Spec. cond., field (umho/cm)	869	858	845	824	830	817	802	791	772	767
Temperature, field (deg C)	17.26	14.99	16.72	13.06	12.46	12.93	11.71	10.10	9.61	10.19
Turbidity, field (N.T.U.)	7.1	6.7	6.5	3.8	8.3	125	4.96	50.7	2.17	13.2
Water Depth, field (in.)	5	8	5	3	6	6	14	6	11	12

Hexavalent chromium
concentration exceeds 1 ug/L

TABLE 4-25
RI SURFACE WATER ANALYTICAL RESULTS FOR CHLORINATED VOCs AND 1,4-DIOXANE, PHASES 1 AND 2
WALTON LONSBURY SUPERFUND SITE

Site Property and Southern Wetland

Location:	SD-201	SD-201	SD-202	SD-203	SD-203	SD-203	SD-204	SD-205	SD-301	SD-302	SD-303
Sample ID:	WL-SW-201	WL-SW-201D	WL-SW-202	WL-SW-203	WL-SW-203-2	WL-SW-203D-2	WL-SW-204	WL-SW-205	WL-SW-301-2	WL-SW-302-2	WL-SW-303-2
Sample Date:	6/18/2014	6/18/2014	7/1/2014	6/19/2014	10/30/2014	10/30/2014	6/25/2014	6/25/2014	11/3/2014	11/3/2014	11/3/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter											
VOCs (ug/L)											
1,1,1-Trichloroethane	0.29 J	0.27 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.48 J	0.46 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.17 J	0.50 U	0.50 U
cis-1,2-Dichloroethene	0.38 J	0.31 J	0.50 U	4.4	5.1	4.7	0.50 U	1.1	1.9	0.33 J	0.19 J
Tetrachloroethene	0.50 U	0.50 U	0.50 U	1.7	1.4	1.2	0.50 U	0.41 J	0.50 U	0.50 U	0.50 U
Trichloroethene	0.18	0.17	0.086 J	4.0	2.0 J	3.3	0.15 U	0.85	0.98	0.17	0.17
Vinyl chloride	0.0099 J	0.0095 J	0.015 U	0.15	0.039	0.048	0.015 U	0.028 U	0.015 U	0.015 U	0.015 U
1,4-Dioxane (ug/L)											
1,4-Dioxane	0.44	0.45	0.22	0.10 U	0.38 J+	0.72 J	0.19	0.10 U	1.0 J	0.10 UJ	0.10 UJ

Bliss Brook

Location:	SD-208	SD-208	SD-209	SD-209	SD-210	SD-210	SD-211	SD-211	SD-212	SD-212	SD-213
Sample ID:	WL-SW-208	WL-SW-208-2	WL-SW-209	WL-SW-209-2	WL-SW-210	WL-SW-210-2	WL-SW-211	WL-SW-211-2	WL-SW-212	WL-SW-212-2	WL-SW-213
Sample Date:	6/20/2014	10/29/2014	6/20/2014	10/29/2014	6/25/2014	10/29/2014	6/25/2014	10/29/2014	6/24/2014	10/29/2014	6/24/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter											
VOCs (ug/L)											
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.16 J
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.13 J	0.50 U	0.29 J
cis-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.13 J
Tetrachloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethene	0.0052 J	0.15 U	0.0055 J	0.15 U	0.16	0.15 U	0.14 J	0.15 U	0.26	0.16 U	0.45
Vinyl chloride	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
1,4-Dioxane (ug/L)											
1,4-Dioxane	0.10 U	0.30 U	0.10 U	0.33 J+	0.10 U	0.30 U	0.10 U	0.41 J+	0.11	0.51 J+	0.18

Mechanics Pond and Bungay River

Location:	SD-219	SD-219	SD-221	SD-221	SD-222	SD-223	SD-224	SD-225	SD-226	SD-227	SD-228
Sample ID:	WL-SW-219	WL-SW-219-2	WL-SW-221	WL-SW-221D	WL-SW-222	WL-SW-223	WL-SW-224	WL-SW-225	WL-SW-226	WL-SW-227	WL-SW-228
Sample Date:	7/1/2014	10/29/2014	6/27/2014	6/27/2014	6/27/2014	7/1/2014	7/1/2014	6/27/2014	7/1/2014	7/1/2014	6/27/2014
Sample Type:	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter											
VOCs (ug/L)											
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	0.50 U	0.50 U	0.23 J	0.22 J	0.15 J	0.15 J	0.50 U	0.16 J	0.50 U	0.50 U	0.17 J
Tetrachloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethene	0.15 U	0.15 U	0.077 J	0.080 J	0.051 J	0.051 J	0.045 J	0.051 J	0.029 J	0.032 J	0.075 J
Vinyl chloride	0.015 U	0.015 U	0.027 U	0.026 U	0.015 U	0.016 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
1,4-Dioxane (ug/L)											
1,4-Dioxane	0.10 U	R	0.18	0.20	0.11	0.18	0.36	0.17	0.19	0.11	0.13

Detection of 1 ug/L or greater

TABLE 4-25
RI SURFACE WATER ANALYTICAL RESULTS FOR CHLORINATED VOCs AND 1,4-DIOXANE, PHASES 1 AND 2
WALTON LONSBURY SUPERFUND SITE

Site Property and Southern Wetland

Location:	SD-304
Sample ID:	WL-SW-304-2
Sample Date:	11/3/2014
Sample Type:	Field Sample
Parameter	
VOCs (ug/L)	
1,1,1-Trichloroethane	0.50 U
1,1-Dichloroethane	0.50 U
cis-1,2-Dichloroethene	0.14 J
Tetrachloroethene	0.50 U
Trichloroethene	0.15 U
Vinyl chloride	0.015 U
1,4-Dioxane (ug/L)	
1,4-Dioxane	1.0 J

Bliss Brook

Location:	SD-213	SD-214	SD-214	SD-215	SD-215	SD-216	SD-217	SD-217	SD-218	SD-218
Sample ID:	WL-SW-213-2	WL-SW-214	WL-SW-214-2	WL-SW-215	WL-SW-215-2	WL-SW-216	WL-SW-217	WL-SW-217-2	WL-SW-218	WL-SW-218-2
Sample Date:	10/28/2014	6/24/2014	10/28/2014	6/24/2014	10/28/2014	6/24/2014	6/24/2014	11/5/2014	6/27/2014	11/5/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
VOCs (ug/L)										
1,1,1-Trichloroethane	0.50 U	0.16 J	0.50 U	0.13 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.30 J	0.50 U	0.27 J	0.50 U	0.19 J	0.17 J	0.50 U	0.13 J	0.50 U
cis-1,2-Dichloroethene	0.50 U	0.15 J	0.50 U	0.10 J	0.50 U	0.32 J	0.18 J	0.50 U	0.14 J	0.50 U
Tetrachloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.10 J	0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethene	0.19 U	0.47	0.26 U	0.40	0.24 U	0.40	0.35	0.20	0.26	0.19 J
Vinyl chloride	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
1,4-Dioxane (ug/L)										
1,4-Dioxane	1.0 J+	0.19	0.59 J+	0.17	0.51 J+	0.14	0.14	0.98 J	0.12	0.74

Mechanics Pond and Bungay River

Location:	SD-305	SD-306	SD-307	SD-308	SD-309	SD-310	SD-311	SD-312	SD-313	SD-314	SD-314
Sample ID:	WL-SW-305-2	WL-SW-306-2	WL-SW-307-2	WL-SW-308-2	WL-SW-309-2	WL-SW-310-2	WL-SW-311-2	WL-SW-312-2	WL-SW-313-2	WL-SW-314-2	WL-SW-314D-2
Sample Date:	10/28/2014	10/28/2014	11/3/2014	11/3/2014	10/29/2014	11/5/2014	10/29/2014	10/29/2014	11/3/2014	11/3/2014	11/3/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate
Parameter											
VOCs (ug/L)											
1,1,1-Trichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
cis-1,2-Dichloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.70 J	0.18 J	0.18 J
Tetrachloroethene	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichloroethene	0.15 U	0.15 UJ	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 UJ	0.15 U	0.15 U	0.15 U
Vinyl chloride	0.015 U	0.015 UJ	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U
1,4-Dioxane (ug/L)											
1,4-Dioxane	0.72 J+	0.10 U	0.90 J	0.10 UJ	0.63 J+	0.79 J	0.52 J+	0.64 J+	0.76 J	0.90 J	0.10 UJ

Detection of 1 ug/L or greater

TABLE 4-26
RI SURFACE WATER ANALYTICAL RESULTS FOR PROPERTY, SOUTHERN WETLAND, MECHANICS POND, AND BUNGAY RIVER - CHROMIUM AND FIELD PARAMETERS
WALTON LONSBURY SUPERFUND SITE

Site Property and Southern Wetland,
Phases 1 and 2

Location:	SD-201	SD-201	SD-202	SD-203	SD-203	SD-203	SD-203	SD-204	SD-205	SD-301
Sample Date:	6/18/2014	6/18/2014	7/1/2014	6/30/2014	6/30/2014	10/30/2014	10/30/2014	6/25/2014	6/25/2014	11/3/2014
Sample Type:	Field Duplicate	Field Duplicate	Field Sample	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample
Parameter										
Dissolved (field-filtered) (ug/L)										
Chromium	130 J	742 J	4.8 J	0.51 J-	0.39 J-	2.6	3.9	18.0 J	7.5 J	44.0
Chromium, Hexavalent	0.146	0.152	0.50 UJ	0.10 U	0.10 U	0.50 U	0.50 U	0.10 U	0.10 U	1.04
Total (unfiltered) (ug/L)										
Chromium	142 J	191 J	13.3	48.5 J-	44.2 J-	10.7 J	35.2 J	59.4	32.4	551 J
Chromium, Hexavalent	0.281 J	0.194 J	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.10 UJ	1.55
Other										
Dissolved oxygen, field (mg/L)	10.75		4.11	8.58		6.98		0.93	2.44	9.77
ORP, field (mV)	71.9		240.5	71.9		-2.3		NR	15.3	112.7
pH, field (S.U.)	7.11		6.6	6.64		6.60		6.49	7.45	6.63
Spec. cond., field (umho/cm)	685		928	1103		1087		1185	1087	366
Temperature, field (deg C)	27.61		25.84	16.87		16.66		22.9	18.23	6.98
Turbidity, field (N.T.U.)	104		7.38	6.92		6.2		>200	9.77	63.3
Water Depth, field (in.)	16		24	6		5		8	4	5

Mechanics Pond and Bungay River,
Phases 1 and 2

Location:	SD-219	SD-219	SD-221	SD-221	SD-222	SD-223	SD-224	SD-225	SD-226	SD-227
Sample Date:	7/1/2014	10/29/2014	6/27/2014	6/27/2014	6/27/2014	7/1/2014	7/1/2014	6/27/2014	7/1/2014	7/1/2014
Sample Type:	Field Sample	Field Sample	Field Duplicate	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Parameter										
Dissolved (field-filtered) (ug/L)										
Chromium	0.077 J	2.0 U	2 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chromium, Hexavalent	0.50 U	0.50 U	0.10 U	0.10 U	0.10 U	0.50 U	0.50 U	0.10 U	0.50 U	0.60 J
Total (unfiltered) (ug/L)										
Chromium	0.31 J-	2.2 J	0.32 J-	0.46 J-	2.7	15.6	13.5	3.1	2.0 U	34.5
Chromium, Hexavalent	0.50 UJ	0.50 U	0.10 U	0.10 U	0.10 U	0.50 U	0.50 U	0.10 U	0.40 J	0.40 J
Other										
Dissolved oxygen, field (mg/L)	6.95	6.44	8.93		11.35	10.20	16.16	12.8	12.18	7.94
ORP, field (mV)	NR	190.1	157.9		182.7	266.9	NR	212	211	212.5
pH, field (S.U.)	7.79	6.29	7.27		7.45	7.60	8.6	7.16	8.38	7.35
Spec. cond., field (umho/cm)	509	484	703		649	691	720	656	757	601
Temperature, field (deg C)	27.03	11.88	19.69		22.81	24.24	25.88	22.23	26.37	23.66
Turbidity, field (N.T.U.)	NR	3.58	2.68		9.63	9.41	NR	7.84	3.69	13.7
Water Depth, field (in.)	NR	18	15		9	12	12	36	48-60	14

Hexavalent chromium detection

TABLE 4-26
RI SURFACE WATER ANALYTICAL RESULTS FOR PROPERTY, SOUTHERN WETLAND, MECHANICS POND, AND BUNGAY RIVER - CHROMIUM AND FIELD PARAMETERS
WALTON LONSBURY SUPERFUND SITE

Site Property and Southern Wetland,
Phases 1 and 2

Location:	SD-302	SD-303	SD-304
Sample Date:	11/3/2014	11/3/2014	11/3/2014
Sample Type:	Field Sample	Field Sample	Field Sample
Parameter			
Dissolved (field-filtered) (ug/L)			
Chromium	11.2	12.4	69.4
Chromium, Hexavalent	0.50 U	0.50 U	0.50 U
Total (unfiltered) (ug/L)			
Chromium	22.2 J	446 J	489 J
Chromium, Hexavalent	0.50 U	0.52	0.60
Other			
Dissolved oxygen, field (mg/L)	9.74	7.25	6.02
ORP, field (mV)	55.2	59.1	-45
pH, field (S.U.)	7.38	6.35	6.45
Spec. cond., field (umho/cm)	529	555	444
Temperature, field (deg C)	6.84	4.19	9.18
Turbidity, field (N.T.U.)	9.87	7.18	31.5
Water Depth, field (in.)	10	12	5

Mechanics Pond and Bungay River,
Phases 1 and 2

Location:	SD-228	SD-305	SD-306	SD-307	SD-308	SD-309	SD-310	SD-311	SD-312	SD-313	SD-314	SD-314
Sample Date:	6/27/2014	10/28/2014	10/28/2014	11/3/2014	11/3/2014	10/29/2014	11/5/2014	10/29/2014	10/29/2014	11/3/2014	11/3/2014	11/3/2014
Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Duplicate
Parameter												
Dissolved (field-filtered) (ug/L)												
Chromium	2.0 U	10.6	2.0 U	1.7 J	1.1 J	2.0 U	0.91 J	2.0 U	2.0 U	0.23 J	1.7 J	1.7 J
Chromium, Hexavalent	0.15	0.50 U	0.50 U	0.92	0.43 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.09	1.07
Total (unfiltered) (ug/L)												
Chromium	2.1	8.1 J	2.5 J	2.6 J	2.0 UJ	6.2 J	20.7 J	2.2 J	2.0 UJ	2.0 UJ	2.6 J	2.4 J
Chromium, Hexavalent	0.13	0.50 U	0.30 J	0.86	0.35 J	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.15	1.10
Other												
Dissolved oxygen, field (mg/L)	12.58	0.75	4.25	10.51	9.26	8.54	4.04	7.59	8.87	3.64	11.36	
ORP, field (mV)	151.6	-6.3	124.5	191	219	15	199.6	90.6	137.7	58.6	105	
pH, field (S.U.)	7.31	6.28	7.08	7.18	7.23	7.07	6.78	6.89	7.17	6.55	7.02	
Spec. cond., field (umho/cm)	700	289	615	579	621	620	588	603	638	567	578	
Temperature, field (deg C)	22.8	11.58	15.40	8.53	9.25	15.81	10.38	14.53	14.59	5.33	6.78	
Turbidity, field (N.T.U.)	14.3	58	7.3	3.3	3.5	1.79	3.26	1.91	2.24	29	5.3	
Water Depth, field (in.)	12	6	10	8	10	12	6	12	84	5	6	

Hexavalent chromium detection

TABLE 4-27
SUMMARY OF DATA VALIDATION CONDUCTED, PHASES 1, 2, AND 3

Event/Matrix	Analysis	Method	Data Validation Tier
Phase 1 Surface Water, Sediment, Soil			
Surface Water	Volatile Organic Compounds (Trace and SIM)	CLP SOW SOM01.2, MA2397.0	1+/S2BVEM and 2/S3VEM (I of 4 SDGs)
	1,4-Dioxane	CLP SOW SOM01.2, MA2180.1	2/S3VEM
	TAL Metals (Total and Dissolved)	CLP SOW ISM01.3, MA2394.0 and MA2395.0	1+/S2BVEM and 2/S3VEM (2 of 16 SDGs)
	Cyanide	CLP SOW ISM01.3, MA2396.0	1+/S2BVEM and 2/S3VEM (1 of 8 SDGs)
	Hexavalent Chromium (Total and Dissolved)	DAS D-159.0	1+/S2BVM and 2/S3VM (2 of 6 SDGs)
	Alkalinity	EPA Region 1 Laboratory SOP	Not Validated
Soil	Volatile Organic Compounds, Semivolatile Organic Compounds (Full Scan and SIM), Pesticides and PCB Aroclors	CLP SOW SOM01.2	2/S3VEM
	TAL Metals and Cyanide	CLP SOW ISM01.3, MA2394.0, MA2395.0 and MA2396.0	1+/S2BVEM and 2/S3VEM (2 of 9 SDGs)
	Hexavalent Chromium	DAS D-160.1	1+/S2BVM and 2/S3VM (1 of 4 SDGs)
	pH	EPA Region 1 Laboratory SOP	Not Validated
Sediment	Volatile Organic Compounds, Semivolatile Organic Compounds (Full Scan and SIM), Pesticides and PCB Aroclors	CLP SOW SOM01.2	2/S3VEM
	TAL Metals and Cyanide	CLP SOW ISM01.3, MA2394.0, MA2395.0 and MA2396.0	1+/S2BVEM and 2/S3VEM (3 of 9 SDGs)
	Hexavalent Chromium	DAS D-160.1	1+/S2BVM and 2/S3VM (1 of 4 SDGs)
	Total Organic Carbon	DAS D-005.2	1+/S2BVM
Phase 1 Groundwater			
	Volatile Organic Compounds (Trace and SIM)	CLP SOW SOM01.2, MA2397.0	1+/S2BVEM and 2/S3VEM (I of 4 SDGs)
	1,4-Dioxane	CLP SOW SOM01.2, MA2180.1	2/S3VEM
	TAL Metals (Total and Dissolved)	CLP SOW ISM01.3, MA2394.0 and MA2395.0	1+/S2BVEM and 2/S3VEM (I of 12 SDGs)
	Cyanide	CLP SOW ISM01.3, MA2396.0	1+/S2BVEM and 2/S3VEM (I of 6 SDGs)
	Hexavalent Chromium (Total)	DAS D-159.0	1+/S2BVM
	Hexavalent Chromium (Dissolved)	DAS D-159.0	1+/S2BVM
Phase 2 Surface Water, Sediment, Soil			
Surface Water	Volatile Organic Compounds (Trace and SIM)	CLP SOW SOM01.2, MA2397.0	1+/S2BVEM
	1,4-Dioxane	CLP SOW SOM01.2, MA2180.1	1+/S2BVEM
	TAL Metals (Total)	CLP SOW ISM01.3, MA2394.0 and MA2395.0	1+/S2BVEM and 2/S3VEM (I of 2 SDGs)
	TAL Metals (Dissolved)	CLP SOW ISM01.3, MA2394.0 and MA2395.0	1+/S2BVEM and 2/S3VEM (I of 2 SDGs)
	Cyanide	CLP SOW ISM01.3, MA2396.0	1+/S2BVEM
	Hexavalent Chromium (Total)	DAS D-159.0	1+/S2BVM
	Hexavalent Chromium (Dissolved)	DAS D-159.0	1+/S2BVM
	Alkalinity	EPA Region 1 Laboratory SOP	Not Validated
Sediment	Semivolatile Organic Compounds (Full Scan and SIM)	CLP SOW SOM01.2	2/S3VEM
	Pesticides	CLP SOW SOM01.2	2/S3VEM
	PCB Aroclors	CLP SOW SOM01.2	2/S3VEM
	TAL Metals and Cyanide	CLP SOW ISM01.3, MA2394.0, MA2395.0 and MA2396.0	1+/S2BVEM and 2/S3VEM (I of 2 SDGs)
	Hexavalent Chromium	DAS D-160.1	2/S3VEM

TABLE 4-27
SUMMARY OF DATA VALIDATION CONDUCTED, PHASES 1, 2, AND 3

Event/Matrix	Analysis	Method	Data Validation Tier
Soil	Semivolatile Organic Compounds (Full Scan and SIM)	CLP SOW SOM01.2	2/S3VEM
	Pesticides	CLP SOW SOM01.2	2/S3VEM
	PCB Aroclors	CLP SOW SOM01.2	2/S3VEM
	TAL Metals and Cyanide	CLP SOW ISM01.3, MA2394.0, MA2395.0 and MA2396.0	1+/S2BVEM and 2/S3VEM (I of 2 SDGs)
	Hexavalent Chromium	DAS D-160.1	1+/S2BVM
	pH	EPA Region 1 Laboratory SOP	Not Validated
Phase 2 Groundwater			
	Volatile Organic Compounds (Trace)	DAS (CLP SOW SOM01.2)	1+/S2BVM and 2/S3VM (I of 5 SDGs)
	TAL Metals (Total and Dissolved)	CLP SOW ISM01.3, MA2394.0 and MA2395.0	1+/S2BVEM
	Cyanide	CLP SOW ISM01.3, MA2396.0	1+/S2BVEM
	Hexavalent Chromium (Total)	DAS D-159.0	1+/S2BVM and 2/S3VM (I of 4 SDGs)
	Hexavalent Chromium (Dissolved)	DAS D-159.0	1+/S2BVM
Phase 3 Surface Water, Sediment, Pore Water			
Surface Water	Volatile Organic Compounds (Trace)	CLP SOW SOM02.2	2/S3VEM
	1,4-Dioxane	CLP SOW SOM02.2. MA2506.0	2/S3VEM
	TAL Metals (Total)	CLP SOW ISM02.2	2/S3VEM
	TAL Metals (Dissolved)	CLP SOW ISM02.2	2/S3VEM
	Cyanide	CLP SOW ISM02.2	2/S3VEM
	Hexavalent Chromium (Total)	DAS D-159.0	2/S3VM
	Hexavalent Chromium (Dissolved)	DAS D-159.0	2/S3VM
	Alkalinity	EPA Region 1 Laboratory SOP	Not Validated
	Dissolved Organic Carbon	DAS D-033.3	2/S3VM
Sediment	Volatile Organic Compounds	CLP SOW SOM02.2	2/S3VEM
	Semivolatile Organic Compounds (Full Scan and SIM)	CLP SOW SOM02.2	2/S3VEM
	TAL Metals and Cyanide	CLP SOW ISM02.2	2/S3VEM
	Hexavalent Chromium	DAS D-160.1	2/S3VM
	Total Organic Carbon	DAS D-005.2	2/S3VM
	AVS/SEM	DAS D-079.3	2/S3VM
Pore Water	TAL Metals (Dissolved)	CLP SOW ISM02.2	2/S3VEM
	Hexavalent Chromium (Dissolved)	DAS D-159.0	2/S3VM
	Alkalinity	EPA Region 1 Laboratory SOP	Not Validated
	Dissolved Organic Carbon	DAS D-00.3	2/S3VM
Phase 3 Groundwater			
	Volatile Organic Compounds (Trace)	CLP SOW SOM02.2	2/S3VEM
	1,4-Dioxane	CLP SOW SOM02.2. MA2506.0	2/S3VEM
	TAL Metals (Total)	CLP SOW ISM02.2	2/S3VEM
	TAL Metals (Dissolved)	CLP SOW ISM02.2	2/S3VEM
	Cyanide	CLP SOW ISM02.2	2/S3VEM
	Hexavalent Chromium (Total)	DAS D-159.0	2/S3VEM
	Hexavalent Chromium (Dissolved)	DAS D-159.0	2/S3VEM

TABLE 4-27

SUMARY OF DATA VALIDATION CONDUCTED, PHASES 1, 2, AND 3 - Footnotes

Footnotes:

1+/S2BVEM	- Tier 1 Plus, Stage 2B, electronic and manual
1+/S2BVM	- Tier 1 Plus, Stage 2B, manual
2/S3VEM	- Tier 2, Stage 3, electronic and manual
2/S3VM	- Tier 2, Stage 3, manual
AVS/SEM	- Acid-Volatile Sulfides/Simultaneously Extracted Metals
CLP	- Contract Laboratory Program
D - #	- DAS Specification
DAS	- Delivery of Analytical Services
MA#	- Modification to SOW
SDG	- Sample Delivery Group
SIM	- Selected Ion Monitoring
SOW	- Statement of Work
TAL	- Target Analyte List, the complete list of metals in the CLP SOW referenced

TABLE 4-28
COMPLETENESS SUMMARY, PHASES 1, 2, AND 3

Event/Matrix	Analysis	Completeness Planned Samples			Completeness Laboratory Data			Overall % Complete
		Planned Locations	Sampled Locations	% Complete	No. Total Results	No. Rejected Results	% Complete	
Phase 1 Surface Water, Sediment, Soil								
Surface Water	Volatile Organic Compounds (Trace and SIM)	43	36	84	1938	0	100	84
	1,4-Dioxane	43	36	84	38	0	100	84
	TAL Metals (Total)	43	36	84	897	0	100	84
	TAL Metals (Dissolved)	43	36	84	897	0	100	84
	Cyanide	43	36	84	39	0	100	84
	Hexavalent Chromium	43	36	84	39	0	100	84
	Hexavalent Chromium	43	36	84	39	0	100	84
	Alkalinity	43	36	84	38	0	100	84
Sediment	Volatile Organic Compounds	43	36	84	1976	308	84	71
	Semivolatile Organic Compounds (Full Scan and SIM)	32	24	75	1742	111	94	71
	Pesticides	32	24	75	546	36	93	70
	PCB Aroclors	32	24	75	234	18	92	69
	TAL Metals and Cyanide	43	36	84	936	2	97	81
	Hexavalent Chromium	43	36	84	39	1	100	84
Soil	Volatile Organic Compounds	53	49	92	2652	278	90	83
	Semivolatile Organic Compounds (Full Scan and SIM)	36	27	75	2010	0	100	75
	Pesticides	36	27	75	630	0	100	75
	PCB Aroclors	36	27	75	270	0	100	75
	TAL Metals and Cyanide	53	49	92	1224	0	100	92
	Hexavalent Chromium	53	49	92	51	0	100	92
	pH	53	49	92	51	0	100	92
Phase 1 Groundwater								
	Volatile Organic Compounds (Trace and SIM)	54	54	100	2907	71	98	98
	1,4-Dioxane	54	54	100	57	0	100	100
	TAL Metals (Total)	54	54	100	1311	0	100	100
	TAL Metals (Dissolved)	54	54	100	1311	0	100	100
	Cyanide	54	54	100	57	0	100	100
	Hexavalent Chromium (Total)	54	54	100	57	0	100	100
	Hexavalent Chromium (Dissolved)	54	54	100	57	0	100	100
Phase 2 Surface Water, Sediment, Soil								
Surface Water	Volatile Organic Compounds (Trace and SIM)	30	30	100	1632	0	100	100
	1,4-Dioxane	30	30	100	32	1	97	97
	TAL Metals (Total)	30	30	100	736	12	98	98
	TAL Metals (Dissolved)	30	30	100	736	16	98	98
	Cyanide	30	29	97	31	0	100	97
	Hexavalent Chromium (Total)	30	30	100	32	0	100	100
	Hexavalent Chromium (Dissolved)	30	30	100	32	0	100	100
	Alkalinity	30	30	100	32	0	100	100
Sediment	Semivolatile Organic Compounds (Full Scan and SIM)	23	23	100	1675	0	100	100
	Pesticides	23	23	100	525	13	98	98
	PCB Aroclors	23	23	100	225	0	100	100
	TAL Metals and Cyanide	18	18	100	456	3	99	99
	Hexavalent Chromium	18	18	100	19	0	100	100
Soil	Semivolatile Organic Compounds (Full Scan and SIM)	15	15	100	1072	0	100	100
	Pesticides	15	15	100	336	4	99	99
	PCB Aroclors	15	15	100	144	0	100	100
	TAL Metals and Cyanide	12	12	100	308	0	100	100
	Hexavalent Chromium	12	12	100	13	0	100	100
	pH	8	8	100	9	0	100	100

TABLE 4-28
COMPLETENESS SUMMARY, PHASES 1, 2, AND 3

Event/Matrix	Analysis	Completeness Planned Samples			Completeness Laboratory Data			Overall % Complete
		Planned Locations	Sampled Locations	% Complete	No. Total Results	No. Rejected Results	% Complete	
Phase 2 Groundwater								
	Volatile Organic Compounds (Trace)	66	66	100	3570	0	100	100
	1,4-Dioxane	0	0	0	--	--	--	0
	TAL Metals (Total)	66	66	100	1610	11	99	99
	TAL Metals (Dissolved)	66	66	100	1610	0	100	100
	Cyanide	66	66	100	70	0	100	100
	Hexavalent Chromium (Total)	66	66	100	70	0	100	100
	Hexavalent Chromium (Dissolved)	66	66	100	70	1	99	99
Phase 3 Surface Water, Sediment, Pore Water								
Surface Water	Volatile Organic Compounds (Trace)	10	10	100	583	0	100	100
	1,4-Dioxane	10	10	100	11	0	100	100
	TAL Metals (Total)	10	10	100	253	0	100	100
	TAL Metals (Dissolved)	10	10	100	253	0	100	100
	Cyanide	10	10	100	11	11	0	0
	Hexavalent Chromium (Total)	10	10	100	11	0	100	100
	Hexavalent Chromium (Dissolved)	10	10	100	11	0	100	100
	Alkalinity	10	10	100	11	0	100	100
	Dissolved Organic Carbon	10	10	100	11	0	100	100
Sediment	Volatile Organic Compounds	15	15	100	816	99	88	88
	Semivolatile Organic Compounds (Full Scan and SIM)	15	15	100	1088	103	91	91
	TAL Metals and Cyanide	15	15	100	384	1	100	100
	Hexavalent Chromium	15	15	100	16	0	100	100
	Total Organic Carbon	15	15	100	16	2	100	100
	AVS/SEM	15	15	100	176	0	100	100
Pore Water	TAL Metals (Dissolved)	15	13	87	322	0	100	87
	Hexavalent Chromium (Dissolved)	15	13	87	14	0	100	87
	Alkalinity	15	13	87	14	0	100	87
	Dissolved Organic Carbon	15	13	87	14	0	100	87
Phase 3 Groundwater								
	Volatile Organic Compounds (Trace)	31	31	100	1734	19	98	98
	1,4-Dioxane	30	30	100	33	0	100	100
	TAL Metals (Total)	36	36	100	920	5	99	99
	TAL Metals (Dissolved)	36	36	100	920	5	99	99
	Cyanide	36	36	100	40	0	100	100
	Hexavalent Chromium (Total)	36	36	100	40	2	95	95
	Hexavalent Chromium (Dissolved)	36	36	100	40	2	95	95

TABLE 4-28

COMPLETENESS SUMMARY, PHASES 1, 2, AND 3 -Footnotes

Footnotes:

Completeness of planned and collected samples includes only field samples. Completeness of laboratory data includes field samples and field duplicates. Equipment blanks, trip blanks and bottle blanks are not included.

AVS/SEM - Acid-Volatile Sulfides/Simultaneously Extracted Metals
SDG - Sample Delivery Group
SIM - Selected Ion Monitoring
SOW - Statement of Work
TAL - Target Analyte List, the complete list of metals in the CLP SOW referenced

Table 5-1. Total and Hexavalent Chromium Concentrations in Selected RI Sediment Samples: Southern Wetland and Bliss Brook Groundwater Discharge Zone

Sample Location	Total Chromium (mg/kg)	Hexavalent Chromium (mg/kg)
Southern Wetland		
SD-201	126 and 107 (field duplicates)	1.93 and 0.18 (field duplicates)
SD-202	2440	<1.2
SD-203	2980	1.3
SD-204	35.0	<1.8
SD-205	4110	<1.5
SD-301	1040	48.4
SD-302	36.2	2.71
SD-303	3220	3.0
SD-304	45.2	1.33
Bliss Brook[1]		
SD-209	2260	0.1
SD-210	138	0.06
SD-211	596	87.0
SD-212	3240	<1.5
SD-213	418	0.14
SD-214	7330	<2.5
SD-215	294	<0.56
SD-216	124	6.10
SD-217	245	6.49
SD-218	306	20.1

[1] Locations selected based on co-located surface water samples showing detectable concentrations of hexavalent chromium. The actual groundwater discharge zone does not extend as far south as SD-218, but surface water as far south as SD-218 is impacted by hexavalent chromium, as are sediments.