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**DRAFT FOR ECOLOGY REVIEW  
REMEDIAL INVESTIGATION-FEASIBILITY STUDY REPORT**

**FORMER PENTHOUSE DRAPERY AND BELSHAW SITE  
1752 RAINIER AVENUE SOUTH  
AND  
1750 22<sup>ND</sup> AVE SOUTH  
SEATTLE, WASHINGTON  
SITE ID NO. 23408  
VCP NO. NW2278**

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# 1. INTRODUCTION

Pacific Crest Environmental, LLC (Pacific Crest) and URS Corporation (URS) have jointly prepared this Remedial Investigation-Feasibility Study (RI/FS) Report for submittal to the Washington State Department of Ecology (Ecology) for the Former Penthouse Drapery and Belshaw Site (the Site) located in Seattle, Washington (Figure 1). The Site<sup>1</sup> consists of properties affected by a co-mingled contamination associated with releases that occurred at: the current location of Seattle Collision Center, Inc. (SCC), formerly owned by the Penthouse Drapery Cleaners and Manufacturers, Inc. (Penthouse Drapery), at 1752 Rainier Avenue South (Former Penthouse Drapery Property); adjacent properties immediately south of the Former Penthouse Drapery Property formerly owned by Belshaw Brothers, Inc. (Belshaw - a former subsidiary of Enodis Corporation [Enodis] and current subsidiary of AGA Foodservice), (Former Belshaw Property); and other adjacent properties owned by third parties as described in Section 2.1. This RI/FS Report describes the RI activities that have been conducted to assess the nature and extent of concentrations of the contaminants of potential concern (COPCs) in the media of concern. The COPCs for the Site consist of: chlorinated volatile organic compounds (CVOCs) associated with releases of dry cleaning solvents that occurred on the Former Penthouse Drapery Property and releases of metal cleaning solvents that occurred on Former Belshaw Property; 1,4-dioxane, a solvent stabilizer, that is associated with releases of the CVOG 1,1,1-trichloroethane (1,1,1-TCA) that occurred on the Former Belshaw Property; and petroleum hydrocarbons that are associated with gasoline releases from a former underground storage tank (UST) system located on the Former Belshaw Property. The contaminants of concern (COCs) are the COPCs in the media of concern that exceed their Model Toxics Control Act (MTCA) Cleanup Regulation (Chapter 173-340 of the Washington Administrative Code [WAC 173-340] as amended November 2007) cleanup levels. Cleanup of the Site is required because concentrations of the COCs in soil and groundwater exceed their respective cleanup standards. In addition to the RI activities, this RI/FS Report presents an evaluation of the feasibility of cleanup action alternatives for the Site. The Site has been assigned Facility/Site No. 23408 and Voluntary Cleanup Program (VCP) Project No. NW2278 by Ecology. The RI and FS activities documented in this report were conducted to assess the Site under the guidelines of the VCP in accordance with MTCA.

## 1.1 PURPOSE

This RI/FS Report is intended to provide sufficient information to enable Ecology and the potentially liable persons (PLPs) to reach an agreement on a final cleanup action approach for the Site under the VCP, and for Ecology to provide an opinion letter stating that this RI/FS meets the substantive requirements of MTCA (RI/FS Approval Opinion Letter). The RI/FS Report is considered “draft” until Ecology issues the RI/FS Approval Opinion Letter.

## 1.2 CLEANUP ACTION RESPONSIBILITIES

The cleanup action is being conducted under the direction of:

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<sup>1</sup> A “Site” is defined as the areal and vertical extent of the contaminants of concern (COCs) in the media of concern at concentrations that exceed the applicable cleanup levels.

Mr. Colin Tsuchikawa and Penthouse Drapery  
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The environmental consultants for the cleanup action are:

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URS Corporation  
c/o Mr. David Raubvogel - Senior Geologist; L.H.G., P.G.  
1501 4th Avenue, Suite 1400  
Seattle, Washington 98101

The current property owners are:

Mr. Todd Sullivan  
Seattle Collision Center, Inc.  
1752 Rainier Avenue South  
Seattle, Washington 98144

Brunzer, LLC, Sleepy Koala LLC, and Centoli Improvement, LLC (collectively Centioli)  
c/o Mr. Todd V. Biesold – Merlino Food, Inc. - Chief Financial Officer  
PO Box 80068  
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## **2. BACKGROUND**

### **2.1 INVESTIGATION AREA**

The Site investigation area (Investigation Area) includes: the Former Penthouse Drapery and Former Belshaw property; adjacent Centioli property; the public right-of-ways adjacent to the properties; and the topographically up- and down-gradient areas. Copies of the legal descriptions for the affected parcels within the Investigation Area are provided in Appendix A. The boundaries of the Investigation Area extend vertically from the surface to the maximum depth in borings completed within the Investigation Area, and laterally for the area depicted on Figure 2.

#### **2.1.1 Former Penthouse Drapery Property Description**

The Former Penthouse Drapery Property consists of a 0.11-acre parcel of land located 1752 Rainier Avenue South in Seattle, Washington. Improvements to the Former Penthouse Drapery Property include one 4,790 square-foot commercial building (the SCC Building), reportedly constructed in 1947. Mr. Todd Sullivan currently owns the Former Penthouse Drapery Property, and SCC conducts automobile body repair activities inside the SCC Building.

The Former Penthouse Drapery Property is bounded to the north by South State Street and beyond by Allied Furniture Clinic; to the east and south by vacant parcels; and to the west by Rainier Avenue South and beyond by Stewart Lumber and Hardware. The Former Penthouse Drapery Property is zoned commercial (C1-65). Residential properties are located northeast of the Former Penthouse Drapery Property.

A chronologic summary of historic operations at the Former Penthouse Drapery Property that is based on Sanborn Fire Insurance maps and Polk street directories is presented below:

- Commercial and industrial operations have apparently been conducted on the Former Penthouse Drapery Property at least since 1947.
- Between 1951 and 1970, Associated Industries Fabricators, Inc. occupied the SCC Building and conducted aircraft parts manufacturing;
- In 1970, American Pool Supply is listed as occupying the SCC Building;
- In 1975, Northwest Pool and Patio Supply is listed as occupying the SCC Building;
- In 1980, Atlas Equipment Pumps is listed as occupying the SCC Building;
- Between approximately 1980<sup>2</sup> and 1990, Penthouse Drapery occupied the SCC Building. Penthouse Drapery operations included the operation of dry cleaning equipment which used tetrachloroethene (PCE) as the primary cleaning solvent. No additional operational information was provided to Pacific Crest by the former owner/operator of the dry cleaning operation regarding the use, storage and waste management related to PCE by Penthouse Drapery. The dry cleaning equipment was presumed to be located in the southeastern portion of the SCC Building;
- In 1994, Don-Vinn Company (restaurant equipment and supplies) is listed as occupying the Building; and,

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<sup>2</sup> Anecdotal information suggests that Penthouse Drapery may have begun operation at the Former Penthouse Property as early as 1978 (Personal Communication 2014), but this information conflicts with the information obtained from the Polk Directory for 1980.

- Mr. Todd Sullivan currently owns the Former Penthouse Drapery Property, and SCC has been operating an auto body repair facility in the SCC Building since 1998.

### **2.1.2 Former Belshaw Property Description**

The Former Belshaw Property is bounded by Rainier Avenue South to the west and 22<sup>nd</sup> Avenue South to the east (Figure 2). Belshaw formerly manufactured donut production equipment within Former Paint Building and Former Welding Shop Building located at 1762 Rainier Avenue South and 1765 22<sup>nd</sup> Avenue South. Other Belshaw operations were conducted on property east of 22<sup>nd</sup> Ave. South. These parcels are not part of this Site and are not a part of this RI/FS. Facility parking was located in a gravel covered parking area located to the south across South Grand Street (Figure 2).

The Former Belshaw Property is located within a mixed use area of commercial, light industrial, and residential properties and is bounded to the north by SCC and a former residential property which has been demolished and is currently vacant (Figure 2). The Belshaw parking lot is bounded to the south by an automotive repair facility.

Between approximately 1924 and 2004, Belshaw or its corporate predecessors owned and/or occupied the Former Belshaw Property. Belshaw moved its operations in 2004 and the Former Belshaw Property was acquired by Centioli. Centioli now owns all of the Former Belshaw Property affected parcels listed in Appendix A, which are now zoned commercial (C1-65).

Operations conducted on the Former Belshaw Property and property to the east of 22<sup>nd</sup> Ave S. (not included in the Site because no commingled contamination has been detected; operations conducted on those properties are described here for informational purposes) by Belshaw consisted of manufacturing bakery and restaurant equipment. Belshaw's manufacturing processes included: aluminum parts casting using an on-site foundry; parts washing at multiple locations using degreasing chemicals; parts machining; welding; painting; and equipment assembly. The chemicals used in the manufacturing process by Belshaw included: solvents containing 1,1,1-TCA; petroleum based cutting oils; aromatic alcohol; propylene glycol; chlorinated alkane polymer; methyl ethyl ketone (MEK); toluene; xylene; ethylbenzene; ethanol; methanol; petroleum naphthalene; and mineral spirits. Two USTs containing leaded gasoline appear to have been located on the Former Belshaw Property west of 22<sup>nd</sup> Street South near the location of the Former Welding Building.

Belshaw's solvent disposal practices changed over time and Belshaw personnel reported that historically spent solvents may have been used for weed control on unpaved portions of the Former Belshaw Property in the area of the former Paint Building (Aaron and Wright 2002a and URS 2002). In 1995, Dames and Moore, Inc. (D&M) conducted an inspection of the Belshaw operations as part of a Phase I Environmental Site Assessment (ESA), identifying several recognized environmental conditions including: improper waste storage on the unpaved lot near the former Welding and Paint Buildings; poor housekeeping associated with solvent use; and stained concrete. A subsequent inspection by Ecology in 1999 identified similar conditions and, as a result of the inspection, Belshaw was issued a Notice of Correction dated March 15, 1999.

### **2.1.3 Site Discovery and Regulatory Status**

In 2002, subsurface investigation activities were conducted by Enodis to characterize the nature and extent of petroleum releases from the USTs formerly located on the Former Belshaw

Property, and chlorinated solvent releases resulting from historical disposal practices on the Former Belshaw Property. Investigation activities conducted after 2002 identified areas on the Former Penthouse Drapery Property where releases of PCE occurred. Subsurface investigation activities conducted by Enodis and, later, by Penthouse Drapery, consisted of: advancing soil borings; installing groundwater monitoring wells; and collecting samples of potentially affected media for laboratory analysis of total petroleum hydrocarbons (TPH) as gasoline range organics (GRO), diesel range organics (DRO), and oil range organics (ORO); metals; volatile organic compounds (VOCs including CVOCs); and semi-volatile organic compounds (SVOCs). The releases that occurred on the Former Penthouse and Belshaw properties have been reported to Ecology and cleanup is being conducted with oversight by Ecology within Ecology's VCP under VCP Project No. NW2278.

#### 2.1.4 Chemical Properties

The properties of the chemicals released in the Investigation Area are summarized below:

- PCE ( $C_2Cl_4$ ) is a widely used synthetic CVOC solvent, commonly used as dry cleaning solvent. PCE has been used in dry cleaning since the 1940s and became the preferred solvent in the dry-cleaning industry in the 1960s because of its relatively low toxicity, non-flammability, stability, and moderate cost compared to alternative solvents. PCE is a colorless, volatile, non-flammable, chlorinated ethene with a sweet ether-like odor. It has a low solubility in water and a high affinity for sorption to soils and organic matter. PCE has a specific gravity of 1.6, and can be present in the subsurface as a dense non-aqueous phase liquid (DNAPL) when releases to the environment occur. PCE has a relatively high Henry's constant and can be expected to form vapor plumes that emanate from the source area and the dissolved-phase plume, which can cause vapor intrusion into buildings. Under anaerobic conditions in groundwater, bacteria mediated reductive dechlorination breaks down PCE into trichloroethene (TCE); TCE into 1,1,-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (c-DCE) and trans-1,2-dichloroethene (t-DCE); c-DCE and t-DCE into vinyl chloride (VC); and VC into ethene and carbon dioxide (Wiedemeier et al. 1999). The reductive dechlorination process for chlorinated ethenes is illustrated below:  
  
PCE ► TCE ► c-DCE (primarily)/t-DCE(secondary)/1,1-DCE ► VC ► ethene and carbon dioxide ( $CO_2$ )
- TCE ( $C_2HCl_3$ ) is another widely used synthetic CVOC solvent. TCE is commonly used in metal cleaning activities. Similar to PCE, TCE has a specific gravity of greater than 1, may be present as DNAPL when releases to the environment occur, and can form a vapor plume. The presence of TCE in soil and/or groundwater can be associated with either a release of TCE that was used in a metal cleaning application or as a degradation product of PCE. As described above, reductive dechlorination breaks down TCE into c-DCE, t-DCE, and 1,1-DCE.
- 1,1,1-TCA ( $C_2H_3Cl_3$ ) is another synthetic CVOC solvent that was introduced for commercial use in the mid-1950's. 1,1,1-TCA has a specific gravity of 1.34, and can be present as a DNAPL when releases to the environment occur. The manufacture and use of 1,1,1-TCA has been phased out due to the international determination under the Montreal Protocol on Substances that Deplete the Ozone Layer that 1,1,1-TCA was an ozone depleting substance (ODS), and Title VI of the 1990 Amendments to the Clean Air Act (CAA) which enacted regulations to control the releases of ODS materials. The

primary use of 1,1,1-TCA was in vapor degreasing and cold cleaning of fabricated metal parts and other materials. Low concentrations of PCE, TCE and 1,2-dichloroethane (1,2-DCA) have been detected as impurities in technical grade 1,1,1-TCA used for metal degreasing (Mohr et. al 2010). 1,1,1-TCA degrades abiotically into 1,1-DCE, and, under anaerobic conditions, bio-degrades into 1,1-dichloroethane (1,1-DCA) which further bio-degrades into chloroethane and ethane (Wiedemeier et al. 1999). The reductive dechlorination process for chlorinated ethanes is illustrated below:

1,1,1-TCA ► 1,1-DCA ► Chloroethane ► ethane ► CO<sub>2</sub>

- 1,4-dioxane is a versatile solvent and has primarily been used as a metal inhibitor and an acid acceptor to maximize the effectiveness of 1,1,1-TCA as a cleaning and degreasing agent. Technical grade formulations of 1,1,1-TCA used for metal degreasing typically contained between 2% and 4% 1,4-dioxane by volume (Mohr et. al 2010). The first reporting of commercial production in the United States was 1951. 1,4-dioxane is a colorless, volatile, flammable, cyclic ether with a mild odor. It is fully miscible with water, most organic solvents, aromatic hydrocarbons, and oils. 1,4-dioxane is characterized by a high solubility and low affinity for sorption to soils and organic matter. Because of these properties, it readily leaches from and through soil following its release to the environment. Once in groundwater, 1,4-dioxane is generally resistant to biodegradation when co-located with other solvents. The contaminant 1,4-dioxane is challenging because of its high solubility, minimal retardation in soils, invulnerability to hydrolysis, low volatility, and because natural biodegradation processes occur slowly. This makes 1,4-dioxane much more mobile and persistent than many contaminants at solvent release sites. As such, 1,4-dioxane groundwater plumes tend to be more mobile – and thus typically more widespread than chlorinated solvent plumes, which is also the case for the low-concentration plume at this Site.
- Gasoline is a mixture of relatively volatile hydrocarbons, including normal and branched chain alkanes, cycloalkanes, alkenes, and aromatics. Gasoline is lighter than water with a specific gravity of approximately 0.7. Upon release into the environment, gasoline is not transported as a mixture; rather, the various components of the mixture selectively partition to the atmosphere, soil, or water according to their individual physical/chemical properties. Gasoline released to soils will differentially partition by volatilization, dissolution, or adsorption of individual constituents according to their physical and chemical properties. Gasoline exists in soil in four states: (1) as a free-moving liquid (light non-aqueous phase liquid [LNAPL]); (2) adsorbed to soil particulates; (3) dissolved in groundwater; and (4) as a vapor. Components of gasoline that are not volatilized or sorbed to soils will migrate through the unsaturated zone to the groundwater table. Hydrocarbons immobilized in the unsaturated zone may be solubilized by downward moving soil water or fluctuating groundwater levels and this residual material typically serves as a source of contamination. Water-soluble components, which consist predominantly (87-95%) of aromatics, will dissolve in the groundwater. Water-soluble compounds, such as benzene, toluene, ethylbenzene, and xylene (BTEX), show a greater potential for transport in groundwater. Prior to the mid-1980's, tetraethyl lead, ethylene dibromide (EDB), and ethylene dichloride (EDC or 1,2-DCA) were used as an additive compound in gasoline.

## **2.2 NATURAL CONDITIONS**

### **2.2.1 Physiographic Setting**

The Investigation Area is located in the Rainier Valley, southeast of downtown Seattle. The Site is located near the centerline of the Rainier Valley, with moderately sloped valley sidewalls to the east and west. The surface elevation is approximately 70 feet above mean sea level (AMSL), and the general direction of the topographic slope near the Site is to the southwest.

### **2.2.2 Terrestrial Habitat Setting**

Land use within Investigation Area consists of a combination of urban commercial and residential property and does not contain undisturbed terrestrial habitat for wildlife. Contiguous undeveloped land with an area greater than 1.5 acres is not present either on the Site or within 500 feet of the Site. Due to the size of the undeveloped contiguous land located on or within a 500 foot radius of the Site (less than 1.5 acres) and the COCs present, the Site qualifies for an exemption under WAC 173-340-7491 (b) and (c)(i).

### **2.2.3 Geologic Setting**

The Puget Sound region is underlain by Quaternary sediments deposited by several glacial episodes (Galster and Laprade 1991). The regional subsurface conditions were generated by deposition occurring through a series of glacial advances and retreats. The regional sediments consist primarily of interbedded and/or sequential deposits of alluvial clays, silts, and sands, typically situated over deposits of glacial till consisting of silty sand to sandy silt with gravel. Outwash sediments consisting of stratified sands, silts, clays, and gravels were deposited by rivers, streams, and post-glacial lakes during the glacial retreats. With the exception of the most recent recessional deposits, sediments have been compacted by the historical overriding ice sheets.

Surficial geology in the immediate vicinity of the Site is identified in the United States Geologic Survey (USGS) Geologic Map of Seattle (Troost et al 2005) as Quaternary age recessional lacustrine and outwash deposits (Qvrl and Qvr) of the Vashon Stade during the Fraser Glaciation. The Vashon Stade of the Fraser Glaciation occurred approximately 15,000–13,000 years ago, and consisted of a portion of the Cordilleran Ice Sheet occupying the Puget lowland area of western Washington. Glacial melt-water drained southwest to the Pacific Ocean due to the dam created by the glacial toe. Qvrl is laminated silt and clay with low to high plasticity, localized sand layers, peat, and other organic sediment deposited in slow moving water and ephemeral lakes. In the Rainier Valley, Qvrl can be up to 60 feet in thickness. Recessional outwash (Qvr) consists of sand, silty sand, and gravel deposited by streams from the retreating ice sheet. Vashon till (Qvt), consisting of a compact mixture of silt, sandy silt, and gravel, underlies Qvrl and Qvr and Vashon advance outwash (Qva), consisting of sand, silty sand and gravel deposited by streams from the advancing ice sheet, underlies Qvt.

The Site is located in the Seattle Fault zone (Troost et al 2005), which consists of a 4 mile wide east-to-west trending zone of faults extending from the foothills of the Cascade Range on the east through Mercer Island and extending to Hood Canal on the west. While the most recent and largest known earthquake occurred within the Seattle Fault zone approximately 1,000 years ago, the fault zone predates the period of glaciation. As a result of its location within the Seattle Fault Zone and the nature of the unconsolidated geologic material present in the subsurface, the Site is also within an area identified by the City of Seattle as subject to liquefaction during



earthquakes. During strong earthquakes, liquefaction of soil can occur when the grains of water-saturated sands and silts rearrange and the sediment loses strength. When liquefaction occurs, the liquefied soil can flow as sand boils or cause lateral spreading of overlying layers. The heterogeneous, discontinuous and highly stratified nature of the sediments encountered during drilling may be partially explained by post-depositional reworking of sediments during liquefaction events which may have occurred prior to compaction of till material by glaciers.

#### **2.2.4 Hydrogeology**

Groundwater aquifers in the Puget Sound region generally occur in recent alluvial deposits of sands and gravel, which are stratigraphically delimited by aquitards (low permeability units) consisting of glacial till deposits. Discontinuous perched shallow groundwater zones may be seasonally or locally present above the glacial till deposits (Galster and Laprade 1991). Further discussion of the site specific hydrogeologic data is presented in Section 3.

### 3. REMEDIAL INVESTIGATION AND INTERIM MEASURES

#### 3.1 HISTORIC REMEDIAL INVESTIGATION ACTIVITIES

Between 1995 and 2010, Phase I ESAs and subsurface investigation activities were conducted in the Investigation Area by Dames & Moore (D&M), Pricewaterhouse Coopers, LLP (PWC), Aaron and Wright Technical Services, Inc. (A&W), URS, G-Logics, Inc. (G-Logics), and Pacific Crest. The objectives of these investigations included satisfying property transaction due-diligence requirements and characterizing the nature and extent of petroleum releases from the former USTs on the Former Belshaw Property and chlorinated solvent releases on the Former Belshaw and Former Penthouse Drapery Properties. Subsurface investigation activities included: advancing soil borings; installing groundwater monitoring wells; collecting soil, groundwater and soil vapor samples for laboratory analysis; and conducting in-situ hydraulic conductivity testing. The locations of soil borings and monitoring wells installed during the previous investigation activities are illustrated on Figure 3. The previous historic investigation activities performed in the Investigation Area are summarized below and in the previous draft RI-FS Report (Pacific Crest 2011):

- Phase I ESAs were performed for the Former Belshaw Property by D&M (D&M 1995), PWC (PWC 2001), and A&W (A&W 2002a). A Phase I ESA was performed by Environmental Associates Inc. (EA) for the Former Penthouse Drapery Property for SCC in 1998 (EA 1998).
- In February 2002, A&W advanced eight borings (AW-SB-1 through AW-SB-8<sup>3</sup>) and collected soil and groundwater samples for laboratory analysis. Borings AW-SB-1, AW-SB-2, AW-SB-3, AW-SB-5 and AW-SB-6 were completed on the western and southern parcels of the Former Belshaw Property (Parcels 7548301150, 7548301115, and 7548301120 (A&W 2002b).
- Between May and June 2002, URS advanced eleven soil borings (B-1 through B-10 and MW-7) collected soil and groundwater samples for laboratory analysis, and installed seven groundwater monitoring wells (MW-1 through MW-7) (URS 2002).
- In February 2003, URS advanced nine soil borings (B-11 through B-13 and MW-8 through MW-13) and installed six groundwater monitoring wells (MW-8 through MW-13). Soil and groundwater samples were collected for laboratory analysis, and URS conducted a ground penetrating radar survey to identify the location of a UST (URS 2003).
- In May 2003, URS advanced five soil borings (MW-14, DPE-1, DPE-2, DPE-3 and B-16), installed one groundwater monitoring well (MW-14), and installed three dual-phase extraction (DPE) wells (DPE-1 through DPE-3). Soil samples were collected and submitted for laboratory analysis (URS 2008).

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<sup>3</sup> The prefix "AW" was added to the A&W soil boring names to distinguish them from similarly named borings conducted by other consultants.

- In October 2003, URS advanced one soil boring, excavated one test pit (TP-1), installed one groundwater monitoring well (MW-17), and collected soil and groundwater samples for laboratory analysis. URS 2004).
- In February 2005, G-Logics advanced three soil borings (GMW-1 through GMW-3), installed three groundwater monitoring wells (GMW-1 through GMW-3) on the property located east of the Former Penthouse Drapery Property, and collected groundwater samples for laboratory analysis as part of a property acquisition by Centioli (G-Logics 2005).
- In late April and early May 2005, URS advanced eight borings (MW-18, MW-19, MW-20, MW-21S, MW-21D, MW-22, MW-23 and HA-1), installed three Continuous Multi Tubing (CMT) wells (MW-18, MW-19, and MW-20), and four standard construction groundwater monitoring wells (MW-21S, MW-21D, MW-22 and MW-23). URS collected soil and groundwater samples during the investigation for laboratory analysis (URS 2008). A CMT well consists of single borehole completed as multiple monitoring wells with discrete screen intervals (ports) designed to sample multiple saturated zones (Solinst 2007).
- In May 2008, URS advanced two soil borings (SCC-1 and SCC-2), installed two monitoring wells (SCC-1 and SCC-2), collected soil and groundwater samples for analysis from beneath the SCC Building, and collected groundwater samples for laboratory analysis from select groundwater monitoring wells (URS 2008).
- In April 2009, URS advanced 15 borings (MW-24-S, MW-24-D, MW-25-S, MW-25-I, MW-25-D, MW-26-S, MW-26-I, MW-26-D, MW-27-S, MW-27-I, MW-27-D, MW-28-S, MW-28-I, MW-28-D, and MW-29) using hollow-stem auger and roto sonic drilling methods; converted the borings into groundwater monitoring wells; completed in-situ hydraulic conductivity testing (i.e. “slug” tests) in select groundwater monitoring wells; conducted groundwater monitoring and sampling in select wells in the Investigation Area; and submitted soil and groundwater samples for laboratory analysis. The scope of work was determined by URS on behalf of Enodis, in consultation with Pacific Crest on behalf of Penthouse Drapery, and Farallon Consulting, LLC (Farallon) on behalf of Belshaw (Pacific Crest 2010a).
- Between February 2010 and April 2011, Pacific Crest conducted RI/FS activities on behalf of Penthouse Drapery for the portion of the Site affected by CVOCs associated with the release of PCE that occurred on the Former Penthouse Drapery Property. During the RI/FS activities, Pacific Crest advanced four reconnaissance soil borings (PH-SB-2 through PH-SB-5<sup>4</sup>), nine monitoring well borings (MW-30-S, MW-30-I, MW-30-D, MW-31-S, MW-31-I, MW-31-D, MW-32-S, MW-32-I, and MW-32-D), sampled soil from borings for CVOCs, sampled groundwater from existing wells, collected one subslab soil vapor sample and one ambient air sample; and conducted an SVE pilot test after converting SB-5 to a recovery well (RW-1) (Pacific Crest 2011). The results of the RI/FS activities were presented in a draft RI/FS Report dated May 11, 2011.

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<sup>4</sup> The prefix “PH” was added to the Pacific Crest soil boring names to distinguish them from similarly named borings conducted by other consultants.

## **3.2 HISTORIC GASOLINE IMPACTED AREA INVESTIGATION AND INTERIM MEASURE ACTIVITIES**

### **3.2.1.1 Investigation Activities**

During the sale of the stock of Belshaw in 2002, a limited subsurface investigation was implemented to assess the area adjacent the Former Welding Shop Building near a reported gasoline UST. Gasoline-range petroleum hydrocarbons (18 milligrams per kilogram [mg/kg]) and aromatic volatile organic compounds (e.g., ethylbenzene and toluene) were identified in the soils adjacent to the Former Welding Shop Building at a depth of 27 feet below ground surface (bgs) and strong petroleum odors were noted from approximately 17 feet bgs to 27 feet bgs. Additional investigations conducted by URS identified gasoline-range hydrocarbon constituents exceeding the MTCA Method A cleanup level in the soil sample between 10 to 25 feet bgs. Strong petroleum odors and elevated photoionization detector (PID) readings were noted to 30 feet bgs. LNAPL was identified at one location (DPE-2) and product thicknesses ranged from approximately 1.4 feet to 2.5 feet. The extent of gasoline-affected soil appeared to be limited to the immediate vicinity of the former tank/fueling system location and the “smear” zone as the groundwater table fluctuated seasonally. Groundwater gasoline-range petroleum hydrocarbons concentrations are summarized on Figure 4.

Based on the type and distribution of the petroleum hydrocarbon affected soil and groundwater in the vicinity of the Former Welding Shop Building, URS recommended implementing an interim voluntary cleanup. The preferred cleanup alternative selected was dual phase extraction (DPE).

### **3.2.1.2 Interim Measure Voluntary Cleanup Activities**

A DPE soil and groundwater remediation system was installed within the gasoline affected area in April and May 2004. Six DPE wells (DPE-2 through DPE-7) were installed within the treatment area and connected by a series of subgrade piping to an enclosure equipped with extraction pumps and vapor and groundwater treatment systems (Appendix B). DPE-1 was installed outside of the gasoline impacted area and was, therefore, not included in the remediation well network. The system began operations in May 2004 and groundwater extraction rates during early operations were approximately 1 gallon per minute (gpm). Approximately 20 gallons of LNAPL were recovered from DPE-2 during the early operations of the system. The system operated on a continuous basis, with the exception of minor shutdowns for equipment replacement and maintenance, until monthly on/off pulsing operations began in May 2006 through March 2007. In March 2007, the system blower failed, and the blower was subsequently refurbished during the summer of 2007. The system ran for another few months until the blower failed again in January 2008. After evaluating system extraction performance and concluding that an asymptotic maximum volume of contaminants had been extracted from the subsurface with consideration of disproportionate cost analysis, a determination was made to monitor natural attenuation from that point forward. System operational history, groundwater extraction history, and vapor extraction history since start-up are summarized in Appendix B.

As part of performance monitoring, untreated and treated extracted vapor and groundwater samples were collected and analyzed on a periodic basis. Extracted vapor gasoline-range TPH concentrations decreased from initial concentration of over 7 parts per million (ppm) to less than 0.110 ppm. DPE-4 and DPE-5 were taken offline in January 2005 and were configured to act as passive vents to allow greater subsurface air flow through the vadose zone soils. Extracted groundwater gasoline-range TPH concentrations also decreased from an initial concentration of

47.7 mg/l to less than 0.05 mg/l. Based on extraction concentrations and flow rate information collected during system operation, estimated TPH recovery rates were calculated and tracked for vapor and groundwater. Total vapor phase TPH recovery was estimated to be 919 pounds. Approximately 202 pounds of liquid phase TPH was recovered from groundwater extraction, including 32 gallons of LNAPL (gasoline) extracted from well DPE-2 that were recovered during the first few months of operation following system start-up. A total of approximately 715,000 gallons of treated water was discharged to the sanitary sewer in accordance with King County Discharge Authorization No. 4068-01.

Historic groundwater data is presented in Appendix B. Gasoline-range hydrocarbon and benzene concentrations in groundwater decreased significantly following start-up in May 2004. In May 2004, well DPE-2 was observed to have 2 feet of LNAPL and within 6 months of DPE system operation, product was no longer evident in this well. DPE-3 and MW-4 historically had two of the highest gasoline-range TPH groundwater concentrations at the Site. Gasoline-range TPH concentrations decreased from 49 mg/L to less than 2 mg/L at DPE-3 during DPE system operation, while benzene concentrations decreased from 3.25 mg/L to 0.129 mg/L. Gasoline-range TPH concentrations detected at MW-4 also decreased from 5.22 mg/L to 78 µg/L during DPE system operation.

### **3.2.2 MTCA Status and Ecology Correspondence**

A chronologic summary of regulatory milestones is presented below:

- In 2002, Enodis notified Ecology of releases that had occurred on the Former Belshaw Property, and Ecology assigned Cleanup Site ID 3018 to the Former Belshaw Property<sup>5</sup>.
- Penthouse Drapery entered into the VCP on May 10, 2010 as a PLP for remedial activities, and Ecology assigned VCP Project No. NW2278 and Facility/Site No. 23408 to the Penthouse facility.
- In July and August 2010, Penthouse Drapery submitted the Data Summary Report (Pacific Crest 2010a) and Sampling and Analysis Plan (Pacific Crest 2010b) to Ecology for review. In correspondence dated January 11, 2011, Ecology provided Penthouse Drapery with comments on the Data Summary Report and Sampling and Analysis Plan.
- In May 2011, RI and FS results were submitted to Ecology in the draft RI-FS Report dated May 11, 2011 (Pacific Crest 2011), with a request for an Opinion Letter.
- Ecology issued an Opinion Letter dated September 20, 2011, with comments on the draft RI-FS Report and required further characterization before providing an Opinion Letter concurring that the RI and FS met the substantive requirements of MTCA.

## **3.3 RECENT REMEDIAL INVESTIGATION ACTIVITIES**

In response to the comments provided in Ecology's correspondence dated September 20, 2011, representatives of the PLPs met with Ecology on November 23, 2011, and July 2, 2012, with proposals for further characterization activities (Joint Work Scope as presented in the Further

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<sup>5</sup> Belshaw also conducted investigation activities on property east of 22nd Ave. S. These investigations were reported to Ecology. Some of these borings may be reflected on site figures included in this report. However, any contaminants detected in that investigation are not commingled with the contamination on the Site; are not addressed in this report; and are being addressed separately.

Remedial Investigation Work Plan dated June 4, 2012) that were designed to address the data gaps identified by Ecology. During the meetings, Ecology concurred that the Joint Work Scope was appropriate and provided a verbal approval to proceed. The Joint Work Scope activities were conducted by Pacific Crest on behalf of Penthouse Drapery and by URS on behalf of Enodis between November 2011 and January 2013.

### **3.3.1 Joint Work Scope – Penthouse Drapery**

The Joint Work Scope activities conducted on behalf of Penthouse Drapery consisted of the following:

- Conducting an underground utility video surveillance and underground utility survey in the immediate vicinity of the SCC Building.
- Measuring water levels and collecting groundwater samples for laboratory analysis from select existing groundwater monitoring wells.
- Advancing eight deep reconnaissance soil borings (PH-SB-1, PH-SB-6, PH-SB-7, PH-SB-8, PH-SB-9, PH-SB-13, PH-SB-14 and PH-SB-15) outside the SCC Building to depths of between 70 feet bgs and 110 feet bgs and collecting soil and groundwater samples from the borings for laboratory analysis.
- Advancing three shallow reconnaissance soil borings (PH-SB-10, PH-SB-11 and PH-SB-12) inside the SCC Building to between 1 foot bgs and 12 feet bgs and collecting soil samples from the borings for laboratory analysis.

#### **3.3.1.1 Utility Location and Inspection**

Utility location and inspection conducted prior to subsurface investigation consisted of locating conductible utilities and video inspection of a previously identified sanitary sewer. Utility location and inspection activities are described below:

- On November 15, 2011, Applied Professional Services, Inc. of North Bend, Washington (APS), a private utility locating company, inspected accessible sewer utilities inside the SCC Building using a closed-circuit video camera. Electronic copies of the video footage taken inside the sewer utilities are provided in Appendix C.
- Prior to the initiation of subsurface work, the public “One-Call” utility locating service was notified with a request to mark public utilities in the rights-of-way in proximity of the drilling locations. In addition, on September 4, 2012, December 8, 2012, and December 26, 2012, APS checked the drilling locations for the presence conductible subsurface utilities.

The locations of subsurface utilities in the vicinity of the SCC Building are illustrated on Figure 5.

#### **3.3.1.2 Groundwater Monitoring**

In July and August 2012, Pacific Crest conducted groundwater monitoring of the existing monitoring wells. The monitoring event included measuring water levels and collecting groundwater samples for laboratory analysis.

Groundwater elevation monitoring was conducted at the Site by removing the monument and well cap from each of the existing wells and permitting the water level in each well to equilibrate with atmospheric pressure for a minimum of 15 minutes prior to collecting groundwater level data. On July 23, 2012, Pacific Crest personnel measured groundwater levels in the existing

wells relative to a surveyed mark located on the north side of each well casing to an accuracy of 0.01 foot using an electronic water level indicator.

Groundwater samples were collected from wells SCC-1, SCC-2, MW-2, MW-8, MW-14, MW-21-S, MW-21-D, MW-22, MW-24-S, MW-24-D, MW-25-S, MW-25-I, MW-25-D, MW-26-S, MW-26-I, MW-26-D, MW-27-S, MW-27-I, MW-27-D, MW-28-S, MW-28-I, MW-28-D, MW-29, MW-30-S, MW-30-I, MW-30-D, MW-31-S, MW-31-I, MW-31-D, MW-32-S, MW-32-I, and MW-32-D using passive diffusion bag (PDB) samplers manufactured by Columbia Analytical Services (CAS). Well MW-17 could not be located and appears to have been destroyed during demolition of the Former Paint Building in 2010. PDB samplers are long cylindrical tubes constructed of low density polyethylene (LDPE) that are filled with analyte-free distilled water and sealed to prevent cross-contamination. Upon retrieval (minimum 14 days after deployment), the PDB samplers were opened and water inside the PDB sampler was transferred into laboratory provided sample containers for submittal to the analytical laboratory for analysis.

Pacific Crest installed PDB samplers in monitoring wells SCC-1, SCC-2, MW-2, MW-8, MW-14, MW-21-S, MW-21-D, MW-22, MW-24-S, MW-24-D, MW-25-S, MW-25-I, MW-25-D, MW-26-S, MW-26-I, MW-26-D, MW-27-S, MW-27-I, MW-27-D, MW-28-S, MW-28-I, MW-28-D, MW-29, MW-30-S, MW-30-I, MW-30-D, MW-31-S, MW-31-I, MW-31-D, MW-32-S, MW-32-I, and MW-32-D on July 24, 2012. The PDB sampling methods and procedures were performed in conformance with the Further Remedial Investigation Work Plan. On August 7, 2012, Pacific Crest retrieved the PDB samplers from the wells and collected samples for laboratory analysis. The samples were labeled, placed on ice in a cooler, and transported to OnSite Environmental, Inc. (OnSite) of Redmond, Washington under standard chain-of-custody protocols. OnSite analyzed the groundwater sample for CVOCs by SW-846 Method 8260B. A copy of the laboratory analytical report is provided in Appendix D.

PDB samplers could not be used to collect groundwater samples from CMT wells MW-18, MW-19, and MW-20 due to the small diameter of the well casing. Therefore, on July 24, 2012 and July 25, 2012, Pacific Crest collected a groundwater samples from CMT wells MW-18, MW-19, and MW-20 for laboratory analysis using U.S. Environmental Protection Agency (EPA) low-flow (minimal drawdown) groundwater purging and sampling procedures (EPA 1996). During purging, groundwater geochemical parameters including temperature, specific conductivity, pH, DO, and oxidation/reduction potential (ORP) were measured and recorded approximately every three minutes using a YSI 556 multi-parameter water quality meter equipped with a flow-through cell. The groundwater sample from each wells was collected from upstream of the flow-through cell upon stabilization of the geochemical parameters.

The groundwater samples from each well were transferred into laboratory-prepared 40-milliliter (ml) sample vials. The groundwater samples were labeled, placed in a cooler on ice, and transported to OnSite under standard chain-of-custody protocols. The samples were analyzed for CVOCs by SW-846 Method 8260B on a standard turnaround time. A copy of the laboratory analytical report is provided in Appendix D.

### **3.3.1.3 Deep Reconnaissance Borings**

Cascade Drilling, Inc. (Cascade) of Woodinville, Washington, advanced five soil borings (PH-SB-1, PH-SB-6, PH-SB-7, PH-SB-8, and PH-SB-9) between September 4, 2012, and September 11, 2012 and Holt Drilling, Inc. (Holt) of Edgewood, Washington advanced three soil borings (PH-SB-13, PH-SB-14 and PH-SB-15) between December 26, 2012, and January 8,

2013, under the direction of a Pacific Crest field geologist. The boring locations are illustrated on Figure 3. Borings PH-SB-1, PH-SB-6, PH-SB-7, PH-SB-8, and PH-SB-9 were advanced using rotosonic drilling technology and borings PH-SB-13, PH-SB-14, and PH-SB-15 were advanced using hollow stem auger technology. Borings PH-SB-1, PH-SB-6, and PH-SB-7 were each advanced to a total depth of approximately 80 feet bgs. Boring PH-SB-8 was advanced at a 25 degree angle beneath the SCC Building to a total vertical depth of 70 feet bgs. Boring PH-SB-9 was advanced to 100 feet bgs. Borings PH-SB-13 and PH-SB-14 were advanced to a total depth of 110 feet bgs. Due to refusal, boring PH-SB-15 was advanced to a total depth of approximately 106.5 feet bgs. Upon completion, the borings were backfilled with bentonite pellets and hydrated with clean water.

Soil samples were collected continuously at five-foot intervals during advancement of the borings PH-SB-1, PH-SB-6, PH-SB-7, PH-SB-8, and PH-SB-9 using a five-foot long, 3-inch inside diameter sampler and at 2.5-foot discrete intervals using a 1.5-foot long, 3-inch inner diameter, standard split-spoon sampler during the advancement of borings PH-SB-13, PH-SB-14, and PH-SB-15. Samples collected from the borings were described in accordance with the Unified Soils Classification System (USCS), and inspected for visual and olfactory indications of contamination. Soil vapor headspace analysis was conducted by Pacific Crest on select samples to field screen the samples for total volatile organic compound (TVOC) concentrations using a PID. The soil vapor headspace analysis was performed by placing a portion of soil from the sample interval into a re-sealable plastic bag, allowing the sample to warm for several minutes, and recording the highest TVOC concentration inside the bag measured over a 30-second span using the PID. The USCS descriptions, observations of contamination, and field screening data were recorded on borings logs, which are provided as Appendix E.

Pacific Crest personnel collected soil and groundwater samples from each boring for laboratory analysis. Soil samples were prepared for submittal to the analytical laboratory using SW-846 Method 5035A. Pacific Crest submitted the samples to OnSite under standard chain-of-custody protocols. OnSite analyzed the samples for CVOCs by SW-846 Method 8260B and a copy of the laboratory analytical report is provided in Appendix D.

Reconnaissance groundwater samples were collected through 2-inch diameter temporary wells constructed of PVC screen and casing installed in borings PH-SB-1, PH-SB-6, PH-SB-7, PH-SB-8, PH-SB-9, PH-SB-13, PH-SB-14, and PH-SB-15. Groundwater sampling was performed in accordance with Pacific Crest standard operating procedures. Due to the depth of groundwater in the temporary wells and/or insufficient recharge of groundwater during drilling, disposable bailers were used to collect samples from each temporary well point. Groundwater samples were transferred directly into laboratory-prepared 40-ml sample vials. The vials were completely filled with water to eliminate potential loss of volatiles to headspace. Each vial was checked to ensure that there were no air bubbles present in the sample. All sample containers were labeled, placed on ice in a cooler, and shipped to On-Site under standard chain-of-custody protocols for analysis on a standard turnaround time. OnSite analyzed the groundwater samples collected during the event for CVOCs by SW-846 Method 8260B; the laboratory analytical report is provided in Appendix D.

#### **3.3.1.4 Shallow Reconnaissance Borings**

On December 8, 2012, Pacific Crest conducted field work activities inside the SCC building to assess the concentrations of CVOCs in shallow soil (0 to 12 feet bgs) in the immediate vicinity of the presumed location of the former dry cleaning machine. Holt advanced three soil borings



(PH-SB-10, PH-SB-11, and PH-SB-12) using a limited access track-mounted Geoprobe™ drilling rig. The approximate boring locations are illustrated on Figure 3.

A Pacific Crest geologist was on-site to direct field activities and to collect soil samples from the soil borings. Due to refusal, borings PH-SB-10, PH-SB-11, and PH-SB-12 were advanced to total depths of 1, 12, and 5 feet bgs, respectively. Upon completion, borings were backfilled with bentonite and sealed with concrete. During drilling, soil samples were collected continuously using a 2-inch diameter macro-core sampler equipped with vinyl acetate liners. Upon retrieval from the borings, the samples were described in accordance with the USCS and observed for visual and olfactory evidence of contamination. Soil vapor headspace analysis was conducted to field screen the samples for TVOC concentrations using a PID. The USCS descriptions, observations of contamination, and field screening data were recorded on borings logs, which are provided as Appendix E.

Soil samples for potential chemical analysis were transferred into laboratory-prepared sample containers in accordance with SW-846 Method 5035. Upon collection, all samples were appropriately labeled, placed into a cooler on ice, and transported OnSite under standard chain-of-custody protocols. OnSite analyzed the soil samples for CVOCs by EPA Method 8260C and the laboratory analytical report is provided in Appendix D.

### **3.3.2 Joint Work Scope – Enodis**

The primary objective of the investigation was to assess current gasoline range TPH/BTEX concentrations in soil and groundwater within the area treated by the interim DPE cleanup action and to assess concentrations of 1,4-dioxane in groundwater. To achieve this objective, the following scope of work was performed:

- Advanced nine borings (URS-SB-1 through URS-SB-9<sup>6</sup>) between 45 to 55 feet bgs to collect soil and groundwater samples for chemical analysis.
- Collect groundwater samples from selected monitoring wells and DPE wells located within the gasoline affected area for chemical analysis.
- Analyzed the samples for gasoline range petroleum hydrocarbons by Northwest TPH – Gasoline extended (NWTPH-Gx) and lead.
- Collect groundwater samples from selected monitoring for chemical analysis of 1,4-dioxane.

#### **3.3.2.1 Soil Boring Drilling and Sampling Methods – Former UST Area**

Prior to implementing the investigation, the One Call utility notification service was contacted to demark the public utilities to the property boundary. URS contracted APS to complete a Site-specific utility clearance within the property boundary. APS located existing utilities on the property and cleared the soil boring locations. The drilling and sampling services were provided by Cascade on September 4 through 6, 2012. The borings were advanced using a CME 75 hollow stem auger drilling rig. Subsurface soil samples were collected from the boreholes using a split spoon sampler on 5 foot intervals to the total depth of the boring. Soil samples were collected for laboratory analysis based on field screening data. Soil samples were collected in accordance with the methods and procedures outline in the Joint Work Scope. Soil samples

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<sup>6</sup> The prefix “URS” was added to the URS soil boring names to distinguish them from similarly named borings conducted by other consultants.

were visually inspected and logged for lithologic description and were field screened for evidence of contamination (e.g., staining, sheen, and/or discoloration) and any odors (e.g., slight, moderate or strong petroleum hydrocarbon odors). The soil conditions were recorded on the boring logs provided in Appendix E. Volatile organics samples were collected using a 5-gram (g) EnCore® sampler (EPA Method 5035). Each sample was properly labeled with a unique sample identification number, placed in a cooler with ice, and submitted to the laboratory for analysis. Chain-of-custody forms were completed and signed by the field representative at the end of each day and shipped to the analytical laboratory.

All down-hole soil sampling equipment was decontaminated prior to use by washing with a dilute Alconox detergent solution and triple rinsed with tap water. Investigation-derived waste was placed in a clearly labeled 55-gallon drum and left on-site pending laboratory analytical results.

### **3.3.2.2 Groundwater Reconnaissance and Monitoring Well Sampling – Former UST Area**

Grab groundwater samples were collected for laboratory analysis from all of the boreholes with the exception of URS-SB-5, as groundwater was not encountered in this boring. The groundwater samples were collected by installing a temporary 10 foot long 2-inch diameter well screen within the borehole. The well was purged using low-flow purging methods and approximately three to five well volumes of groundwater were removed using a peristaltic pump with dedicated polyethylene tubing. Field parameters (e.g., temperature, pH, specific conductivity, turbidity, dissolved oxygen [DO] and oxygen-reduction potential [ORP]) were monitored and groundwater samples were collected directly from the peristaltic pump discharge into the laboratory provided sample containers.

Two monitoring wells (MW-3 and MW-13) and four DPE wells (DPE-2, DPE-3, DPE-6 and DPE-7) were sampled on September 24, 2012. Three of the wells proposed for sampling (MW-4, DPE-4 and DPE-5) could not be accessed due to damage sustained during the demolition of the Former Welding Shop Building. Prior to purging, groundwater level measurements were collected and all non-dedicated sampling equipment was decontaminated prior to each sampling event using an Alconox wash and deionized water rinse. Groundwater purging was accomplished using a peristaltic pump and the groundwater samples were collected in general conformance with low-flow groundwater sampling procedures. Field parameter measurements were recorded on the sampling log forms.

### **3.3.2.3 Analytical Methods and Cleanup Levels – Former UST Area**

The soil and groundwater samples were submitted for analysis to Fremont Analytical, an Ecology-accredited laboratory located in Seattle, Washington. The soil and groundwater analytical program included the following analyses: GRO by NWTPH-Gx, VOCs by Method 8260B, and lead by 6000 Series methods. The groundwater samples collected for lead analysis were not filtered; thus, the results represent total lead concentrations in the groundwater. The laboratory analytical reports are provided in Appendix D. A URS project chemist reviewed all of the analytical data, and based on this data quality review, no data usability issues were identified.

### **3.3.2.4 Recent Groundwater Monitoring - 1,4-dioxane**

Previous groundwater monitoring events conducted at the Former Belshaw Property did not include a Site-wide assessment of 1,4-dioxane concentrations in the monitoring wells which had detectable levels of 1,1,1-TCA. Thus, an additional assessment of groundwater 1,4-

dioxane levels was performed to evaluate the nature and extent of this constituent in groundwater.

To accomplish the above stated objectives, monitoring wells which had previously detected 1,1,1-TCA were sampled in July and August 2012. A URS scientist accompanied Pacific Crest during the groundwater monitoring event on August 7, 2012, to retrieve the PDB consistent with the Joint Work Scope. Wells that could not be equipped with passive PDBs, were sampled/purged using low flow sampling techniques. Field measurements, including pH, specific conductance, DO, temperature, and ORP, were recorded during sampling.

Sample handling and quality assurance procedures were performed in general conformance with the Joint Work Scope. During the groundwater sampling events, sample containers were labeled with a unique sample identification number, placed in a cooler with ice, and submitted to the laboratory for analysis under chain-of-custody protocol. All non-disposable sampling equipment was decontaminated as described in the Joint Work Scope. Quality assurance samples included VOC trip blanks that accompanied each sample shipment.

The groundwater samples were submitted for analysis to Fremont Analytical. Laboratory methods, sample container types, preservatives, and sample holding time requirements were outlined in the Joint Work Scope. The laboratory analytical reports are provided in Appendix D. A URS project chemist reviewed all of the analytical data, and no data usability issues were identified.

### **3.4 DECONTAMINATION AND WASTE MANAGEMENT**

All non-dedicated field sampling equipment was cleaned and decontaminated between each use and prior to leaving the Site using an aqueous solution of Alconox, and triple rinsed in deionized water. Investigation-derived waste, including soil, purge water, and decontamination wash water were temporarily contained in sealed and appropriately labeled Washington State Department of Transportation-approved 55-gallon steel drums pending waste profiling and proper disposal.

### **3.5 PRELIMINARY SCREENING LEVELS**

Prior to Ecology approval of cleanup standards for the Site, Pacific Crest and URS used preliminary screening levels (PSLs) to assess the nature and extent of COPCs in the media of concern. The PSLs are based on the MTCA methods for establishing cleanup levels, summarized below:

- Method A provides tables of default cleanup levels (Method A Cleanup Levels) that are protective of human health for common hazardous substances detected in media of concern. Method A Cleanup Levels are applicable for use at sites with relatively few hazardous substances. Method A Cleanup Levels have been developed for unrestricted land use and industrial land use scenarios.
- Method B provides a set of equations that use chemical-specific, site-specific, and exposure-specific parameters to develop risk-based cleanup levels (Method B Cleanup Levels). Method B Cleanup Levels are applicable for use at all sites governed by MTCA. Method B Cleanup Levels are calculated based on a residential exposure scenario, assuming a target cancer risk of 1 in 1,000,000 (1.0E-06) for carcinogens and a hazard

index of 1 for non-carcinogens. After calculation of Method B Cleanup Levels, the values are compared to laboratory practical quantitation limits (PQLs) and adjusted upward, if necessary, in order to insure that Method B Cleanup Levels are not less than the PQLs.

- Method C provides a set of equations and modified criteria used primarily for industrial properties. The MTCA Method C concentrations are calculated based on an industrial exposure scenario, assuming a target cancer risk of 1 in 100,000 (1.0E-05) for carcinogens and a hazard index of 1 for non-carcinogens. When multiple hazardous substances are present, cleanup levels for individual hazardous substances are adjusted downward to ensure that the total excess cancer risk does not exceed 1 in 100,000 (1.0E-05) and the total non-carcinogenic risk does not exceed a hazard quotient of 1.0.

The applicable PSLs for the COPCs in soil, groundwater, and air are the applicable MTCA Method A or Method B values which are presented in Tables 1, 2, and 3.

## **3.6 RESULTS AND CONCLUSIONS**

The results of historic and recent investigations are summarized in the following sections.

### **3.6.1 Underground Utilities**

The results of the investigation of the location and condition of the underground utilities in the vicinity of the Site are summarized below:

- Floor drains and bathrooms located on the northern side of the SCC Building connect to a subsurface sanitary sewer line that is connected to the main sanitary sewer line located west of the SCC Building in Rainier Avenue. APS and Pacific Crest did not observe damage to the sanitary sewer line during the November 2011 underground utility investigation activities.
- A 96-inch diameter storm-water sewer, an 18-inch diameter storm-water sewer, and a 72-inch diameter sanitary sewer, and water utilities are located in the rights-of-way of Rainier Avenue. Underground natural gas utility lines are located in the rights-of-way of South State Street.

The locations of the underground utilities are illustrated on Figure 5.

### **3.6.2 Non-Aqueous Phase Liquid**

The results obtained to-date indicate the following with respect to the presence of DNAPL and LNAPL at the Site:

- Historically, LNAPL has been present in the vicinity of the former UST at the Former Welding Shop Building. Based on monitoring well sampling conducted in July 2012, it is apparent that gasoline range petroleum hydrocarbon concentrations have declined significantly since pre-remedial levels. Significant reductions were noted in DPE-2 which had up to 2 feet of measurable LNAPL prior to the remedial action. During active remediation, LNAPL was recovered and contaminant concentrations declined steadily. The recent groundwater sampling at DPE-2 detected gasoline range petroleum hydrocarbon and benzene concentrations below applicable PSL (MTCA Method A cleanup levels). On the basis of the recent investigation results, LNAPL is no longer present in the subsurface near the former USTs.

- EPA guidance (*Estimating the potential for occurrence of DNAPL at Superfund sites. Publication 9355.4-07FS*) recommends 1% of the effective solubility as a rule of thumb for evaluating the presence of DNAPL. The solubility of PCE in groundwater is 200,000 micrograms/liter (µg/L); therefore the groundwater with PCE concentrations greater than 2,000 µg/L exceed the 1% rule of thumb value.
- The laboratory analysis of groundwater samples collected from wells SCC-2, MW-29, and MW-14, and boring PH-SB-4 located near the southeast corner of the SCC Building (approximate location of the former dry cleaning machine), detected PCE at concentrations indicative of the presence of DNAPL. Laboratory analysis of groundwater samples collected from depths of greater than 40 feet bgs has not detected PCE or other CVOCs at concentrations indicative of the presence of DNAPL.
- The maximum concentration of PCE detected in soil is 4.2 mg/kg (Boring SCC-2 at 35 feet bgs). This concentration, while indicative of a source area, is not indicative of the presence of an extensive DNAPL source.
- During RI activities conducted in 2010, Indigo Blue® (a hydrophobic dye used to determine the presence of DNAPL in ex-situ soil samples suspected of DNAPL contamination) was used to assess the presence of DNAPL in ex-situ soil samples collected from Borings PH-SB-2 through PH-SB-5. The presence of DNAPL was not indicated in any of the samples that were screened using Indigo Blue®.

The DNAPL assessment results suggest the presence of DNAPL “ganglia” (ITRC 2003) in a small fraction of the soil pore space in the source area associated with the release of PCE that occurred on the Former Penthouse Drapery Property. The areas of suspected DNAPL and historic LNAPL are illustrated on Figure 6.

### 3.6.3 Soil

The results obtained to-date indicate the following with respect to soil conditions encountered at the Site:

- The interpretation of the Investigation Area geology is based on soil types described in borings completed by Pacific Crest and URS.
  - In the northern portion of the Site, near the SCC Building, the upper 40-feet of soil consists of silt, clay, sand, and silty sand layers interpreted to be a mixture of shallow anthropogenic fill, recessional lacustrine and outwash deposits (Qvrl and Qvr) and till (Qvt) that have been modified by liquefaction during historic earthquakes. The material between approximately 40 feet bgs and 70 feet bgs consists of dense silt and sandy silt containing trace amounts of gravel, interpreted to be till (Qvt). The material between approximately 70 feet bgs and 110 feet bgs (maximum depth explored) consists sand and silty sand that grades with depth to silty sand and sandy silt interpreted to be advance outwash (Qva). Cross-sections illustrating these glacial units are provided as Figure 7 and Figure 8.
  - In the in the vicinity of the former USTs, up to approximately 5 feet of fill material consisting of silty sands and sands with various amounts of gravel were encountered. Native soils underlying the fill material consist of heterogeneous mixtures of silt with silty sands to sandy silts extending to between 30 to 40 feet bgs. This material was underlain by a dense silt to sandy silt layer that appears to be contiguous beneath this area. A north to south geologic cross section through the investigation area is provided on Figure 9.

- The soil field screening results in the vicinity of the former USTs are provided on the boring logs in Appendix E. During field screening of soils, elevated PID readings were noted in borings URS-SB-1 from approximately 25 feet to 37 feet bgs, URS-SB-3 from 20 feet to 30 feet bgs and URS-SB-4 from 25 to 30 feet bgs. The highest PID reading (1035 parts per million) was noted at URS-SB-1 (25 feet bgs) which also had the strongest odor of gasoline noted in any of the borings. Only slight gasoline odors were noted in the soil samples collected from the other two borings. None of the boring had notable discoloration or staining.

The laboratory analytical results from the subsurface investigation activities conducted to date are summarized below:

- Soil samples were collected within the Investigation Area and analyzed for COPCs including CVOCs or VOC by SW-846 Method 8260B. The analytical results for soil samples are summarized below:
  - PCE was detected at concentrations ranging from 0.0087 mg/kg to 4.2 mg/kg. The maximum concentration of PCE in soil does not exceed the MTCA Method B PSL for direct contact of 480 mg/kg. Concentrations of PCE in select soil samples exceed the MTCA Method A PSL of 0.05 mg/kg. The vertical and horizontal extent of concentrations of PCE in soil that exceed the most conservative PSL (MTCA Method A) is defined by soil samples collected to date.
  - Soil samples from MW-31D at 41.5 ft bgs and MW-24D at 14 ft bgs detected TCE at concentrations of 0.00099 mg/kg and 0.03 mg/kg, respectively. The maximum concentration of TCE in soil does not exceed the MTCA Method B PSL for direct contact of 11 mg/kg or the MTCA Method A PSL of 0.03 mg/kg.
  - Laboratory analysis did not detect c-DCE, t-DCE, VC or 1,1,1-TCA at concentrations above their respective practical quantitation limits (PQLs).
  - Within the former UST area, with the exception of soil boring URS-SB-1, URS-SB-3 and URS-SB-4, none of the soil samples detected gasoline-range petroleum hydrocarbons, fuel additives or VOCs (Table 5). The highest concentration of gasoline-range petroleum hydrocarbons were detected in URS-SB-1 (4,300 mg/kg) at a depth of 26 feet bgs which exceeds the applicable PSL (MTCA Method A cleanup level of 30 mg/kg). Deeper soil samples collected from this boring at 31 and 46 feet bgs detected gasoline-range petroleum hydrocarbons at concentrations of 30.2 mg/kg and 10.2 mg/kg, respectively. Gasoline range petroleum hydrocarbons were also detected in URS-SB-3 at 31 feet (5.15 mg/kg) and URS-SB-4 at 26 feet bgs (16.2 mg/kg). Deeper soil samples collected from both of these borings did not detect gasoline range petroleum hydrocarbons.
  - Benzene was detected in borings URS-SB-3 and URS-SB-4 at concentrations ranging from 0.0345 mg/kg (URS-SB-4 at 31 feet bgs) to 0.586 mg/kg (URS-SB-3 at 31 feet bgs) which exceeded the PSL (MTCA Method A cleanup levels of 0.03 mg/kg). Low concentrations of toluene, ethylbenzene and xylenes were also detected below their respective PSLs (MTCA Method A cleanup levels) (Table 5). A number of other gasoline related VOCs were detected in URS-SB-3 and URS-SB-4, at concentrations below applicable PSLs.

- Lead was detected in all of the soil samples collected in the UST Area and ranged in concentration from 1.15 mg/kg to 3.57 mg/kg, well below the PSL (MTCA Method A cleanup level of 250 mg/kg).
- Five soil samples were analyzed for total organic carbon (TOC) by Plumb, 1981. Laboratory analysis of soil samples detected concentrations of TOC ranging from 0.075% to 0.171%.
- Two soil samples were analyzed for permanganate soil oxidant demand (PSOD). Laboratory analysis of soil samples detected concentrations of PSOD of 1.3 grams of potassium permanganate (KMnO<sub>4</sub>) to kilograms of soil (g KMnO<sub>4</sub>/kg) in both soil samples analyzed.

The laboratory analytical results for soil samples are summarized in Table 4 and Table 5. The concentrations of PCE detected in soil are illustrated on Figure 10. The concentrations of petroleum related compounds detected in soil are illustrated on Figure 11.

### **3.6.4 Groundwater**

The results obtained to-date indicate the following with respect to groundwater conditions encountered at the Site:

- In the vicinity of the SCC Building, shallow unconfined groundwater is first encountered in discontinuous sandy layers at depths ranging from between approximately 12 feet bgs and 20 feet bgs and partially confined discontinuous saturated zones are encountered to 60 feet bgs (Shallow Zone). The material between the saturated zones (generally silt and sandy silt) was described as moist or slightly moist and did not produce sufficient groundwater to sample. Saturated zones in the Shallow Zone are generally located between 12 feet bgs and 20 feet bgs (Shallow-Shallow), 25 feet bgs to 35 feet bgs (Shallow-Intermediate), and 45 feet bgs to 59 feet bgs (Shallow-Deep). Groundwater encountered in the sand and silty sand located between 65 feet bgs and 100 feet bgs (Deep Zone) appears to be partially confined by the silt located between 40 feet bgs and 65 feet bgs. The aquifer material in the Deep Zone (sand and silty sand) is more homogeneous than the material in the Shallow Zone (interbedded sands and silts). During the investigation activities conducted between 2005 and 2010, well clusters (CMT Wells MW-18, MW-19, and MW-20, and wells clusters MW-24, MW-25, MW-26, MW-27, MW-28, MW-30, MW-31, and MW-32) were installed with screened intervals within the saturated zones in the Shallow-Shallow, Shallow-Intermediate, Shallow-Deep and Deep Zones. Groundwater potentiometric elevations calculated from water level data for Investigation Area monitoring wells are summarized in Table 6.
- The hydraulic gradient of groundwater is the driving force for groundwater flow. Pacific Crest calculated downward vertical hydraulic gradients of between 0.003 feet per foot (ft/ft) to 0.122 ft/ft for the potentiometric surface elevation data collected on July 23, 2012, for the wells in well clusters MW-25, MW-26, MW-27, MW-30, MW-31, and MW-32. An upward vertical gradient between MW-28-S and MW-28-I was calculated to be -0.08 ft/ft. With the exception of MW-28, the positive vertical gradients calculated between the nested wells in the Shallow Zone and Deep Zone indicate consistent downward vertical gradient from the Shallow-Shallow Zone to the Deep Zone. These results are consistent with the analytical data that indicates vertical contaminant migration. The variability in the vertical gradients indicates that vertical groundwater flow is not consistent across the Site.

- Potentiometric surface elevations in the Shallow Zone generally indicate a west-southwest groundwater flow direction. However, attempts to generate potentiometric surface elevation contour maps using water level elevations measured in wells installed in the Shallow Zone (Shallow-Shallow, Shallow-Intermediate and Shallow-Deep) produced anomalous results. Pacific Crest interprets the anomalous potentiometric surface elevation contours as the result of the vertical groundwater gradients between zones and the spatial heterogeneity of the saturated zones. The potentiometric surface elevation data collected on July 23, 2012, and inferred direction of groundwater flow in the Shallow Zone are illustrated on Figure 12.
- The direction of groundwater flow based on potentiometric surface elevations measured in wells installed in the Deep Zone (Wells MW-30-D, MW-31-D, and MW-32-D) was easterly in 2010 and westerly in 2011. The potentiometric surface elevation contours for the Deep Zones are illustrated on Figure 13. The groundwater flow direction on July 23, 2012, was to the east-southeast under a horizontal gradient of 0.004.
- The average hydraulic conductivities calculated using rising and falling head slug test data collected from Shallow Zone wells MW-14, MW-21-S, and MW-21-D ranged from  $9.73 \times 10^{-5}$  centimeters per second (cm/s) to  $1.85 \times 10^{-3}$  cm/s. The hydraulic conductivity values are consistent with typical values for sands and silty sands.
- Groundwater was encountered during drilling in the Former UST Area at depths ranging from approximately 24.5 feet (URS-SB-9) to 30.5 feet bgs (URS-SB-3). Static groundwater levels measured in the monitoring wells within the investigation area on July 23, 2012, are summarized in Table 6. Water levels in these wells ranged from 18.8 feet bgs (DPE-3) to 20.4 feet bgs (DPE-2). Based on the depth to groundwater noted during drilling and the static groundwater levels, it is apparent that the groundwater is under confined conditions. Groundwater flow in the area has been documented to be predominantly southerly. However, it appears that the demolition of the Belshaw buildings as well as the adjacent residential buildings (Figure 3) has had an effect on the groundwater flow conditions and resulted in a complex flow pattern in the central portion of the Site.

The geochemical parameters and laboratory analytical results for groundwater samples collected during the subsurface investigation activities conducted to date are summarized below:

- The groundwater temperature, specific conductivity, pH, dissolved oxygen, and ORP measurements collected prior to groundwater sampling are presented in Table 6.
- Groundwater samples collected from wells and borings completed within the Investigation Area and analyzed for CVOCs are summarized below:
  - PCE concentrations historically have ranged from 0.21 µg/L to 57,000 µg/L. During the July 2012 sampling event, concentrations of PCE exceeded the MTCA Method A PSL of 5 µg/L in Wells MW-14, MW-18 (Port #3), MW-19 (Port #6), MW-21-S, MW-24-S, MW-24-D, MW-25-S, MW-25-I, MW-25-D, MW-27-S, MW-27-I, MW-29, MW-31-S, SCC-1, and SCC-2 in groundwater. Laboratory analysis detected PCE at concentrations exceeding the MTCA Method A PSL in groundwater samples collected from reconnaissance borings PH-SB-3, PH-SB-4, PH-SB-6, PH-SB-8, PH-SB-9, PH-SB-14, and PH-SB-15. The horizontal and vertical extent of PCE concentrations in groundwater that exceed the MTCA Method A PSL is defined by the samples collected to date. The highest concentrations of PCE in groundwater are located below and adjacent to the



southeast corner of the SCC Building. Concentrations of PCE in groundwater that exceed the MTCA Method A PSL extend into the Deep Zone to a depth of 80 feet bgs in boring PH-SB-6 and 75 feet bgs in boring PH-SB-9, but the vertical and horizontal extent of PCE in the Deep Zone is defined by samples collected from adjacent borings PH-SB-1, PH-SB-13, PH-SB-14, and PH-SB-15 and wells MW-30-D and MW-31-D.

- TCE concentrations historically have ranged from 0.24 µg/L to 41.9 µg/L. The concentrations of TCE detected in well MW-23 appear to be associated with an unrelated upgradient site. In addition, the concentrations of TCE detected in groundwater samples collected in 2002 on the parcels to the east of 22<sup>nd</sup> Ave. S. from borings AW-SB-7 and B-9 appear to be distinct from the releases of solvents that occurred on the Former Belshaw Property (A&W 2002 and URS 2002). During the August 2012 sampling event concentrations of TCE exceeded the MTCA Method B PSL for TCE of 4 µg/L in groundwater samples collected from Wells MW-1, MW-19 (Port #2), MW-24-S, MW-25-I, MW-25-D, MW-28-D, and DPE-1. The concentrations of TCE detected in samples collected from Wells MW-24-S, MW-25-I, and MW-25-D appear to be related to the release of PCE that occurred on the Former Penthouse Drapery Property. The concentrations of TCE detected in MW-1, MW-19 (Port #2), MW-28-D and DPE-1 are collocated with 1,1,1-TCA.
- c-DCE concentrations historically have ranged from 0.22 µg/L to 159 µg/L. During the July 2012 sampling event, laboratory analysis did not detect at concentrations that exceeded the MTCA Method B PSL for c-DCE of 16 µg/L.
- 1,1,1-TCA concentrations historically have ranged from 0.2 µg/L to 195 µg/L. During 2012, the highest concentration of 1,1,1-TCA was detected at MW-1 (21.6 µg/L) and ranged from 1.3 µg/L (MW-19) to 4.87 µg/L (DPE-1). The PSL for 1,1,1-TCA is the MTCA Method A cleanup level of 200 µg/L.
- 1,4-dioxane concentrations historically have ranged from 0.41 µg/L to 20.5 µg/L. The groundwater analytical results are summarized in Table 7a. During 2012, 1,4-dioxane was detected in seven of the monitoring well samples at concentration exceeding the MTCA Method B cleanup level of 0.438 µg/L. The highest concentrations were detected in MW-19 at approximately 15 feet (2.86 µg/L), 22 feet (3.73 µg/L) and 41.5 feet (1.42 µg/L). 1,4-dioxane was detected in the other monitoring wells at concentrations ranging from 0.41 µg/L (MW-32D) to 1 µg/L (DPE-1). 1,4-dioxane inferred iso-concentration contours are depicted on Figure 14. The highest concentrations are evident in the central portion of the Site. The primary 1,4-dioxane plume extends approximately 270 feet southeasterly and appears to be approximately 90 feet in width. A smaller area of 1,4-dioxane occurrence appears to be centered around MW-26.
- Gasoline constituents were also detected in the grab groundwater samples collected from URS-SB-1, URS-SB-3, and URS-SB-4 and were not detected in the other boring samples (Figure 15). The gasoline range petroleum hydrocarbons were detected at concentration ranging from 13,300 µg/L (URS-SB-1) to 35,200 µg/L (URS-SB-4), which exceeds the PSL (MTCA Method A cleanup level of 800 µg/L). BTEX were detected in the sample at URS-SB-4 at concentrations exceeding applicable PSLs. Benzene concentrations in boring URS-SB-1 (57 µg/L), also exceeded the applicable PSL. The only other VOC which exceeded the

PSLs in these three samples was 1,3,5-trimethylbenzene which ranged in concentration from 191 µg/L (URS-SB-1) to 274 µg/L (URS-SB-4) and naphthalene in URS-SB-4 (305 µg/L).

- Total lead was detected in all of the groundwater samples and ranged in concentration from 2.34 µg/L to 23 µg/L. Three samples (URS-SB-1, URS-SB-3, and URS-SB-6) exceeded the PSL of 15 µg/L.
- Laboratory analysis has not detected t-DCE or VC at concentrations above their respective PQLs.

The CVOC laboratory analytical results for groundwater samples collected from Site monitoring wells are summarized in Table 7a and Table 8. The petroleum and lead laboratory analytical results for groundwater samples are summarized in Table 7b and Table 9. The most recent analytical results for groundwater are illustrated on Figure 14 through Figure 18.

- Groundwater samples collected from wells MW-28S, MW-28I, and MW-28D were analyzed for dissolved gasses (methane, ethane, and ethene) by RSK-175, volatile organic acid anions, and dissolved metals (Ca, Fe, Mg, and Mn) by SW-846 Method 6020, hardness, alkalinity, total organic carbon, nitrate and sulfate. The analytical results for these analytes are presented in Table 10.
- The distribution of the COCs in groundwater at the Site is affected by biologic, hydrogeologic, and geochemical variables. Concentrations of chlorinated ethenes and ethanes such as PCE, TCE, and 1,1,1-TCA adsorbed to soil and dissolved in groundwater are subject to biodegradation processes including reductive dechlorination, aerobic oxidation, anaerobic oxidation and anaerobic co-metabolism. Select bacteria that thrive in anaerobic environments are capable of degrading CVOC constituents through the process of biodegradation.

In areas where concentrations of PCE are present, the concentrations of TCE and c-DCE appear to be degradation products associated with the reductive dechlorination process described above. Additional lines of evidence that support reductive dechlorination in groundwater include ORP, dissolved oxygen, nitrate, sulfate and methane results. In areas where 1,1,1-TCA is present, the concentrations of 1,1-DCA and chloroethane appear to be degradation products associated with the reductive dechlorination process. The origin of TCE and 1,2-DCA in groundwater where 1,1,1-TCA is also present may be explained by 1,2-DCA's and TCE's reported presence as an impurity in technical grades of 1,1,1-TCA (Mohr et. al 2010).

### **3.6.5 Sub-Slab Soil Gas and Ambient Air**

Under certain conditions, VOCs present in soil vapor may migrate into indoor air in basements, buildings, and other enclosed spaces. The factors that influence the intrusion of VOCs in soil vapor into indoor air include the following:

- Diffusion of VOC concentrations in soil vapor via upward movement toward buildings and ground surface through the partially saturated soils directly above the water table and through the unsaturated zone (vadose zone).
- Abiotic, aerobic, or anaerobic degradation of VOCs in soil vapor within the vadose zone.

- Migration of VOCs in soil vapor vertically through the building foundation via diffusion and advection through cracks or other openings that may serve as points of entry for soil vapor. The degree of migration through the foundation depends on many factors, including soil type and moisture content directly beneath the structure, building construction type (e.g., basement or slab-on-grade), structural integrity of the building (e.g., cracks in the floor and floor penetrations), pressure gradients associated with seasonal effects, the building's ventilation system, and the operation of household appliances. Advection is made possible by continuous airflow paths associated with open or incompletely sealed doors and windows, chimneys, and other intake/exhaust ports.
- Mixing of indoor air inside the enclosed space with ambient air that is drawn into the building. The degree of mixing depends on the amount of mechanical or forced ventilation, natural ventilation, and infiltration from ambient air.

Ecology's Vapor Intrusion (VI) Guidance (Ecology 2009) provides a tiered approach to assessing the potential for VI at a site. The tiers conducted during a remedial investigation include preliminary assessment, Tier I, and Tier 2. The complexity, quality, and specificity of the data collected during these tiers increases from basic assessment data in the preliminary assessment to site-specific indoor air and building-specific data in the Tier 2 evaluation.

Pacific Crest has used the tiered approach presented in the draft VI Guidance to assess the potential for vapor intrusion of the CVOC COCs (PCE and its degradation compounds) associated with the release of PCE that occurred at the Former Penthouse Drapery Property. The Preliminary VI Assessment consists of evaluating the chemical properties of the COCs and the proximity of the contamination to existing or potential future buildings. The COCs present in soil and groundwater beneath the SCC Building and extending southwest toward Rainier Avenue are of sufficient volatility and toxicity to be of concern for VI. On the basis of the results of the Preliminary VI Assessment, further evaluation of the VI pathway was appropriate.

The first applicable component of the Tier I screening process consists of comparison of concentrations of COCs in soil vapor to generic screening levels provided in Ecology's draft VI Guidance. During the RI, Pacific Crest collected one subslab soil vapor sample and one ambient air sample. The RI results indicate the following with respect to the condition of subslab soil gas beneath the SCC Building and ambient air in the Investigation Area:

- Laboratory analysis detected methylene chloride, hexane, toluene, ethylbenzene, m,p-xylene, o-xylene, and PCE in the sub-slab soil gas sample (Sample SV-81710) collected using a Summa® canister. The concentrations of methylene chloride, hexane, toluene, ethylbenzene, m,p-xylene, and o-xylene appear to be due to the presence of these compounds in the Sikaflex caulk used to seal around the collection tubing. Laboratory analysis detected 4,700 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) of PCE in the sub-slab soil gas sample. Laboratory analysis did not detect concentrations of TCE, cis-1,2-DCE, or VC in the sub-slab soil gas sample. The analytical data for the air samples are summarized in Table 11.
- The subslab soil vapor sample (Sample SV-81710) is representative of soil vapor concentrations in the subsurface beneath the SCC Building. Due to the presence of soil contamination beneath the SCC Building, the Site features support the use of soil vapor screening levels developed for "shallow" soil vapor on the Former Penthouse Drapery Property. Locations on the adjacent properties where the depth to shallow groundwater is

greater than 15 feet bgs and soil contamination is not present support the use of soil vapor screening levels developed for “deep” soil vapor.

- In accordance with Ecology guidance, Pacific Crest used a groundwater to indoor air vapor attenuation factor ( $\alpha$ ) of 0.001 to calculate appropriate generic screening levels.
- The applicable PSLs for PCE and TCE in soil gas are 96  $\mu\text{g}/\text{m}^3$  and 3.7  $\mu\text{g}/\text{m}^3$ , respectively. The maximum concentrations of PCE detected in the soil vapor sample exceeded its applicable soil vapor screening level. Laboratory analysis of the soil vapor sample did not detect TCE at a concentration above the PQL of 18  $\mu\text{g}/\text{m}^3$ .

The extent of soil gas with concentrations of COCs that exceed their applicable screening level is assumed to coincide with the extent of soil and shallow groundwater with concentrations of COCs that exceed their applicable cleanup levels. Due to the exceedence of soil gas screening levels in the soil vapor sample collected, there is a potential for VI at the SCC Building. Concentrations of CVOCs in groundwater exceed VI screening levels, but not in locations that are below or adjacent to occupied buildings.

## 4. REGULATORY ELEMENTS

The regulatory elements applicable to the evaluation of the nature and extent of concentrations of COPCs at the Site include: development of a conceptual site model (CSM); applicable MTCA regulations; and the development of cleanup standards for COCs in the media of concern. MTCA regulations establish stringent default cleanup standards and methods for developing site-specific cleanup levels. Other potential Applicable or Relevant and Appropriate Requirements (ARARs) evaluated in the development of the RI Cleanup Levels include the Washington State Dangerous Waste Regulations (WAC 173-303).

### 4.1 CONCEPTUAL SITE MODEL

A CSM has been developed for the Site that is based upon data collected during the RI activities conducted at the Site by Pacific Crest and others. The CSM identifies plausible exposure pathways for human receptors. The CSM elements are discussed below:

- Contaminant releases identified within the Site boundaries include: gasoline in the vicinity of the former gasoline UST adjacent to the Former Welding Shop Building on the Former Belshaw Property; cleaning solvent containing 1,1,1-TCA (and the solvent stabilizer 1,4-dioxane) on the Former Belshaw Property; and PCE based dry cleaning solvent on the Former Penthouse Drapery Property. On the basis of the dry cleaning operation dates, the release of PCE appears to have occurred between 1980 and 1990. On the basis of the commercial availability of 1,1,1-TCA, the releases of 1,1,1-TCA and 1,4-dioxane likely occurred between the 1950's and 1990's.
- Information Specific to the Former Gasoline UST Area - Historical site information indicated that a former fueling system was situated adjacent to the Former Welding Shop Building. According to facility personnel, subsurface soil analytical results and a ground penetrating radar survey (GPR), a gasoline UST was removed from the east side of the building. An accurate date for the UST removal was unavailable. The GPR survey completed east of the building identified disturbed soils consistent with the dimensions of a tank excavation and the approximate dimension of the excavation was approximately 17 feet by 7 feet. Based on this information, it is suspected that the gasoline range hydrocarbon affected soil and groundwater originated from a release associated with this fueling system (i.e., UST, piping, and/or dispenser). The extent of gasoline-affected soil appears to be limited to the immediate vicinity of the former tank location and the "smear" zone of the aquifer as the water table elevations change. Thus, the primary source of contamination lies within the saturated zone and water table fluctuation. Based on the analytical results, the extent of the groundwater contamination was limited to the general area of the Former Welding Shop Building.
- An Interim Cleanup Action was implemented to address the gasoline affected soil and groundwater in 2004 through 2007 and consisted of installation of a DPE system. The cleanup reduced contaminant levels by an average of approximately 95%. However, a portion of the remediation area remains above applicable cleanup levels and covers an area of approximately 1,750 square feet (Figure 19).
- Information Specific To the Former Penthouse Drapery - On the basis of the elevated concentrations of PCE in groundwater samples collected from boring PH-SB-4 and wells SCC-2, MW-29, and MW-14, DNAPL "ganglia" are suspected in a fraction of the soil pore spaces in the Shallow Zone beneath and adjacent to the southeast corner of the SCC

Building. The horizontal and vertical extent of concentrations of PCE and its degradation compounds in groundwater is defined by samples collected to date. The inferred eastern boundary of CVOC contamination is based on the results of samples collected from wells completed east of Rainier Avenue (well cluster MW-30), the distribution of contaminants east of Rainier Avenue and the direction of groundwater flow.

- The media of concern within the Investigation Area consist of: soil, groundwater, soil vapor, and air. The laboratory analytical results for soil samples collected from within the saturated zone will be used for qualitative evaluation and not for quantitative comparison to cleanup levels.
- The media of concern where concentrations of COPCs have been detected include: soil, groundwater, and sub-slab soil vapor. The applicable PSLs for the COPCs in soil, groundwater, and air are the applicable MTCA Method A or Method B values which are presented in Tables 1, 2, and 3.
- The applicable transport mechanisms for the migration of COCs include: direct release to soil; migration to subsurface soil; migration/leaching to groundwater; volatilization from soil and groundwater to air; and transport by groundwater flow (advection). Future receptors exposed to contaminants in soil at the Site primarily consist of construction workers for the ingestion and dermal exposure pathways during site redevelopment.
- Inhalation was identified as the only current potentially complete exposure pathway for commercial and industrial workers. The current zoning (C1-65) is described by the City of Seattle as: "An auto-oriented, primarily retail/service commercial area that serves surrounding neighborhoods as well as a citywide or regional clientele, such as large supermarkets, building supplies and household goods, and auto sales and repairs. Building types are a variety of commercial structures with extensive surface parking, and multi-story office or residential buildings. There is no size limit for most uses; 25,000-40,000 square feet for warehouse and wholesale showroom uses; 35,000 square feet or size of lot, whichever is greater, for offices uses." Based on the zoning classification, future receptors exposed to contaminants in air at the Site include: residents and commercial and construction workers.
- MTCA requires an evaluation of the potential impact for the constituents of concern on terrestrial ecological receptors in accordance with the procedures outlined in WAC 173-340-7490. However, due to the size of the undeveloped contiguous land located on or within a 500 foot radius of the Site (less than 1.5 acres) and the COCs present, the Site qualifies for an exemption under WAC 173-340-7491 (b) and (c)(i); therefore, no further ecological evaluation was conducted.
- Future receptors exposed to contaminants in soil at the Site include residents, commercial/industrial workers and construction workers for the ingestion and dermal exposure pathways.
- Groundwater in the vicinity of the Site is not currently used as a drinking water source. Groundwater in the Shallow Zone of the Site appears to meet the MTCA criteria for non-potability, but groundwater in the Deep Zone does not.

## **4.2 CONTAMINANTS OF CONCERN AND CLEANUP STANDARDS**

As defined in WAC 173-340-700, cleanup standards for a site include establishing cleanup levels and points of compliance at which those cleanup levels will be attained. The preliminary cleanup standards for the Site have been established in accordance with WAC 173-340-700

through WAC 173-340-760, which are protective of human health and the environment, and also comply with the ARARs for the Site.

#### **4.2.1 Contaminants of Concern**

The COPCs for the Site consist of: CVOCs associated with releases of dry cleaning solvents that occurred on the Former Penthouse Drapery Property and releases of the metal cleaning solvent 1,1,1- TCA and the associated solvent stabilizer 1,4-dioxane that occurred on Former Belshaw Property; and petroleum hydrocarbons and lead associated with releases of gasoline I from a former UST located on the Former Belshaw Property. The COCs are COPCs detected at concentrations above the PSLs in the media of concern. The Site COCs are: PCE, TCE, c-DCE, 1,4-dioxane, GRO, BTEX, trimethylbenzene, lead, and naphthalene. VC does not currently meet the criteria for identification as a COC, but, the reductive dechlorination degradation pathways that have been identified at the Site have the potential to result in VC in groundwater at concentrations above the PSLs. VC is retained as a COPC, but, analysis for VC will continue throughout the cleanup action and, in the event that VC is detected at concentrations above its applicable PSL, it will be re-classified as a COC.

#### **4.2.2 Cleanup Levels**

Pacific Crest obtained technical information related to the establishment of cleanup levels for COCs established for the Site (FS Cleanup Levels) under MTCA from Ecology's Cleanup Levels and Risk Calculation (CLARC) available at <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>.

#### **4.2.3 Soil**

Soil is a potential media of concern with respect to direct contact and protection of groundwater. The proposed FS Cleanup Levels for the COCs in soil at the Site were selected based on a current commercial and possible future residential and commercial exposure scenario. The point of compliance for soil cleanup levels based on direct contact is soil between ground surface and 15-feet bgs. The point of compliance for soil based on the protection of groundwater is defined as all soil throughout the Site. The proposed FS Cleanup Levels are presented in Table 1. The RI results with respect to the extent of soil contamination at the Site that requires remediation is presented below:

- The laboratory analysis of soil samples collected from borings in the vicinity of the SCC Building have detected PCE at concentrations above the FS Cleanup Level that is based on leaching to groundwater. Concentrations of PCE in soil do not exceed the MTCA Method B PSL for direct contact/ingestion. The areal and vertical extent of PCE in soil at concentrations exceeding its applicable FS Cleanup Level appears to be defined laterally and vertically by borings PH-SB-1, PH-SB-2 and MW-21S to the north; well cluster MW-30 to the west; well cluster MW-31 to the south, and boring PH-SB-14 to the east. The estimated areal extent of soil requiring remedial action is illustrated on Figure 10. The vertical extent of contamination is defined by samples collected from borings PH-SB-9, PH-SB-14, PH-SB-15, PH-SB-13 and PH-SB-1.
- The analytical results for PCE in soil sample MW-27D-35 appear to be anomalous, not representative of soil conditions in the area of well MW-27, and excluded from inclusion within the extent of soil contamination associated with the Site for the following reasons:
  - The sample was collected from the saturated zone.

- Laboratory analysis of soil samples collected from adjacent borings (MW-31, MW-32 and MW-25) at similar depth intervals did not detect concentrations of PCE above PSLs or FS Cleanup Levels.
- Laboratory analysis of groundwater samples collected from well MW-27-I has detected PCE, but not at a concentration indicative of a proximate significant source of PCE in soil.
- Soil borings completed within the DPE remedial action area have successfully defined the nature and extent of gasoline affected soil within the treatment area. Specific conclusions are as follows:
  - Soil with concentrations of gasoline range petroleum hydrocarbons and VOCs exceeding MTCA Method A cleanup levels were noted in a limited area measuring approximately 70 feet in length by 25 feet in width as shown on Figure 19. Soil contamination appears to exist within the saturated zone soils and was first noted directly above the groundwater table at approximately 25 feet bgs. The gasoline affected soils exceeding applicable cleanup levels were generally less than 10 feet thick. The total volume of affected soils is estimated to be approximately 700 cubic yards. The area of gasoline affected soils generally coincides with the area of affected groundwater exceeding applicable cleanup levels. No evidence of shallow vadose zone contamination was noted during the investigation.
  - The gasoline affected soils within the saturated zone appear to be confined vertically by a predominantly silt/sandy silt layer which appears to be a low permeability layer perching groundwater and minimizing the vertical migration of contamination (Figure 9). The vertical extent of the gasoline contamination was identified to be less than approximately 40 feet bgs.
  - It is apparent that the existing DPE remedial system was effective in reducing contaminant levels in the gasoline affected area. However, portions of the saturated zone soils were identified with levels of gasoline range petroleum and benzene remaining above applicable cleanup levels. It is suspected that zones of higher permeability sandier soils may have caused preferential flow within these zones and thus were not as effective in cleaning up siltier lower permeability zones. The influence of DPE wells was perhaps not uniform and had greater influence in certain orientations than others, resulting in some deeper saturated areas being less affected.

#### **4.2.4 Groundwater**

Groundwater is a media of concern in relation to potential contributions of contaminants in air (i.e. vapor intrusion) and potential future potable use. The proposed FS Cleanup Levels for the COCs in groundwater at the Site were selected based on a current commercial and possible future residential and commercial exposure scenario. The proposed FS Cleanup Levels are presented in Table 2. The standard point of compliance for groundwater is defined as all groundwater from the uppermost level of the saturated zone extending vertically to the lowest depth that is affected by any of the COCs.

##### **4.2.4.1 Groundwater – Former Penthouse Drapery Source Area**

The RI results with respect to the extent of groundwater contamination at the Site associated with the release of PCE that requires remediation are presented below:



- An apparent release of PCE based dry cleaning solvent occurred on the Former Penthouse Drapery Property and resulted in PCE, TCE, and, historically, c-DCE in groundwater at concentrations above their respective proposed FS Cleanup Levels. VC has not been detected in groundwater, but, in locations where elevated concentrations of PCE were detected, the MDLs for VC exceeded the applicable PSL (MTCA Method A).
- The lateral extent of PCE in groundwater is delineated to below the FS Cleanup Level to the north by MW-22, PH-SB-1, and PH-SB-7; to the west by the MW-30 well cluster, to the south by the MW-32 well cluster, and to the east by wells MW-17, MW-19, MW-26-S, MW-26-I, and MW-26-D. The estimated areal extent of groundwater requiring remedial action is illustrated on Figure 17.
- The vertical extent of PCE in groundwater is delineated by samples collected from borings PH-SB-13, PH-SB-14, and PH-SB-15.

#### **4.2.4.2 Groundwater – Former UST Area**

The RI results with respect to the extent of groundwater contamination at the Site associated with the release of gasoline that requires remediation are presented below:

- Based on monitoring well sampling conducted in July 2012, it is apparent that gasoline range petroleum hydrocarbon concentrations have declined significantly since pre-remedial levels. Significant reductions were noted in DPE-2 which had up to 2 feet of measurable LNAPL prior to the remedial action. During active remediation, LNAPL was recovered and contaminant concentrations declined steadily. The recent groundwater sampling at DPE-2 detected gasoline range petroleum hydrocarbon and benzene concentrations below applicable MTCA Method A cleanup levels. Significant contaminant declines were also noted in DPE-3. Initial gasoline range petroleum hydrocarbon and benzene concentrations in this well were 49,600 µg/L and 3,250 µg/L, respectively, in June 2003, and in July 2012, these contaminants were detected at concentrations of 445 µg/L and 26.4 µg/L, respectively. Significant reductions in contaminant concentrations were also noted in DPE-7, MW-3 and MW-4.

#### **4.2.4.3 Groundwater –1,1,1-TCA Source Area**

The source of 1,4–dioxane is associated with the former use and management of 1,1,1-TCA at the Former Belshaw Property. 1,1,1-TCA was the primary solvent used during Belshaw's former operations and was allegedly used for weed control in areas that were prone to blackberry brambles. The area south of the Former Paint Building was used for equipment storage and was periodically overgrown with blackberries. Sampling conducted in this area did not detect 1,1,1-TCA in soils, however, this area was identified with the highest concentrations of 1,4–dioxane in groundwater (Figure 14). 1,4–dioxane concentrations generally decline with depth, however, concentrations exceeding the applicable cleanup level were detected in the saturated zone as deep as 59 feet bgs (e.g., MW-28). The distribution of 1,4-dioxane indicates generally declining concentrations from location MW-19 (3.73 µg/L) to the south-southeast at location MW-1 (0.70 µg/L).

The media of concern is groundwater, and the applicable groundwater cleanup level for 1,4-dioxane is the MTCA Method B cleanup level (0.438 µg/L).

Based on the findings of the groundwater 1,4–dioxane investigation, URS has drawn the following conclusions:

- A direct correlation was evident between the presence of 1,1,1-TCA in groundwater and the detection of 1,4-dioxane. The highest concentrations of 1,4-dioxane were identified in monitoring wells located south of the Former Paint Building in an area which 1,1,1-TCA was allegedly used for weed control. The recent sampling results are generally consistent with historic groundwater data from this area. Based on the concentrations of 1,1,1-TCA and 1,4-dioxane noted in MW-1, it appears that weed control was also conducted in south portion of the Former Belshaw Property which has been unpaved and used for parking (Figure 2).
- A 1,4-dioxane plume exceeding the MTCA Method B cleanup level of 0.438 µg/L appears to extend from the primary source area in the central portion of the Former Belshaw Property some 270 feet to the south (Figure 14). Another area of 1,4-dioxane affected groundwater was identified north of the primary plume at MW-26. The levels of 1,4-dioxane in MW-26 (0.59 µg/L) only slightly exceeded the applicable cleanup level.
- Higher concentrations of 1,4-dioxane were generally detected in the shallower water bearing zones (i.e., approximately 17 to 40 feet bgs) and attenuated with depth. However, two of the deeper groundwater monitoring locations screened from 54 feet to 59 feet bgs at MW-26 and MW-28 detected 1,4-dioxane at 0.59 µg/L and 0.6 µg/L, respectively, at concentrations slightly exceeding the MTCA Method B cleanup level.
- The recent groundwater monitoring results indicate that the levels of 1,4-dioxane were general lower than previously detected during the sampling conducted in 2005.

#### **4.2.5 Air**

The proposed FS Cleanup Levels for the COCs in air at the Site were selected based on a current commercial and possible future residential and commercial exposure scenarios. The proposed FS Cleanup Levels are presented in Table 3.

## **5. FEASIBILITY STUDY**

### **5.1 PURPOSE**

The purpose of the FS is to develop and evaluate cleanup action alternatives to facilitate the selection of a final cleanup action for the Site in accordance with WAC 173-340-350(8) and WAC 173-340-360. The FS presented in the following sections includes: a summary of previous cleanup actions conducted to remediate portions of the Site; a summary of historic pilot test activities conducted to assess the feasibility of remediation technologies; an evaluation of regulatory requirements applicable to the cleanup action; evaluation of remediation technologies; development of cleanup action alternatives; and selection of a cleanup action approach in accordance with MTCA.

### **5.2 PREVIOUS FEASIBILITY STUDY**

A chronologic summary of the cleanup action activities conducted at the Site is presented below:

- In May of 2003, URS advanced three soil borings (DPE-1, DPE-2, and DPE-3) and installed three DPE wells (DPE-1 through DPE-3) on the Former Belshaw Property (URS 2008) for the purpose of conducting a DPE pilot test. Pilot testing was performed on June 18, 2003, using a vacuum truck that produced a vacuum measuring 17.5 inches of mercury. Total fluids (groundwater and LNAPL) were extracted at an average rate of 0.3 gallons per minute (gpm), and vacuum influence was observed at wells located 40 to 70 feet away.
- Between 2004 and 2007, Enodis installed four additional DPE recovery wells (DPE-4 through DPE-7) and installed and operated a DPE system in the area of gasoline affected soil and groundwater adjacent to the Former Welding Shop Building to recover LNAPL and remediate unsaturated soil and shallow groundwater with concentrations of GRO and DRO in excess of their applicable MTCA cleanup levels. A summary of the interim measure that was implemented as an independent cleanup is presented in Section 3.2.1.2. The DPE system ceased operation in 2007 and has been dismantled and removed from the Former Belshaw Property. Copies of the system process flow diagram, DPE sections and details and operational data are provided in Appendix C of the draft RI-FS Report dated May 11, 2011 (Pacific Crest 2011).
- In October 2010, Pacific Crest conducted pilot test activities to assess the feasibility of using soil vapor extraction (SVE) as remedial technology for reducing concentrations of CVOCs in soil and groundwater at the Site. The objective of the SVE pilot test was to monitor the response of the unsaturated vadose zone to an induced vacuum using well RW-1 as an extraction well and monitoring points VMP-1 and VMP-2 and wells MW-24-S, MW-25-S and MW-26-S and vacuum monitoring points. Well RW-1 was installed to a depth of 15-feet bgs and screened between 5-feet bgs and 15-feet bgs with 10 feet of 2-inch diameter PVC well screen. Two monitoring points (VMP-1 and VMP-2) were constructed at a 5-foot (VMP-1) and 10-foot (VMP-2) radial distances from well RW-1 for the purpose of monitoring vacuum. Monitoring points VMP-1 and VMP-2 were constructed using 1.25-inch diameter carbon steel casing and stainless steel screen and installed using a combination of 1.5-inch diameter solid stem auger and electric

jackhammer with screen intervals of between 4-feet bgs and 5-feet bgs (VMP-1) and between 4.5-feet bgs and 5.5-feet bgs (VMP-2). Laboratory analysis of air samples collected during the pilot tests detected PCE at concentrations ranging from 16,000 µg/m<sup>3</sup> to 20,000 µg/m<sup>3</sup>. Laboratory analysis did not detect TCE, cis-1,2-DCE and VC at concentrations above their respective PQLs. A maximum induced vacuum of 70-inH<sub>2</sub>O was applied at the SVE extraction well RW-1 during the SVE pilot test. The maximum air flow rate measured during the SVE pilot test was 12.81 cubic feet per minute (cfm). Relatively little vacuum was measured in the vacuum monitoring points (VMP-1 and VMP-2). The low range of influence (ROI) was possibly due to shallow total depth and short screen intervals of VMP-1 and VMP-2 and soil heterogeneity. The contaminant recovery rate, air flow and effective radius calculated from the SVE pilot test results indicate that SVE is a potential candidate technology as a component of alternatives being considered for soil remediation (e.g., ERH). The SVE pilot test results are presented in the draft RI-FS Report date May 11, 2011.

## **5.3 REGULATORY REQUIREMENTS**

The MTCA regulation specifies requirements for completing an FS and selecting a cleanup action, and MTCA contains specific requirements for developing and applying cleanup standards that are protective of human health and the environment. Additionally, MTCA contains provisions for the use of remediation levels to develop and evaluate cleanup action alternatives. Each remedial alternative developed to achieve the cleanup levels at the point of compliance must comply with requirements presented in MTCA.

### **5.3.1 Applicable or Relevant and Appropriate Requirements**

Cleanup activities at the Site will be conducted under Ecology's VCP. Although Ecology will be the lead agency, the cleanup action effort will be conducted in accordance with all applicable local regulations and permitting requirements. The remedial alternatives presented in the FS will comply with the ARARs, including state and federal laws, in accordance with WAC 173-340-350 and WAC 173-340-710. ARARs are often identified as constituent-specific, location-specific, or remedial action-specific. A number of regulations include requirements in more than one of these three categories.

The primary ARARs for the Site include:

- MTCA (WAC 173-340);
- Water Quality Standards for Groundwater (WAC 173-200); and
- Hazardous Waste Management Act (Chapter 70.105 of the Revised Code of Washington [RCW 70.105]).

These primary ARARs are anticipated to be the most applicable requirements, since they include the framework for the cleanup action, including applicable and relevant regulatory guidelines, cleanup standards, waste disposal criteria, references for additional ARARs, and standards for documentation.

Additional ARARs for the Site include:

- The Occupational Safety and Health Act (Part 1910 of Title 29 of the Code of Federal Regulations [29 CFR 1910]);
- The State Environmental Policy Act (RCW 43.21);
- General occupational health standards (WAC 296-62);
- Minimum Standards for Construction and Maintenance of Wells (WAC 173-160); and
- Accreditation of Environmental Laboratories (WAC 174-50).

## 5.4 IDENTIFICATION AND DESCRIPTION OF CLEANUP TECHNOLOGIES

Numerous remediation technologies have been developed, tested, and utilized to remediate contaminated soil and groundwater at similar sites. Contaminants in soil and groundwater can be remediated using passive (e.g. monitored attenuation) or active (e.g. SVE) technologies. In addition, some technologies focus on a single type of media (e.g. excavation of soil or air sparging for groundwater) while other technologies are capable of remediating several media at one time (e.g. DPE). Due to the unpredictability of DNAPL migration in the subsurface, achieving “full restoration” of affected media at sites where DNAPL has been present may be not be practicable regardless of the technology utilized (EPA 1993).

The potential technologies for site remediation were selected from the Federal Remediation Technologies Roundtable Treatment Technologies Screening Matrix ([http://www.frtr.gov/matrix2/section3/table3\\_2.pdf](http://www.frtr.gov/matrix2/section3/table3_2.pdf)) and screened to identify those technologies best-suited to achieving the remediation objectives. The technologies selected in the initial screening are described below and in Table 12:

- **Excavation** – Excavation of shallow contaminated soil using readily available construction equipment is a rapid and effective, though costly, remediation method for soil. Excavation is the process of physically removing contaminated soil from a site and either treating the soil above ground on site or transporting the soil off-site for treatment and/or disposal. Following soil excavation, samples are collected to confirm that excavation surfaces are clean and the excavation is then backfilled with clean material.

Current state and federal regulations governing waste disposal prohibit routine land disposal of untreated hazardous waste. Under these regulations, soil that contains concentrations of a listed hazardous waste (e.g. PCE and other CVOCs) and is being excavated as a part of cleanup action must be handled as listed waste, regardless of the concentration of hazardous waste constituents present in the soil. In response to the unintended consequence of significantly increased cleanup costs without any observable improvement for human health or the environment that resulted from the strict interpretation of these regulations, EPA issued the “Contained-In” Policy to clarify the application of hazardous waste regulations to environmental media generated during a site cleanup. The “Contained-In” Policy allows soil from a cleanup action to be handled as a non-hazardous waste, provided that only minimal concentrations of hazardous waste constituents are present in the soil.

- **Soil Vapor Extraction (SVE) and Dual Phase Extraction (DPE)** – SVE and DPE operate by inducing a vacuum on wells to recover VOCs from the subsurface. SVE recovers soil vapor only, while DPE recovers soil vapor and groundwater. SVE and DPE are effective for remediation of permeable material (e.g., sand and silty sand). DPE is primarily used for remediation of shallow contamination. The recovered media are

typically treated before being discharged. During operation of a typical SVE or DPE system, the concentrations of VOCs in soil gas decrease as the mass of contaminants present in the soil pore space is reduced. Over time, the VOC recovery rate tends to become a function of the rate of desorption of contaminants from soil and recovery rates reach asymptotic levels.

- **Air Sparging (AS)** – AS operates by injecting compressed air into groundwater through wells installed below the static water table. The migration of injected air through the saturated soil pore spaces results in the partitioning of VOCs dissolved in groundwater into soil vapor. Once the air reaches the un-saturated zone, SVE is used to physically extract the VOCs as discussed above. Depending on the concentrations of the contaminants, treatment of the system effluent may be required. During operation of a typical AS system, the concentrations of VOCs in recovered vapor decrease as the mass of contaminants dissolved in groundwater and present in the soil pore space is reduced. The effectiveness of AS is dependent upon the homogeneity of the subsurface.
- **Bioremediation** – Bioremediation is the process in which select bacteria that thrive in groundwater and, under proper conditions, transform the contaminants into innocuous byproducts. The higher molecular weight chlorinated compounds (e.g., PCE and TCE) are more readily degraded by reductive dechlorination, while the lower molecular weight chlorinated degradation compounds (e.g., VC) can be degraded by enhanced reductive dechlorination (ERD; see below) or aerobic oxidation. As discussed in Section 4.2.1, VC is retained as a COPC, but, analysis for VC will continue throughout the cleanup action and, in the event that VC is detected at concentrations above its applicable PSL, it will be re-classified as a COC. Reductive dechlorination occurs under anaerobic conditions that are conducive to the growth of bacteria capable of consuming VOCs. In aerobic zones of the subsurface (i.e., zones of the subsurface where dissolved oxygen is present), different kinds of bacteria can also degrade petroleum hydrocarbons and certain VOCs. Aerobic bioremediation, in some cases, can be enhanced by addition of oxygen-releasing compounds to increase dissolved oxygen concentrations in groundwater.

Monitored natural attenuation (MNA) is the process of periodic monitoring to verify that the natural degradation processes are occurring. MNA is typically implemented at sites where concentrations of contaminants are low and source removal has been conducted. MNA is the preferred alternative when concentrations of the COCs are below their respective FS Remediation Levels but above the draft FS Cleanup Levels, and the groundwater plume containing those COCs is stable or shrinking in size.

Enhanced reductive dechlorination (ERD) or enhanced aerobic bioremediation (EAB) are technologies that add nutrients or other supplements to the subsurface to make the subsurface conditions more conducive to the rapid degradation of contaminants. The naturally occurring reductive dechlorination processes can be enhanced to accelerate degradation of CVOCs in groundwater by adding organic substrates to the subsurface. Numerous organic substrates are available which can be naturally degraded and fermented in the subsurface to result in the generation of hydrogen to enhance reductive dechlorination. Carbohydrates (e.g., sugars), alcohols, low-molecular-weight fatty acids (e.g., lactate), vegetable oils, and plant debris (e.g., mulch) are examples of easily fermentable organic substrates. Similarly, aerobic bioremediation can be enhanced by increasing the concentrations of dissolved oxygen in groundwater. Additional factors that influence the effectiveness of EAB include inorganic nutrients such as nitrogen and phosphate to support cell growth and sustain biodegradation processes.

- **In-Situ Chemical Oxidation (ISCO)** – Groundwater remediation using ISCO involves injecting oxidizing materials (e.g. hydrogen peroxide, potassium permanganate, sodium permanganate, or sodium persulfate) and other amendments directly into the source zone and downgradient plume. The ISCO materials can be injected into the vadose zone, but is most effective in treating contaminants that are dissolved in groundwater. The oxidizing materials chemically react with the organic contaminant and any other organic material—including CVOC degrading bacteria—resulting in the breakdown of the contaminant into benign substances such as carbon dioxide and water. ISCO is effective for remediation of CVOCs, petroleum hydrocarbons, and, depending on the ISCO application design, 1,4-dioxane. However, ISCO materials are antiseptics and can inhibit or kill microorganisms at concentrations used in ISCO applications. Use of ISCO can have the unintended consequence of reducing and/or temporarily eliminating the naturally occurring bacteria populations that were previously degrading the COCs.
- **Groundwater Recovery and Hydraulic Control (Pump-and-Treat)** – Pump-and-treat consists of pumping groundwater from recovery wells screened in the zone of contamination to both remove contaminant mass and to control groundwater migration (hydraulic control). The recovered groundwater is then treated before being discharged, typically to a sewer system under a permit with the local municipality. Pump-and-treat systems are capable of controlling the hydraulic gradient of groundwater, but they are not generally considered effective in achieving cleanup levels at sites impacted with CVOCs. In addition, groundwater treatment can be complicated by naturally high iron concentrations present in anaerobic groundwater and low treatment standards required by the treatment facility. Pump-and-treat is potentially effective for mass reduction of 1,4-dioxane in groundwater at the Site, but above-ground treatment technologies capable of permanent destruction, rather than media transfer, of 1,4-dioxane have high relative costs.
- **Electrical Resistance Heating (ERH)** – ERH uses multiphase electricity to resistively heat the soil to the boiling point of water. Heating the subsurface volatilizes the contaminants and, ultimately, causes the groundwater in the heating zone to boil. Steam that is generated from the boiling groundwater enhances contaminant extraction. The steam and volatilized contaminants are collected from the subsurface by a SVE process, and treated above ground to achieve applicable discharge permit limits. ERH is effective for CVOCs and petroleum hydrocarbons, but may not be practicable for remediation of groundwater with low concentrations of 1,4-dioxane.

## 5.5 CLEANUP ACTION ALTERNATIVE DEVELOPMENT AND SELECTION

This section summarizes the requirements for evaluating and selecting Site cleanup action alternatives. Cleanup action requirements take into account the Site characteristics, including the source, affected medium potential receptors, concentrations of COCs present, complete exposure pathways, and land use restrictions on the affected properties.

### 5.5.1 AREA DEFINITION

For the purpose of evaluating cleanup alternatives, the Site has been divided into three sub-areas (Site Area 1 [SA-1], Site Area 2 [SA-2], and Site Area 3 [SA-3]) where cleanup actions will be implemented. The three site area boundaries are illustrated in Figure 19. The sub-areas generally conform to areas affected by the release of PCE (SA-1), the release of gasoline from the former UST (SA-2), and the co-mingled plume of low concentrations of CVOCs (PCE, TCE, 1,1,1-TCA) and 1,4-dioxane (SA-3).

### 5.5.2 Remediation Technology Screening and Selection Process

Within each site area, technologies for soil and groundwater remediation were screened to identify those technologies best-suited to achieving the remediation objectives. The criteria used for screening remedial technologies are as follows:

- **Technology Development Status (bench, pilot, or full scale):** The level of development for the technology. Technologies with full scale implementation were favored over less developed technologies. Technologies successfully implemented in a variety of environmental and geologic settings were favored over technologies with a more restricted application record.
- **Performance Record:** The record of successfully attaining the remediation objectives established for the technology during previous uses. Technologies with a more successful performance record were favored over technologies with fewer successes or more failures.
- **Constituents Addressed:** The COCs the technology is capable of addressing. Only technologies that are capable of addressing the specific constituents in the specific media of interest (soil or groundwater) will be retained for evaluation in the FS. These technologies must also ensure potential future indoor air concentrations associated with VI from soil and groundwater are in compliance with applicable MTCA cleanup standards.
- **Implementability within the Constraints of the Project Area:** The expected capability of successfully implementing the technology in the project area within a reasonable time frame. Technologies requiring extensive permitting or access to numerous locations were not favored over technologies requiring minimal access and simpler permitting. Technologies that require significant infrastructure or would pose extensive administrative and logistical challenges and may ultimately be considered administratively not implementable were also not favored. Non-invasive technologies were favored over highly invasive technologies. Technologies using existing infrastructure such as the Site monitoring well network are preferred.

The technology screening step is intended to produce a very short list of only the most applicable and promising technologies for further consideration. Technologies were either retained or rejected based upon their prior application history, ability to meet the remediation objectives, and an evaluation against the above screening criteria.

The selection of a final remedial alternative for implementation in each site area is based upon comparison of the remedial alternatives to the threshold and evaluation criteria established under WAC 173-340-360 and presented below:

#### Threshold Requirements:

- Protect human health and the environment;
- Comply with cleanup standards;
- Comply with applicable state and federal laws; and
- Provide for compliance monitoring of groundwater at the Site.



**Other Requirements:**

- Use permanent solutions to the maximum extent practicable;
- Provide for a reasonable restoration time frame; and
- Consider public concerns.

**The evaluation criteria for this FS also include the following:**

- Protectiveness and risk reduction;
- Permanence;
- Cost;
- Long-term effectiveness;
- Management of short-term risks;
- Technical and administrative implementability;
- Public concern; and
- Restoration time frame.

The retained alternatives for each site area were screened in accordance with the Ranked Pair Method (Jones 1998). The weighted ranking scheme emphasizes protectiveness (30%), permanence (20%) and long term effectiveness (20%) over management of short term risks (10%), implementability (10%) and public concern (10%) in order to select the preferred cleanup alternative. Weighted ranking is conducted by sequentially evaluating MTCA criteria of each alternative against each other alternative (e.g. Alternative No. 2 is compared first to Alternative No. 3 and then to Alternative No. 4). Each pair-wise evaluation results in a preferred alternative which received a single vote. After the alternatives are evaluated against each other, the votes are tallied, multiplied by a weighted rank, and summed to produce a final ranking score. Under this selection methodology, the remedial alternative for each site area that achieves the highest ranking (i.e. highest rank number) is selected as the preferred Cleanup Action Alternative for that site area and the combined implementation of cleanup action alternatives in each site area addresses the entire Site.

**5.5.3 Cleanup Action Alternative Evaluation – Site Area 1****5.5.3.1 Remediation Technology Screening**

As described in Section 5.5.1 and illustrated on Figure 19, SA-1 consists of the area around the SCC Building that is affected by the release of PCE. The conceptual site model and remediation objective for SA-1 are summarized below:

- Concentrations of PCE in soil and soil vapor and PCE, TCE, and c-DCE in groundwater have exceeded their respective cleanup levels. On the basis of the concentrations of PCE in groundwater, DNAPL ganglia is suspected in the area below and adjacent to the southeast corner of the SCC Building at depths of between 30 and 45 feet bgs. The vertical extent of PCE concentrations in groundwater that exceed the applicable cleanup level is defined at approximately 100 feet bgs. Petroleum hydrocarbons, 1,1,1-TCA, and

1,4-dioxane are not present in SA-1 at concentrations above their applicable cleanup levels.

- The presence of the SCC Building and SCC's business activities presents constraints on the practicability of remedial alternatives.
- Reductive dechlorination of CVOCs in groundwater appears to be occurring to a limited extent.

The remediation technologies for soil contamination in SA-1 that were retained for further evaluation are excavation, DPE, and ERH. The remediation technologies for groundwater contamination in SA-1 that were retained for further evaluation are DPE, ERD, ISCO, and ERH. Sub-slab depressurization was included as part of the remediation technology screening process although it is not a remediation technology. Sub-slab depressurization is an engineering control that prevents vapors in soil and groundwater from impacting indoor air. This technology does not remediate soil, groundwater, or air. However, it is often used in conjunction with remediation technologies in order to protect human health during implementation of the selected cleanup action alternative.

### **5.5.3.2 Remedial Alternatives**

The remedial alternatives developed for SA-1 combine one or more of the retained remedial technologies to achieve the cleanup action objectives. The removal of DNAPL ganglia and the effective remediation of soil in the source area are necessary pre-conditions to implementation of soil and groundwater remediation technologies at the Site due to the potential for recontamination. Alternatives No. 2, 3 and 4 include compliance monitoring consisting of: protection monitoring during implementation; performance monitoring to confirm that the alternative has achieved the applicable remediation and cleanup levels; and confirmation monitoring consisting of four quarters of groundwater monitoring to demonstrate long-term effectiveness of the alternative. The four remedial alternatives developed for evaluation for SA-1 are summarized in Table 13 and are presented below:

#### **Alternative No. 1 - No Action**

Alternative No. 1 does not include active remediation, but would include using restrictive covenants and engineering controls (i.e., surface paving) to mitigate potential threats to receptors through direct contact or ingestion pathways. This alternative does not include performance or compliance monitoring. Due to the likely presence of DNAPL ganglia, a "No Action" alternative is unlikely to be approved.

#### **Alternative No. 2 - Excavation and In-situ Chemical Oxidation**

Alternative No. 2 consists of demolition of the SCC Building, excavation of soil to 50 feet bgs in the source area, and implementation of ISCO to address COC concentrations in groundwater in the Shallow and Deep Zones that exceed the proposed FS Cleanup Levels. The components of this alternative are described below:

- Due to the presence of the source area beneath the Building, demolition of the SCC Building and relocation of SCC operations would be required.
- After demolition of the SCC Building, excavation of the affected soil to the extent practicable would be conducted and soil would be transported off-site to an authorized landfill. Due to the apparent presence of DNAPL ganglia in the immediate

vicinity of the source area, excavation to a depth of at least 50-feet bgs would be required. Based on the depth of the excavation and the direct abutment of the contamination beneath the right-of-way of Rainier Avenue South, excavation sidewall shoring and a dewatering system would be required.

- During backfilling of the excavation, piping to facilitate injection of ISCO chemicals would be completed. Implementation of ISCO would be required to address residual groundwater contamination. Groundwater remediation using ISCO involves injecting oxidizing materials (e.g. hydrogen peroxide, potassium permanganate or sodium permanganate) and other amendments directly into the source zone and downgradient plume. The oxidizing materials chemically react with the organic contaminant, resulting in the breakdown of the contaminant into benign substances such as carbon dioxide and water.
- After completion of the excavation and initiation of ISCO, groundwater monitoring would be conducted to assess the progress of ISCO. After concentrations of COCs in groundwater decreased below the cleanup levels, confirmation monitoring of groundwater would be conducted for four quarters to ensure concentrations of the COCs remain below the cleanup levels.
- On the basis of experience at similar sites, the estimated remediation timeframe for this alternative is at least 10 years. If the affected properties are redeveloped during this period, VI mitigation would be required.
- Excavation and ISCO have the advantage of being mature technologies that can be implemented quickly, with likely approval by Ecology. The disadvantages of this alternative include: disruption of SCC's commercial operations due to demolition of the Building; high cost for soil disposal and shoring to achieve the required excavation depth; and repeated injections of ISCO chemicals and long term monitoring to verify that concentrations of the COCs remain below the cleanup levels.

### **Alternative No. 3 - DPE, Pump-and-Treat, ERD and MNA**

Alternative No. 3 consists of using DPE to remediate shallow affected soil and groundwater, pump-and-treat to hydraulically control groundwater the deeper zones, and implementation of ERD and MNA in the Shallow and Deep zones. Demolition of the existing SCC Building is not assumed in this cleanup alternative. The components of this alternative are described below:

- Soil and groundwater remediation would be implemented in the Shallow Zone using a DPE system consisting of a network of recovery wells that are connected to a centralized recovery and treatment system to facilitate contaminant extraction. The DPE recovery wells would be screened in the Shallow Zones to remediate shallow contaminated soil and groundwater and address VI issues. The spacing of the recovery wells would be based on the ROI calculated during the SVE pilot test. DNAPL and low permeability silts may result in extended operation of the DPE system. The DPE system would operate until either concentrations of the COCs are below their respective remediation levels that are protective of indoor air under a commercial exposure scenario (MTCA Method B Screening Levels for Groundwater - Vapor Intrusion – Commercial – Table 2) in groundwater or system monitoring indicates that the system has recovered contaminants

to the extent practicable. Remediation levels are proposed for this technology because, as demonstrated by the DPE system operated in Site Area 2, DPE may not be capable of attaining the proposed FS Cleanup Levels within a reasonable timeframe.

- After the DPE system operation is discontinued, further groundwater treatment in the Shallow and Deep Zones would be conducted by ERD. Select bacteria (dehalococcoides) that thrive in anaerobic environments are capable of degrading PCE, TCE, and other CVOC constituents including VC through the process of reductive dechlorination, which, under proper conditions, terminates with ethene and CO<sub>2</sub>. The groundwater monitoring results indicate that reductive dechlorination of PCE and other CVOCs is occurring in groundwater at the Site. Groundwater treatment would be conducted by injecting commercially available substrates into the subsurface to enhance anaerobic bioremediation. Enhanced anaerobic bioremediation using electron receptor substrates (e.g. EOS, HRC, or sodium lactate) results in reductions in the concentrations of the COCs in groundwater by stimulating the existing populations of dehalococcoides. Implementation of this technology is conducted by injecting a solution of water and a substrate compound into groundwater through vertical borings or wells.
- Hydraulic control and groundwater remediation would be implemented in Shallow and Deep Zones during the period of enhanced bioremediation using a pump-and-treat system consisting of a network of recovery wells connected to a centralized treatment system. The purpose of the pump-and-treat system is hydraulic control of groundwater until concentrations of COCs in groundwater decrease below their remediation levels. The pump-and-treat system would require the installation of treatment equipment and a connection to the sanitary or storm sewer system for disposal of treated water, and multiple groundwater recovery wells to ensure containment of the contaminant plume in groundwater. Iron fouling is anticipated to present a significant operation and maintenance issue. Due to the physical characteristics of the COCs, the pump-and-treat system is anticipated to operate for an extended period. The pump-and-treat system would operate until concentrations of the COCs are below their respective remediation levels in groundwater. Due to the mobility of 1,4-dioxane, implementation of pump-and-treat has the potential to exacerbate the area of 1,4-dioxane contamination.
- After the DPE, bioremediation, and pump-and-treat components are turned off, remediation of residual concentrations of COCs in groundwater would be implemented by MNA. MNA would consist of performance monitoring to verify that conditions are conducive to reductive dechlorination and that naturally occurring bacteria are continuing to degrade the COCs.
- On the basis of experience at similar sites and in the UST Area (SA-2), the estimated remediation timeframe for this alternative is at least 30 years and possibly longer. The extended timeframe for remediation is due to the suspected presence of DNAPL ganglia, the slow desorption rate of CVOCs from saturated soil, and heterogeneous conditions in the subsurface.
- DPE, ERD, and pump-and-treat are mature technologies that can be implemented quickly, with likely approval by Ecology.

#### **Alternative No. 4 - Electrical Resistive Heating and Enhanced In-situ Anaerobic Bioremediation**

Alternative No. 4 consists of the implementation of ERH for remediation of soil and groundwater with concentrations of PCE above the Site-specific Remediation Level for this alternative that is protective of indoor air under a commercial exposure scenario (MTCA Method B Screening Levels for Groundwater - Vapor Intrusion – Commercial – Table 2) followed by enhanced in-situ anaerobic bioremediation and monitored natural attenuation of the COCs in groundwater until the proposed FS Cleanup Levels are attained. The proposed Method B remediation levels were calculated using MTCA Method B equations (WAC 173-340-750) and modified exposure parameters presented in Appendix F. The modified parameters are appropriate for a non-residential exposure scenario (i.e. 8 hours per day, 250 days per year, over a 25 year exposure duration) (EPA 2009). ERH is an in-situ treatment of contaminated soils in which electrical current is applied to the subsurface via electrodes. The electrodes are placed in the subsurface and activated so that electrical current passes through the soil creating a resistance which heats the soil to a target temperature of 100 degrees Celsius. The components of this alternative include the following:

- The preliminary ERH system design includes 20 combination electrode/SVE wells installed within the same borehole. These wells are spaced on a grid with approximately 18 feet centers in the affected area located east of Rainier Avenue South and will extend an average of 50 feet bgs in the western portion of SA-1 and 85 feet bgs in the eastern portions of SA-1. The electrode/SVE well depths were selected on the basis of the subsurface investigation results. The steam condensate recovered during extraction will be utilized as drip water in the electrode locations to keep the conductivity between the electrodes at optimal resistance. The recovered vapors and groundwater will be treated using granular activated carbon (GAC) and then discharged to the atmosphere. The components of the ERH system are illustrated in Figure 20. The well locations and heating zones are illustrated in cross-section in Figure 21 and Figure 22.
- The electrode/SVE wells will be installed using a drilling rig with hollow stem augers. No sampling activities will be conducted during the installation of the electrode/well locations. Each boring will be advanced with an 8.25 inch inside diameter (ID) auger with an outside diameter (OD) of 13-inches. Within each boring location two screens will be placed: one will contain the electrode for the ERH system and the other screen will be utilized for the SVE system. In 3 of the 20 locations, a temperature probe will also be installed to monitor the subsurface soil temperature. Soil cuttings generated during the electrode/SVE Well installation will be containerized and disposed of off-site.
- The above grade portions of the ERH system will include: necessary electrical wiring; above-ground piping for the SVE wells; a condensate tank; 15-hp blower for vapor recovery; and vessels containing GAC for vapor treatment.
- Prior to construction and start-up, a State Environmental Policy Act (SEPA) checklist will be prepared and a permit for construction and operation of the system will be obtained from the Puget Sound Clean Air Agency (PSCAA). Following system start-up, Site visits will be conducted to monitor system performance in accordance with a Site-specific Operation and Maintenance Plan. System flow rates, vacuums, temperature, effluent system concentrations, and motor operating conditions will be measured and recorded. If necessary, water removed from the system will be transported off-site for disposal. SVE

system emissions monitoring activities will be performed to ensure compliance with the PSCAA permit. Maintenance and repairs to equipment will be performed per manufacturer's specifications, as needed to meet warranty requirements and maintain system operation. The ERH operational data will be summarized in an Annual Progress Report and submitted to Ecology.

- It is estimated that it will take approximately one year to complete the cleanup within the treatment area. The vapors generated by heating the subsurface soil are collected and removed from the ground using soil vapor extraction equipment paired with electrodes.
- Active remediation by ERH will be considered complete once performance monitoring indicates concentrations of CVOCs in soil are below the MTCA Method A cleanup level and groundwater in the treatment area are below the applicable Remediation Level established for this technology (MTCA Method B cleanup levels protective of indoor air under commercial exposure scenario). Upon completion of the active remediation, all 20 electrode/SVE wells and SVE system will be properly abandoned. This task will also include ERH system decommissioning; removal of above ground SVE and ERH system components.
- Select bacteria (dehalococcoides) that thrive in anaerobic environments are capable of degrading PCE, TCE, and other CVOC constituents including VC through the process of reductive dechlorination. The groundwater monitoring results indicate that reductive dechlorination of PCE and other CVOCs is occurring in groundwater at the Site. The objective of the using ERD is to reduce concentrations of the COCs in groundwater to below the applicable proposed FS Cleanup Levels. If ERH does not reduce concentrations of the COCs to below the proposed FS Cleanup Levels, commercially available substrates can be added to the subsurface to enhance anaerobic bioremediation including: sodium lactate, molasses, HRC™, and EOS. Enhanced anaerobic bioremediation using electron receptor substrates (e.g. EOS, HRC, or sodium lactate) results in reductions in the concentrations of the COCs in groundwater by stimulating the existing populations of dehalococcoides. Implementation of this technology is conducted by injecting a solution of water and a substrate compound into groundwater through vertical borings or wells.
- Compliance groundwater monitoring including: performance monitoring during active remediation and confirmation groundwater monitoring to verify effectiveness of the remedial alternative.
- ERH and ERD are aggressive remediation approaches, and on the basis of experience at similar sites, the estimated remediation timeframe for this alternative is between 1 and 5 years.
- ERH is an emerging technology that can be implemented quickly, with likely approval by Ecology, and is capable of achieving cleanup levels in a short period of time. The disadvantages of this alternative include: high cost for capital equipment, electrical usage and intensive operation and maintenance during system operation.

#### **5.5.3.3 Preferred Remedial Alternative Selection**

The selection of a final remedial alternative for implementation is based upon comparison of the remedial alternatives to the threshold and evaluation criteria established under WAC 173-340-

360. The evaluation criteria results for each alternative are summarized in Table 13. The alternative that did not meet the threshold criteria (Alternative No. 1) was rejected from further evaluation. The results of this evaluation indicate that Alternative No. 2, Alternative No. 3, and Alternative No. 4 meet the threshold criteria and, therefore, were retained for further evaluation. The retained alternatives were screened in accordance with the Weighted Ranking Method as described in Section 5.5.2. The ranking results indicate that the preferred Cleanup Action Alternative for SA-1 is Alternative No. 4 – ERH and Enhanced In-Situ Anaerobic Bioremediation. The weighted rank results for each alternative are summarized in Table 15.

## **5.5.4 Cleanup Action Alternative Evaluation – Site Area 2**

### **5.5.4.1 Remediation Technology Screening**

As described in Section 5.5.1 and illustrated on Figure 19, SA-2 consists of the area in the vicinity of the former UST on the Former Belshaw Property that has been affected by a release of gasoline. The CSM and remediation objective for SA-2 are summarized below:

- Information Specific to the Former Gasoline UST Area - Historical site information indicated that a former fueling system was situated adjacent to the Former Welding Shop Building. According to facility personnel, subsurface soil analytical results, and a GPR, a gasoline UST was removed from the east side of the building. An accurate date for the UST removal was unavailable. The GPR survey completed east of the building identified disturbed soils consistent with the dimensions of a tank excavation and the approximate dimension of the excavation was approximately 17 feet by 7 feet. Based on this information, it is suspected that the gasoline-range hydrocarbon affected soil and groundwater originated from a release associated with this fueling system (i.e., UST, piping, and/or dispenser). The extent of gasoline-affected soil appears to be limited to the immediate vicinity of the former tank location and the “smear” zone of the aquifer as the water table elevations change. Thus, the primary source of contamination lies within the saturated zone and water table fluctuation. Based on the analytical results, the extent of the groundwater contamination was limited to the general area of the Former Welding Shop Building.
- An Interim Cleanup Action was implemented to address the gasoline affected soil and groundwater in 2004 through 2007 and consisted of installation of a DPE system. The cleanup reduced contaminant levels by an average of approximately 95%. However, a portion of the remediation area remains above applicable cleanup levels and covers an area of approximately 1,750 square feet (Figure 19).

The remediation technologies for groundwater contamination in SA-2 that were retained for further evaluation are monitored natural attenuation, excavation, and ERH.

### **5.5.4.2 Remedial Alternatives**

The remedial alternatives developed for the SA-2 combine one or more of the retained remedial technologies to achieve the cleanup action objectives. Each alternative includes compliance monitoring consisting of: protection monitoring during implementation; performance monitoring to confirm that the alternative has achieved the applicable remediation and cleanup levels; and confirmation monitoring consisting of four quarters of groundwater monitoring to demonstrate long-term effectiveness of the alternative. The three remedial alternatives developed for evaluation are summarized in Table 16 and are presented below:

### **Alternative No. 1 - Monitored Natural Attenuation**

The MNA alternative does not include active remediation, but consists of monitoring the natural reductions of the concentrations of COCs (gasoline-range petroleum hydrocarbons) in groundwater until the proposed FS Cleanup Levels are reached. As discussed above, COC concentrations in groundwater are decreasing and will likely continue to occur until contaminants are completely degraded. Source removal is usually a precondition for effective implementation of MNA. The MNA alternative can be implemented quickly, but the timeframe to achieve cleanup levels is difficult to estimate.

### **Alternative No. 2 - Excavation and Enhanced Aerobic Bioremediation**

Alternative No. 2 consists of excavation of soil to approximately 30 feet bgs on the Former Belshaw Property, and placement of oxygen-releasing compounds to address COC concentrations within the right-of-way of 22nd Avenue South that exceed the proposed FS Cleanup Levels. The components of this alternative are described below:

- Excavation of the affected soil to the extent practicable would be conducted to approximately 30 feet bgs, and soil would be transported off-site to an authorized landfill. Based on the depth of the excavation and the direct abutment of the contamination beneath the right-of-way of 22nd Avenue South, excavation sidewall shoring and a dewatering system would likely be required.
- Following backfilling of the excavation, placement of oxygen-releasing compounds would be completed immediately adjacent to, and upgradient of, the right-of-way of 22nd Avenue South. Placement of oxygen-releasing compounds would address residual groundwater contamination within the right-of-way. After completion of the excavation and placement of oxygen-releasing compounds, groundwater monitoring would be conducted to assess the progress of enhanced aerobic bioremediation. After concentrations of COCs in groundwater decreased below the cleanup levels, confirmation monitoring of groundwater would be conducted for four quarters to ensure concentrations of the COCs remain below the cleanup levels.
- On the basis of experience at similar sites, the estimated remediation timeframe for this alternative is approximately 3 years.
- Excavation and enhanced aerobic bioremediation have the advantage of being mature technologies that can be implemented quickly, with likely approval by Ecology.

### **Alternative No. 3 - Electrical Resistive Heating**

Alternative No. 3 consists of the implementation of ERH for remediation of soil and groundwater with concentrations of gasoline-range hydrocarbons above cleanup levels. The components of this alternative include the following:

- The preliminary ERH system design includes 9 combination electrode/SVE wells installed within the same borehole. These wells are spaced on a grid with approximately 17 feet centers in the affected area located west of 22nd Avenue South and will extend an average of 35 feet bgs in SA-2. The electrode/SVE well depths were selected on the basis of the subsurface investigation results. The steam condensate recovered during extraction will be utilized as drip water in the electrode locations to keep the conductivity between the electrodes at optimal resistance. The recovered vapors and groundwater will be treated using GAC and then discharged to the atmosphere.



- The electrode/SVE wells will be installed using a drilling rig with hollow stem augers. No sampling activities will be conducted during the installation of the electrode/well locations. Each boring will be advanced with an 8.25 inch ID auger with an OD of 13-inches. Within each boring location two screens will be placed: one will contain the electrode for the ERH system and the other screen will be utilized for the SVE system. In 3 of the 9 locations, a temperature probe will also be installed to monitor the subsurface soil temperature. Soil cuttings generated during the electrode/SVE well installation will be containerized and disposed of off-site.
- The above grade portions of the ERH system will include: necessary electrical wiring; above-ground piping for the SVE wells; a condensate tank; 15-hp blower for vapor recovery; and vessels containing GAC for vapor treatment.
- Prior to construction and start-up, a SEPA checklist will be prepared and a permit for construction and operation of the system will be obtained from the PSCAA. Following system start-up, Site visits will be conducted to monitor system performance in accordance with a Site-specific Operation and Maintenance Plan. System flow rates, vacuums, temperature, effluent system concentrations and motor operating conditions will be measured and recorded. If necessary, water removed from the system will be transported off-site for disposal. SVE system emissions monitoring activities will be performed to ensure compliance with the PSCAA permit. Maintenance and repairs to equipment will be performed per manufacturer's specifications, as needed to meet warranty requirements and maintain system operation. The ERH operational data will be summarized in an Annual Progress Report and submitted to Ecology.
- It is estimated that it will take approximately one year to complete the cleanup within the treatment area. The vapors generated by heating the subsurface soil are collected and removed from the ground using soil vapor extraction equipment paired with electrodes.
- Active remediation by ERH will be considered complete once performance monitoring indicates concentrations of COCs in soil and groundwater are below MTCA Method A cleanup levels. Upon completion of the active remediation, all 9 electrode/SVE wells and SVE system will be properly abandoned. This task will also include ERH system decommissioning and removal of above ground SVE and ERH system components.
- ERH is an aggressive remediation approach and on the basis of experience at similar sites, the estimated remediation timeframe for this alternative is between 1 and 3 years.

ERH is an emerging technology that can be implemented quickly, with likely approval by Ecology, and is capable of achieving cleanup levels in a short period of time. The disadvantages of this alternative include: high cost for capital equipment, electrical usage, and intensive operation and maintenance during system operation.

#### **5.5.4.3 Remedial Alternative Selection Criteria and Evaluation**

The selection of a final remedial alternative for implementation is based upon comparison of the remedial alternatives to the threshold and evaluation criteria established under WAC 173-340-360. The evaluation criteria results for each alternative are summarized in Table 17. The results of this evaluation indicate that Alternative No. 1, Alternative No. 2, and Alternative No. 3 meet the threshold criteria and therefore, were retained for further evaluation.

The retained alternatives were screened in accordance with the Weighted Ranking Method as described in Section 5.5.2. The ranking results indicate that the preferred Cleanup Action Alternative for SA-2 is Alternative No. 2 – Excavation and Enhanced Aerobic Bioremediation. The weighted rank results for each alternative are summarized in Table 18.

## **5.5.5 Cleanup Action Alternative Evaluation – Site Area 3**

### **5.5.5.1 Remediation Technology Screening**

As described in Section 5.5.1 and illustrated on Figure 19, SA-3 consists of the area on the Former Belshaw Property where a co-mingled plume of low concentrations of CVOCs (PCE, TCE, 1,1,1-TCA) and 1,4-dioxane (SA-3) is present in groundwater. The CSM and remediation objective for SA-3 are summarized below:

- Concentrations of PCE, TCE, and 1,4-dioxane in groundwater exceed their respective cleanup levels. The maximum concentrations of PCE, TCE, and 1,4-dioxane detected in groundwater samples collected in SA-3 during 2012 were 43 µg/L (Well MW-27-I), 16.9 µg/L (Well DPE-1), and 3.73 µg/L (Well MW-19 port #2), respectively. The maximum concentrations of PCE, TCE and 1,4-dioxane exceed their proposed FS Cleanup Levels by factors of 8.6, 4.2, and 8.5, respectively.
- The groundwater data collected between 2002 and 2012 demonstrate that reductive dechlorination of PCE and TCE in groundwater is occurring and that concentrations of 1,4-dioxane are also decreasing over time.
- Site characterization activities have not identified any areas within SA-3 where concentrations of CVOCs or 1,4-dioxane in soil exceed their applicable cleanup levels, therefore no technologies for soil remediation were evaluated.

The remediation technologies for groundwater contamination in SA-3 that were retained for further evaluation are monitored natural attenuation, ERD, ISCO, and pump-and-treat.

### **5.5.5.2 Remedial Alternatives**

The remedial alternatives developed for the SA-3 combine one or more of the retained remedial technologies to achieve the cleanup action objectives. Each alternative includes compliance monitoring consisting of: protection monitoring during implementation; performance monitoring to confirm that the alternative has achieved the applicable remediation and cleanup levels; and, confirmation monitoring consisting of four quarters of groundwater monitoring to demonstrate long-term effectiveness of the alternative. The four remedial alternatives developed for evaluation are summarized in Table 19 and are presented below:

#### **Alternative No. 1 - Monitored Natural Attenuation**

The MNA alternative does not include active remediation, but consists of monitoring the natural reductions of the concentrations of COCs (i.e., PCE, TCE and 1,4-dioxane) in groundwater until the proposed FS Cleanup Levels are reached. As discussed above, COC concentrations in groundwater are decreasing and will likely continue to occur until contaminants are completely degraded. Source removal is usually a precondition for effective implementation of MNA. The aggressive remediation activities proposed for concentrations of PCE in SA-1 are intended to remediate the source area beneath the SCC Building and would minimize the potential for recontamination of SA-3. The MNA alternative can be implemented quickly; however, due to

uncertainty regarding the rate of degradation of 1,4-dioxane and the impact that source remediation in SA-1 will have on degradation rates in SA-3, the timeframe to achieve cleanup levels is difficult to estimate. Research indicates that removal of co-mingled contaminant mass improves the rate of degradation of 1,4-dioxane (Alvarez-Cohen 2012).

### **Alternative No. 2 - Enhanced Reductive Dechlorination and MNA**

Alternative No. 2 consists of the implementation of ERD for areas where concentrations of the COCs exceed a remediation level protective of indoor air under a commercial exposure scenario (MTCA Method B Screening Levels for Groundwater - Vapor Intrusion – Commercial – Table 2) and MNA of the concentrations of COCs in groundwater below the remediation level but above the proposed FS Cleanup Levels. The components of this alternative include the following:

- Groundwater treatment in the Shallow Zone would be conducted using ERD. As described previously, select bacteria (dehalococcoides) that thrive in anaerobic environments are capable of breaking down PCE, TCE, and other CVOC constituents including VC into ethene and CO<sub>2</sub> byproducts through the process of reductive dechlorination. 1,4-dioxane is not degraded by anaerobic bioremediation, but is also not a concern for vapor intrusion. The groundwater monitoring results indicate that reductive dechlorination of PCE and other CVOCs is occurring in groundwater at the Site. Groundwater treatment would be conducted by injecting commercially available substrates into the subsurface to enhance anaerobic bioremediation.
- Remediation of residual concentrations of the COCs in groundwater that are below the remediation level but above the proposed FS Cleanup Levels would be implemented by MNA. MNA would consist of performance monitoring to verify that conditions are conducive to reductive dechlorination and that naturally occurring bacteria are continuing to degrade the COCs.
- This alternative includes compliance groundwater monitoring consisting of performance monitoring during active remediation and confirmation groundwater monitoring to verify effectiveness of the remedial alternative.
- On the basis of observed rate of degradation of the COCs in groundwater from wells in SA-3, the estimated remediation timeframe for this alternative is between 3 years and 5 years.

ERD is a mature technology that can be implemented quickly, with likely approval by Ecology.

### **Alternative No. 3 - In-Situ Chemical Oxidation**

Alternative No. 3 consists of the implementation of ISCO for areas where concentrations of PCE, TCE, and 1,4-dioxane exceed the proposed FS Cleanup Levels. The components of this alternative include the following:

- Groundwater remediation using ISCO would be implemented by injecting oxidizing materials (e.g. hydrogen peroxide, potassium permanganate or sodium permanganate) and other amendments directly into the plume areas located in SA-3.
- After initiation of ISCO, groundwater monitoring would be conducted to assess the progress of ISCO. After concentrations of COCs in groundwater decreased below the

cleanup levels, confirmation monitoring of groundwater would be conducted for four quarters to ensure concentrations of the COCs remain below the cleanup levels.

- On the basis of experience at similar sites, the estimated remediation timeframe for this alternative is 5 to 10 years. If the affected properties are redeveloped during this period, VI mitigation may be required.

ISCO has the advantage of being a mature technology that can be implemented quickly, with likely approval by Ecology. The disadvantages of this alternative include: the potential for repeated injections of ISCO chemicals and long term monitoring to verify that concentrations of the COCs remain below the cleanup levels.

#### **Alternative No. 4 - Pump-and-Treat**

Alternative No. 4 consists of using groundwater extraction wells to extract shallow affected groundwater with above-ground oxidation of contaminants.

- Groundwater remediation would be implemented in the Shallow Zone using a groundwater extraction system consisting of pumping wells connected to a centralized treatment system. The extraction wells would be screened in the Shallow Zone.
- Groundwater treatment would be conducted by oxidizing extracted groundwater above grade using ultraviolet light or ozone.
- The pump-and-treat system would require the connection to the sanitary sewer system for disposal of treated water. Iron fouling is anticipated to present a significant operation and maintenance issue. Due to the physical characteristics of the COCs and Site hydrogeology, a pump-and-treat system would be anticipated to operate for an extended period until concentrations of the COCs are below their respective groundwater cleanup levels.
- This alternative includes compliance groundwater monitoring consisting of performance monitoring during active remediation and confirmation groundwater monitoring to verify effectiveness of the remedial alternative.
- On the basis of experience at similar sites and in the UST Area (SA-2), the estimated remediation timeframe for this alternative is at least 30 years and possibly longer.

Groundwater extraction and above-grade oxidation treatment technologies can be implemented quickly, with likely approval by Ecology.

#### **5.5.5.3 Remedial Alternative Selection Criteria and Evaluation**

The selection of a final remedial alternative for implementation is based upon comparison of the remedial alternatives to the threshold and evaluation criteria established under WAC 173-340-360. The evaluation criteria results for each alternative are summarized in Table 20. The results of this evaluation indicate that Alternative No. 1, Alternative No. 2, Alternative No. 3, and Alternative No. 4 meet the threshold criteria and therefore, were retained for further evaluation.

The retained alternatives were screened in accordance with the Weighted Ranking Method as described in Section 5.5.2. The ranking results indicate that the preferred Cleanup Action Alternative for SA-3 is Alternative No. 2 – ERD and MNA. The weighted rank results for each alternative are summarized in Table 21.

## **5.6 PREFERRED CLEANUP ACTION ALTERNATIVES SELECTED FOR THE SITE**

The FS presented herein is intended to provide sufficient information to enable Ecology and the PLPs to reach concurrence on the selection of a final cleanup action alternative under the VCP and for Ecology to provide an opinion letter stating that this RI/FS meets the substantive requirements of MTCA. The preferred alternatives for the three Site Areas are described below:

- Site Area 1 - The preferred Cleanup Action Alternative for SA-1 is ERH and Enhanced In-Situ Anaerobic Bioremediation (SA-1 Alternative No. 4).
- Site Area 2 – The preferred Cleanup Action Alternative for SA-2 is Excavation and Enhanced Aerobic Bioremediation (SA-2 Alternative No. 2).
- Site Area 3 – The preferred Cleanup Action Alternative for SA-3 is Enhanced In-Situ Anaerobic Bioremediation and MNA (SA-3 Alternative No. 2).

The preferred alternatives for the three sub-areas of the Site will be implemented independently and will collectively constitute the complete cleanup action for the Site. Design specifications and details regarding implementing the selected cleanup action alternative for each area will be provided to Ecology via Cleanup Action Plans developed for each Site Area that will, collectively, constitute a Cleanup Action Plan for the Site.

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## 7. LIMITATIONS

The conclusions and recommendations contained in this report are based on professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location and are subject to the following inherent limitations:

- **Accuracy of Information.** Certain information used by Pacific Crest and URS in this report has been obtained, reviewed, and evaluated from various sources believed to be reliable. Although the conclusions, opinions, and recommendations are based in part on such information, Pacific Crest's services did not include the verification of its accuracy or authenticity. Should such information prove to be inaccurate or unreliable, Pacific Crest reserves the right to amend or revise its conclusions, opinions, and/or recommendations.

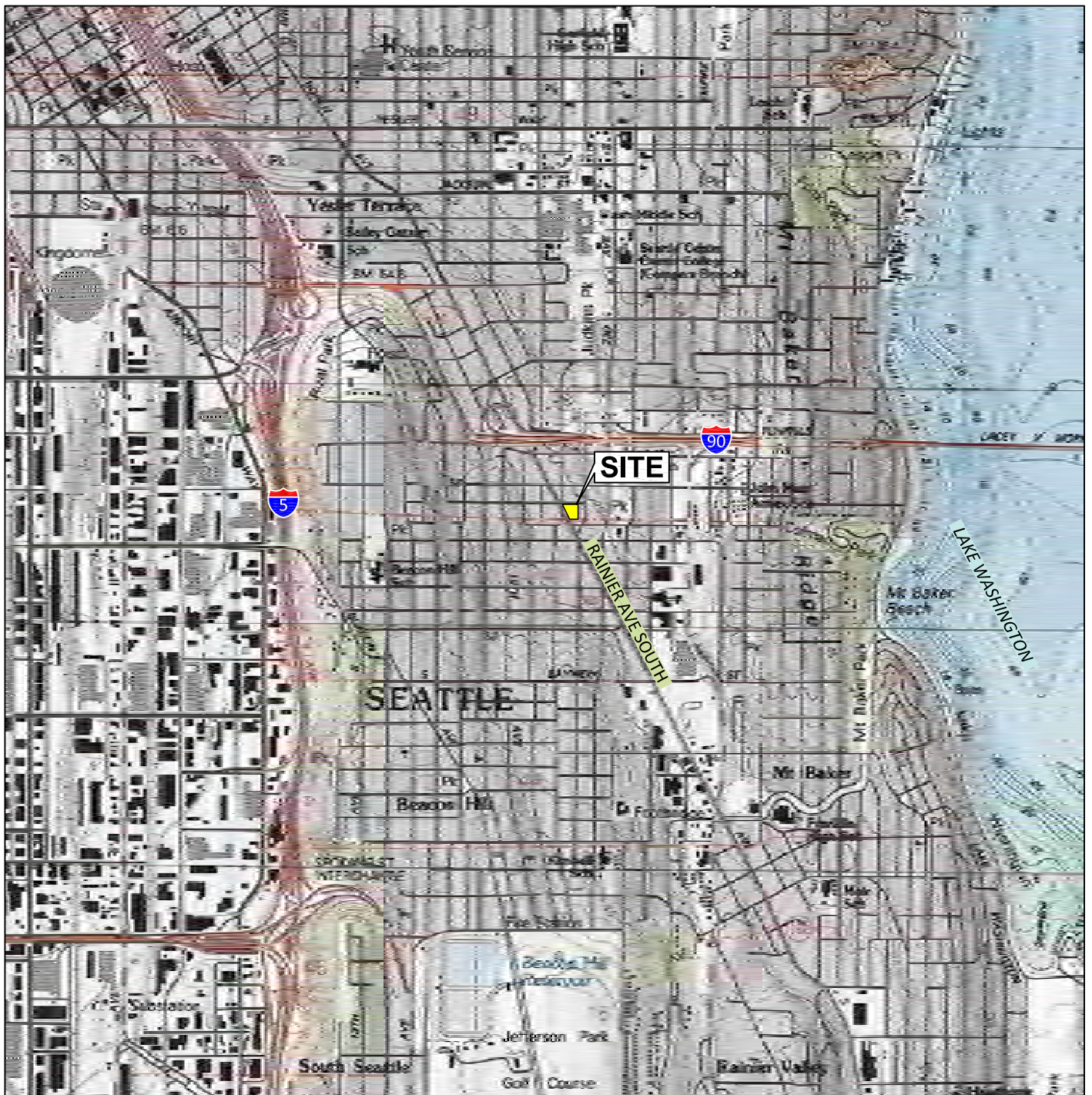


## **FIGURES**

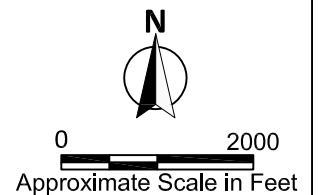
### **DRAFT FOR ECOLOGY REVIEW REMEDIAL INVESTIGATION-FEASIBILITY STUDY REPORT**

**FORMER PENTHOUSE DRAPERY AND BELSHAW SITE  
1752 RAINIER AVENUE SOUTH  
SEATTLE, WASHINGTON**

**PACIFIC CREST PN: 105-003**



**Source:** TOPO! 2007



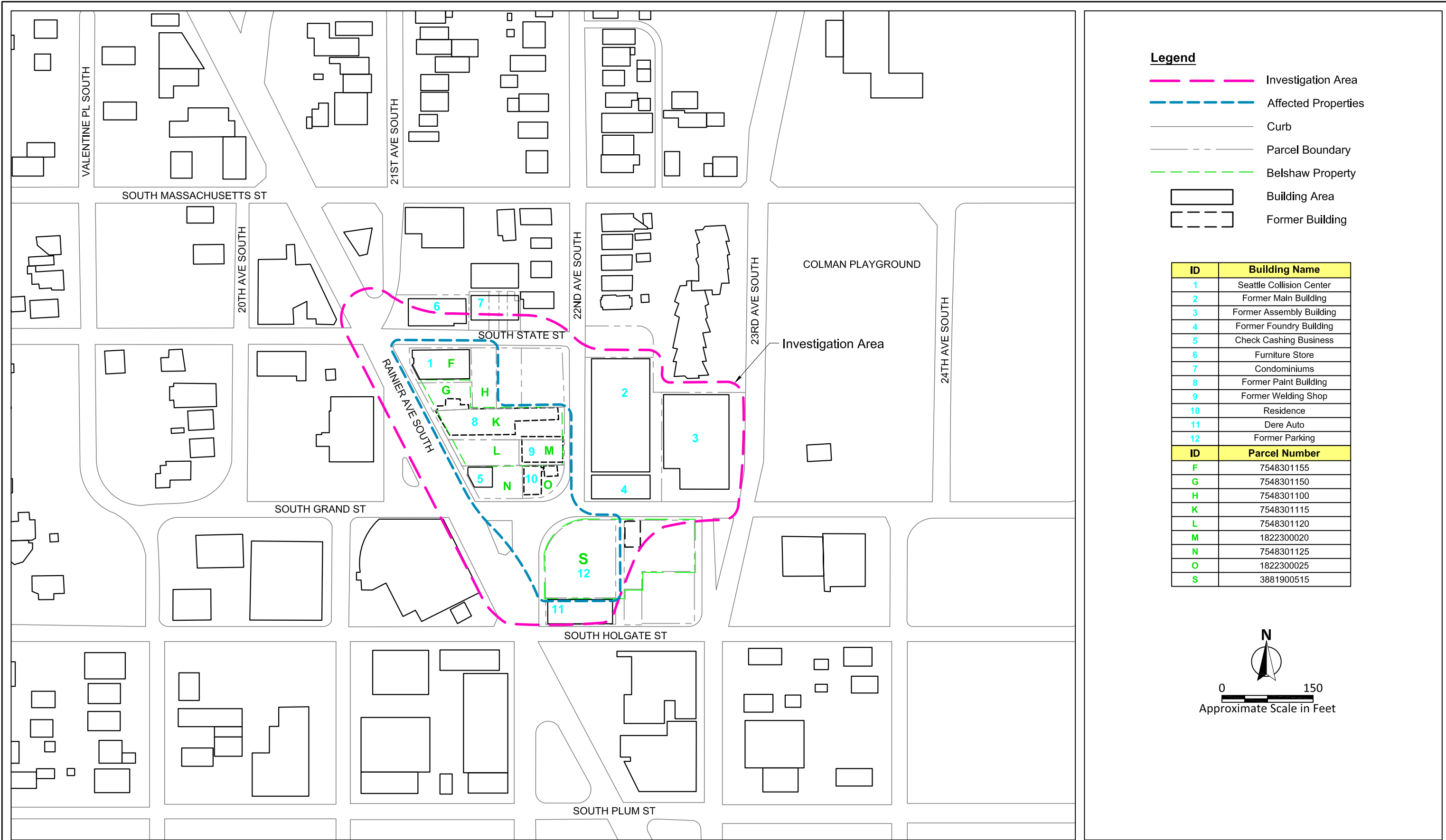
Penthouse Drapery and Belshaw Site  
Seattle, Washington

PN: 105-003

**Figure 1**

Site Location Map

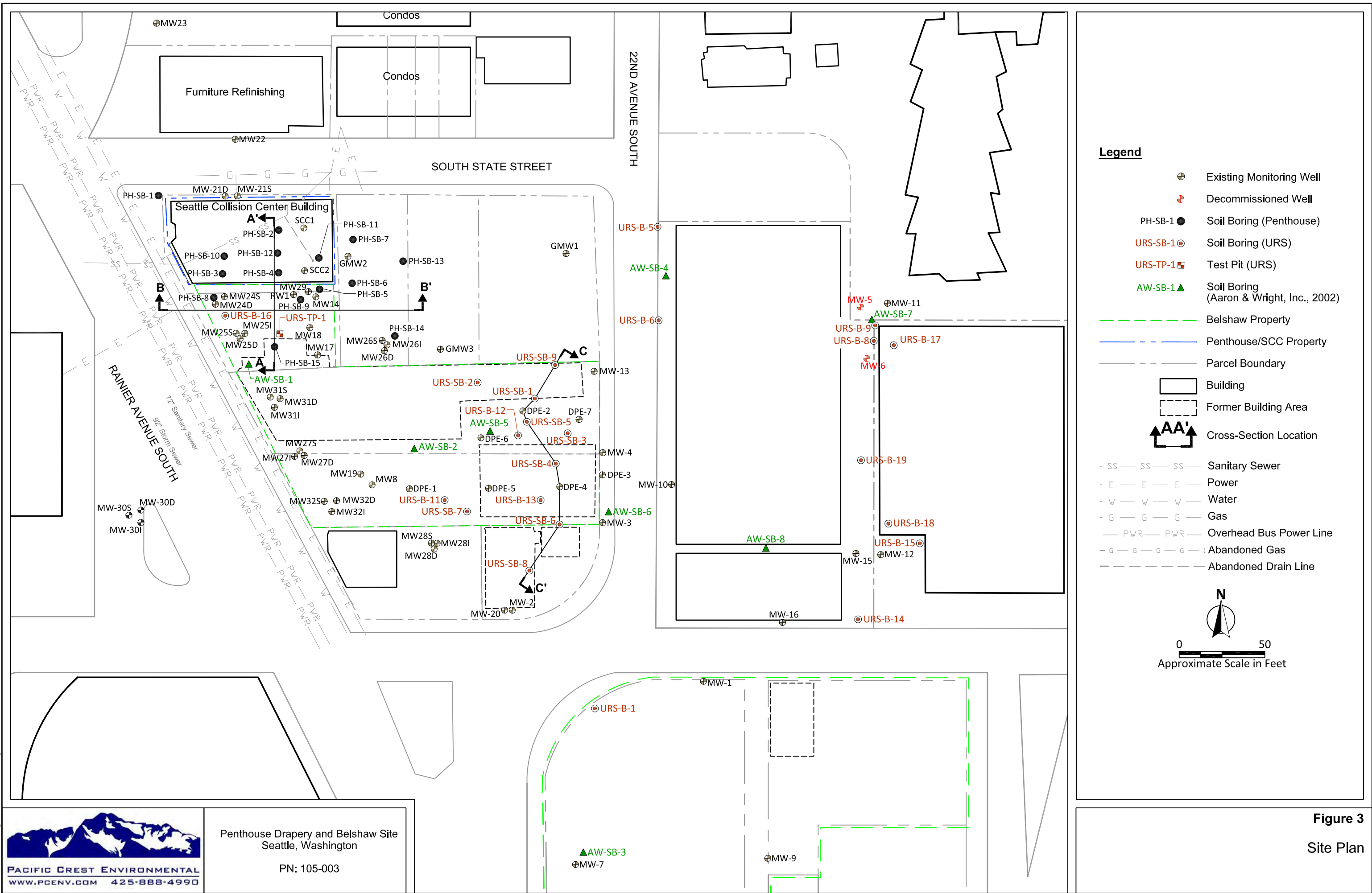
2/17/2014 Drafting 105-003-003.dwg FIG 2 Inves Area Fnl



Penthouse Drapery and Belshaw Site  
Seattle, Washington  
PN: 105-003

**Figure 2**  
Investigation Area

6/9/2014 Drafting 105-003-027.dwg FIG 3 Site



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Penthouse Drapery and Belshaw Site  
Seattle, Washington

PN: 105-003



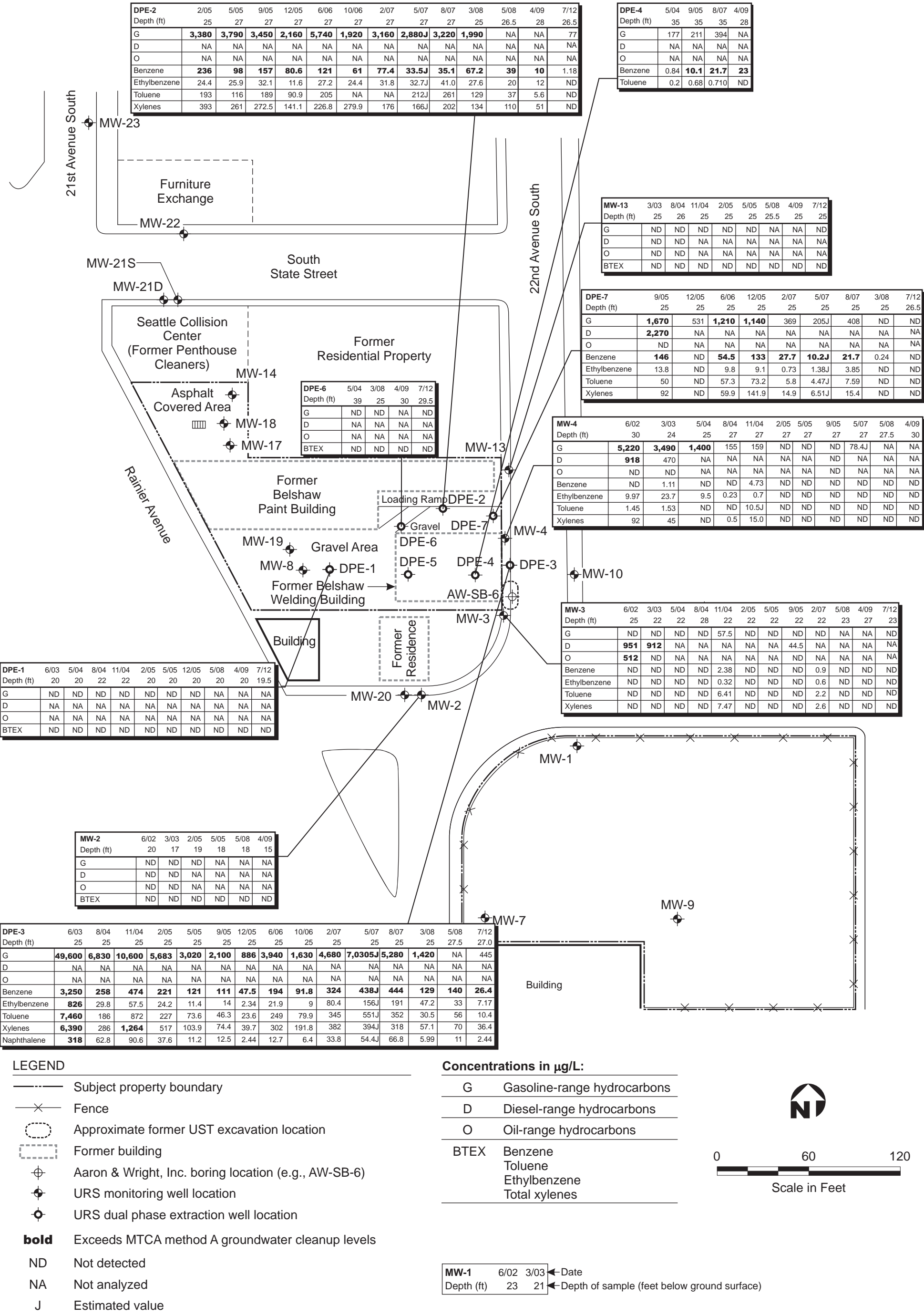
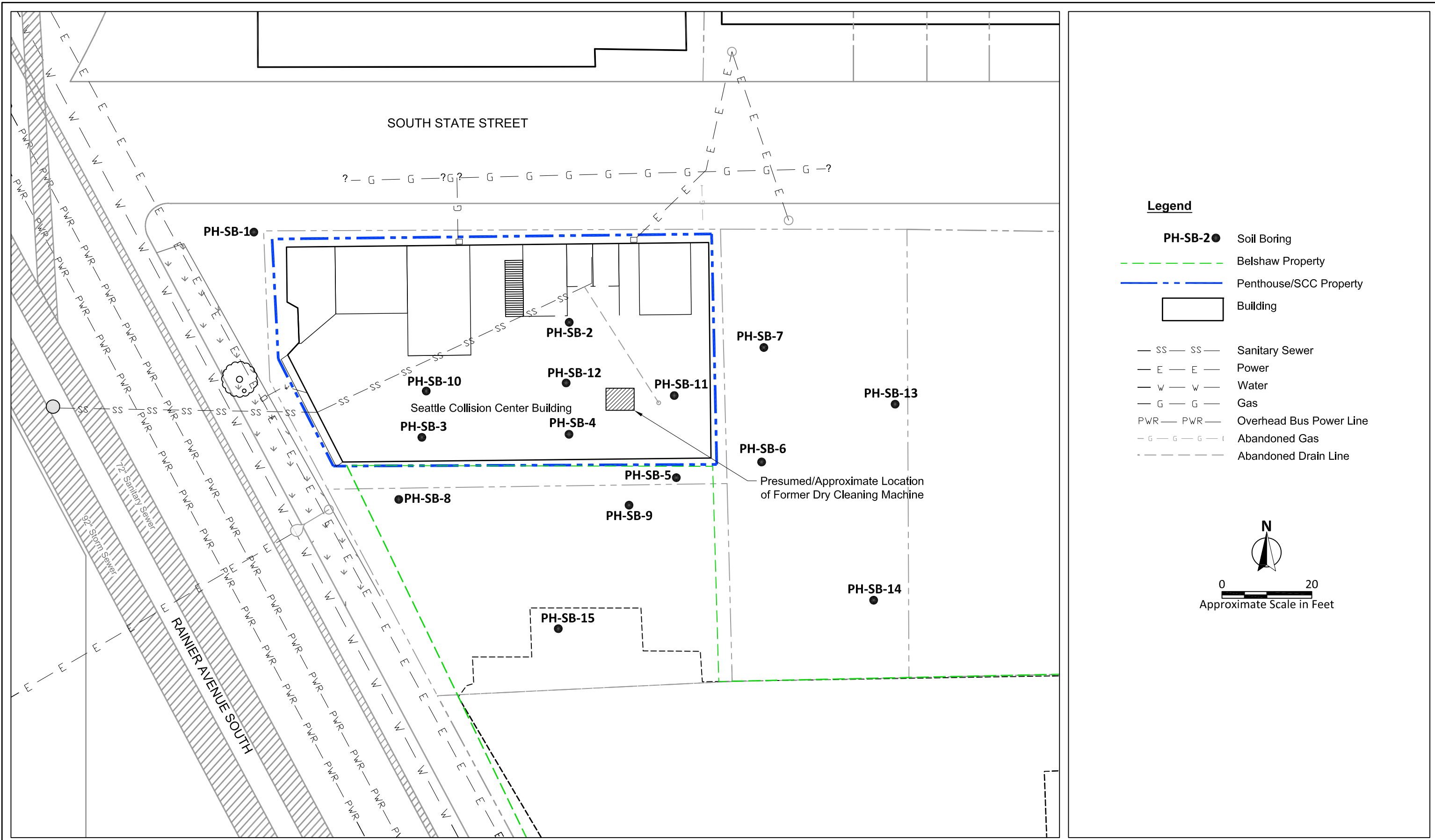


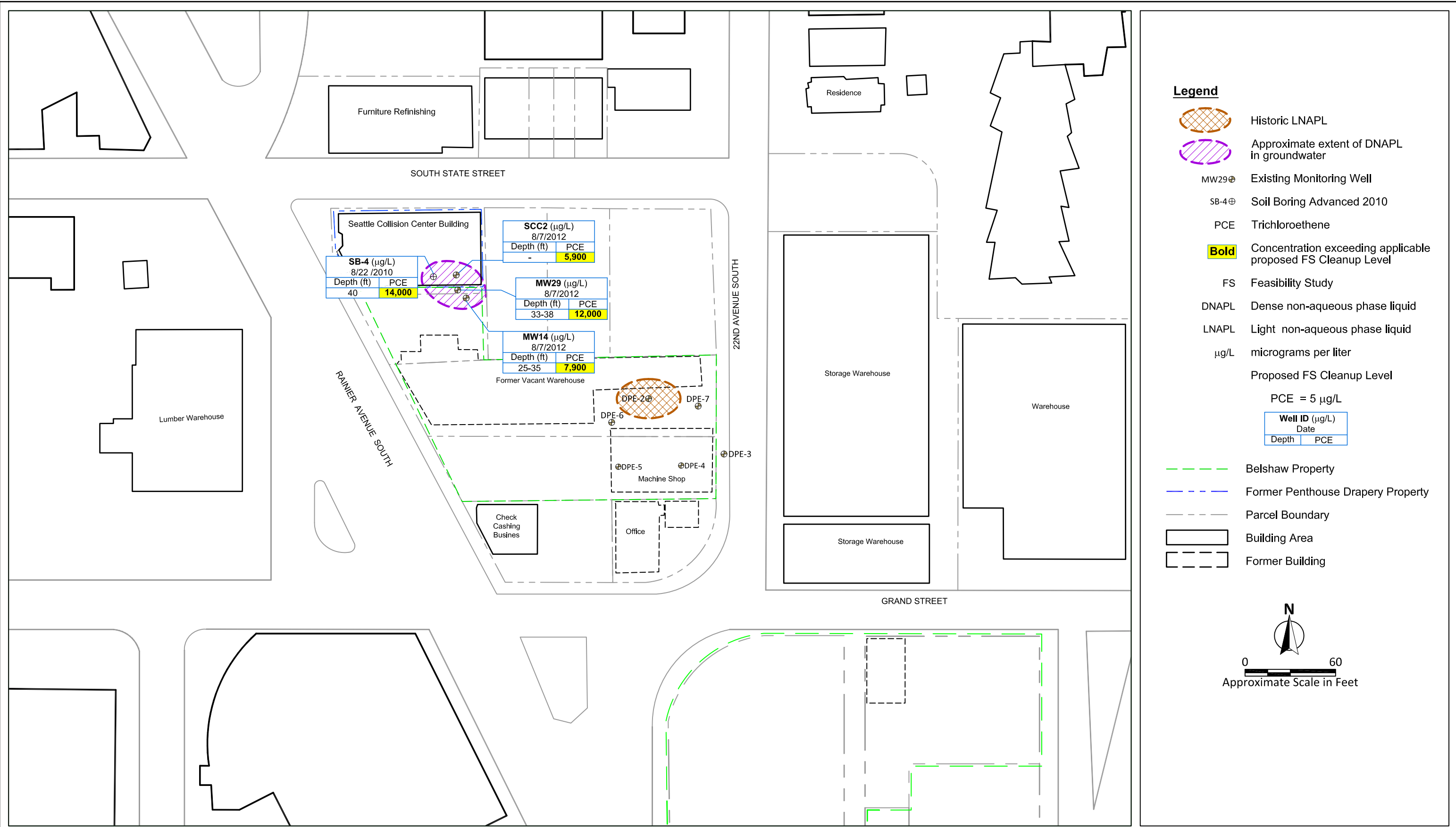
Figure 4  
**Groundwater Gasoline-Range Hydrocarbons  
and BTEX Concentrations**

2/17/2014 Drafting 105-003-028.dwg FIG 5



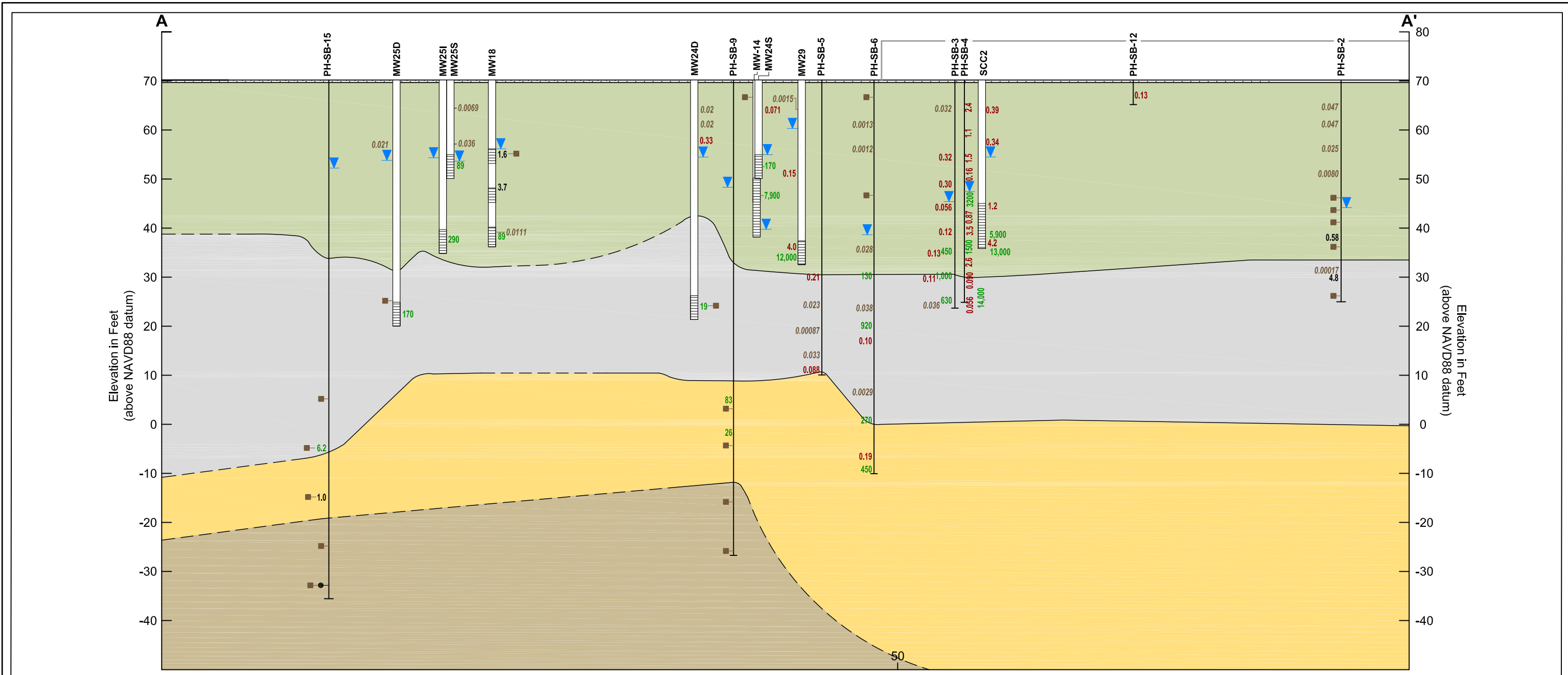
**Figure 5**  
SCC Building and Underground Utility Locations

2/17/2014 Drafting 105-003-025.dwg FIG 6



**Figure 6**  
Site Plan with Extent of DNAPL and LNAPL

2/17/2014 Drafting 105-003-016.dwg FIG 7 AA FS

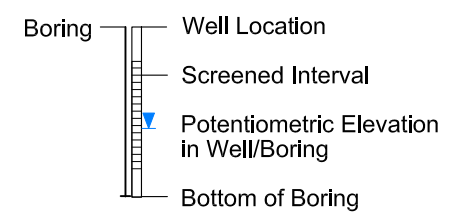


**Legend**

- Asphalt / Fill
- Interbedded Silt/Sand
- Silt (ML)
- Sand or Sand and Gravel containing Silt (SM, SM-GM)
- Sandy Silt
- Contact between Sediment Types (dashed where inferred)
- Building

- 45 Concentration of PCE in Groundwater in µg/L that Exceeds Proposed FS Cleanup Level of 5 µg/L
- 0.58 Concentration of PCE in Groundwater in µg/L Below Proposed FS Cleanup Level of 5 µg/L
- PCE in Groundwater Not Detected
- 1.5 Concentration of PCE in Soil in mg/kg that Exceeds Proposed FS Cleanup Level of 0.05 mg/kg
- 0.021 Concentration of PCE in Soil in mg/kg Below Proposed FS Cleanup Level of 0.05 mg/kg
- PCE in Soil Not Detected

**MW-14 Boring ID**



**Notes:**

Concentrations of PCE are displayed if they exceed the Proposed FS Cleanup Level.  
PCE = tetrachloroethene  
µg/L = micrograms per liter  
mg/kg = milligrams per kilogram  
FS = Feasibility Study

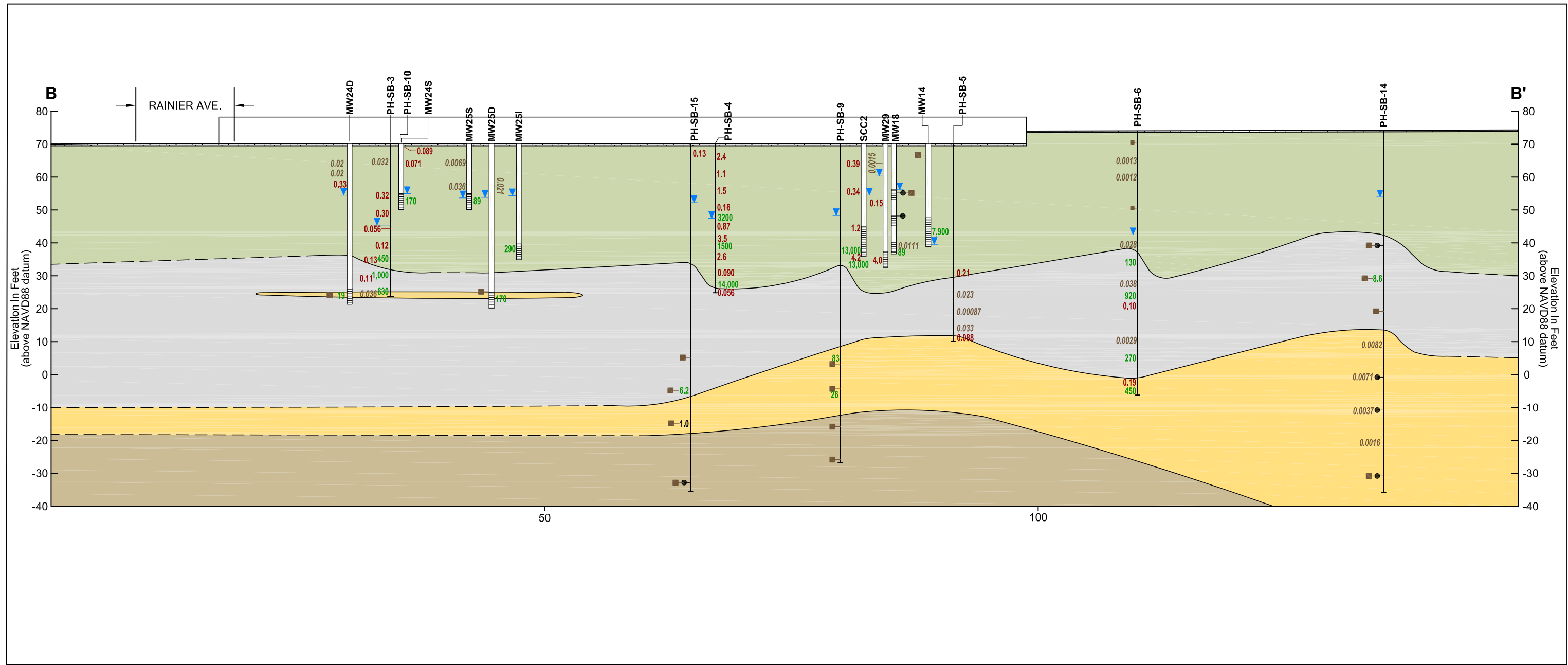
Approximate Horizontal Scale in Feet  
Horizontal Exaggeration x 3  
0 6.6  
0 20  
Approximate Vertical Scale in Feet



Penthouse Drapery and Belshaw Site  
Seattle, Washington  
PN: 105-003

**Figure 7**  
Cross-Section A-A'





**Legend**

- Asphalt / Fill
- Interbedded Silt/Sand
- Silt (ML)
- Sand or Sand and Gravel containing Silt (SM, SM-GM)
- Sandy Silt
- Contact between Sediment Types (dashed where Inferred)
- Building

- 45 Concentration of PCE in Groundwater in  $\mu\text{g/L}$  that Exceeds Proposed FS Cleanup Level of 5  $\mu\text{g/L}$
- 0.58 Concentration of PCE in Groundwater in  $\mu\text{g/L}$  Below Proposed FS Cleanup Level of 5  $\mu\text{g/L}$
- PCE in Groundwater Not Detected
- 1.5 Concentration of PCE in Soil in  $\text{mg/kg}$  that Exceeds Proposed FS Cleanup Level of 0.05  $\text{mg/kg}$
- 0.021 Concentration of PCE in Soil in  $\text{mg/kg}$  Below Proposed FS Cleanup Level of 0.05  $\text{mg/kg}$
- PCE in Soil Not Detected

**MW-14 Boring ID**

- Boring
- Well Location
- Screened Interval
- Potentiometric Elevation in Well/Boring
- Bottom of Boring

**Notes:**

Concentrations of PCE are displayed if they exceed the Proposed FS Cleanup Level.

PCE = tetrachloroethene  
 $\mu\text{g/L}$  = micrograms per liter  
 $\text{mg/kg}$  = milligrams per kilogram  
FS = Feasibility Study

Approximate Horizontal Scale in Feet  
Horizontal Exaggeration x 3  
0 10  
0 30  
Approximate Vertical Scale in Feet

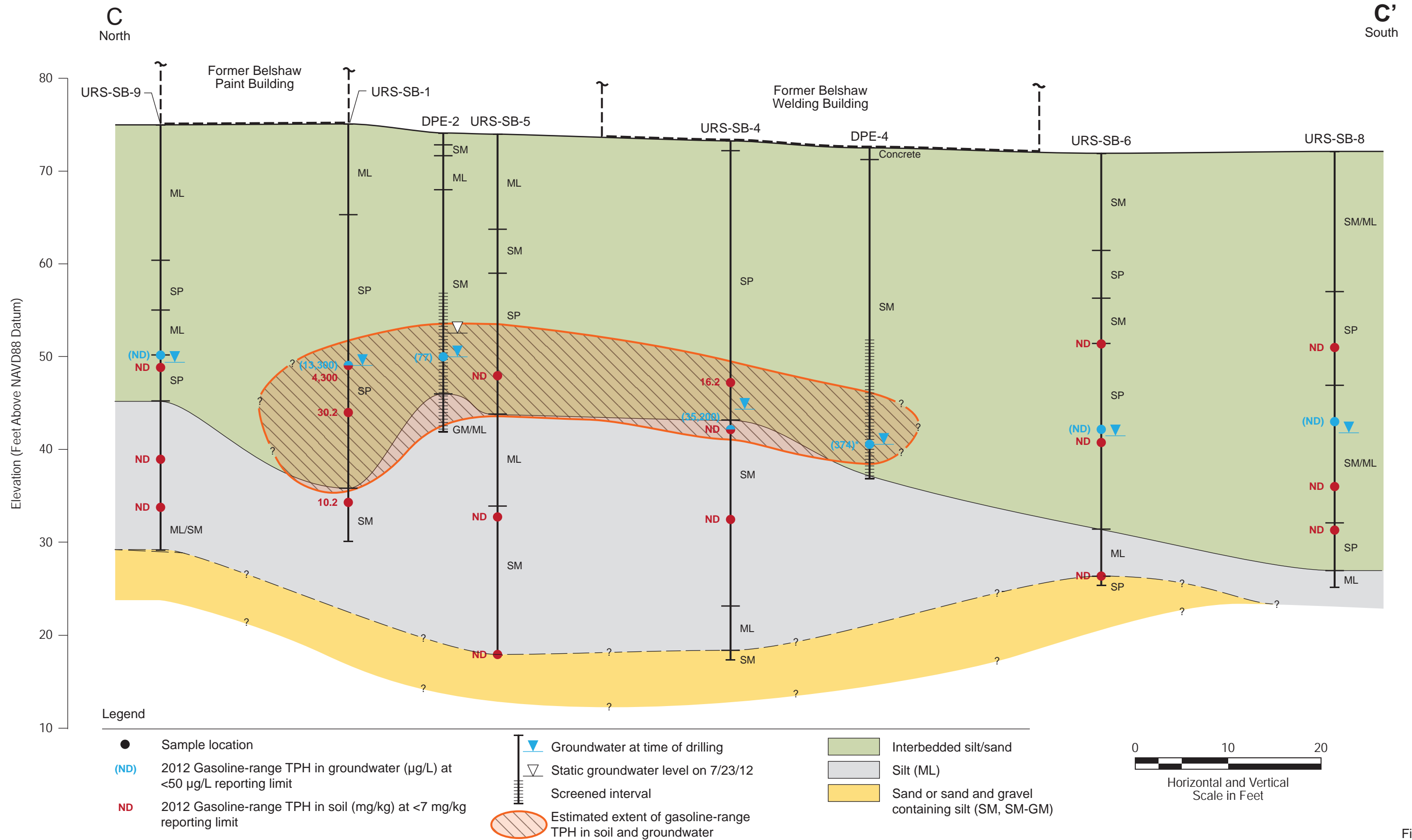


Penthouse Drapery and Belshaw Site  
Seattle, Washington

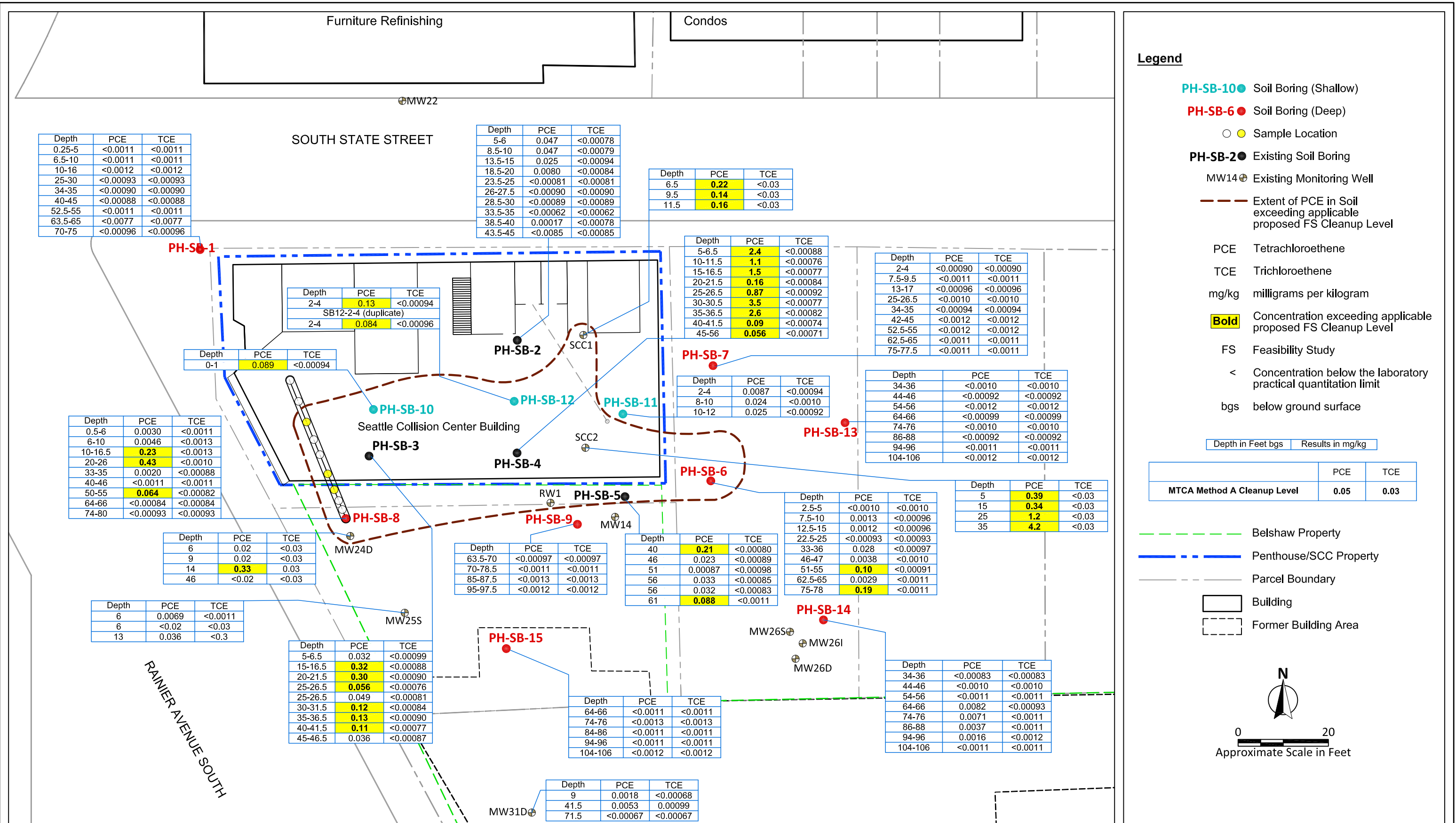
PN: 105-003

**Figure 8**

Cross-Section B-B'



2/17/2014 Drafting 105-003-017.dwg FIG 10



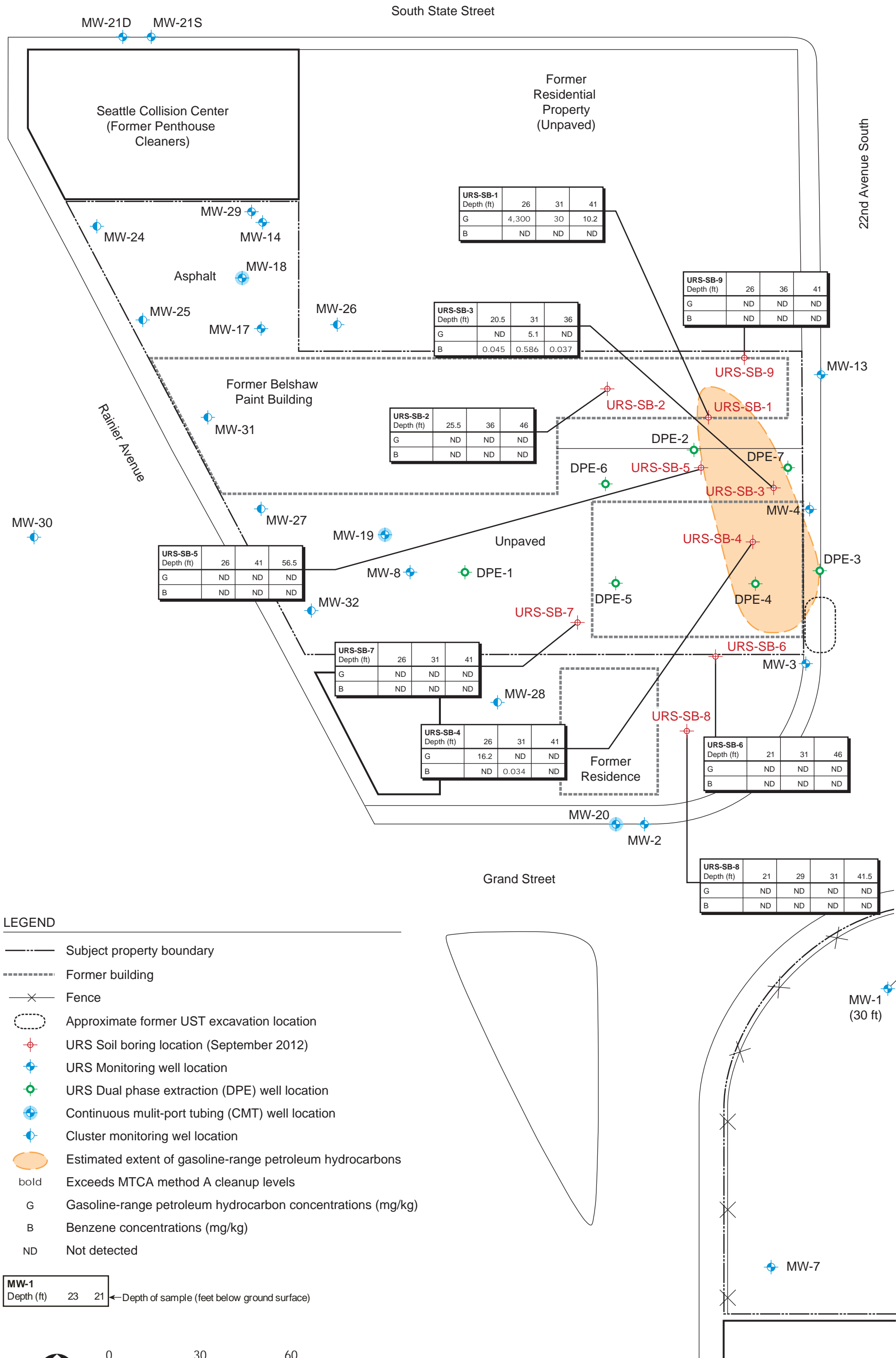
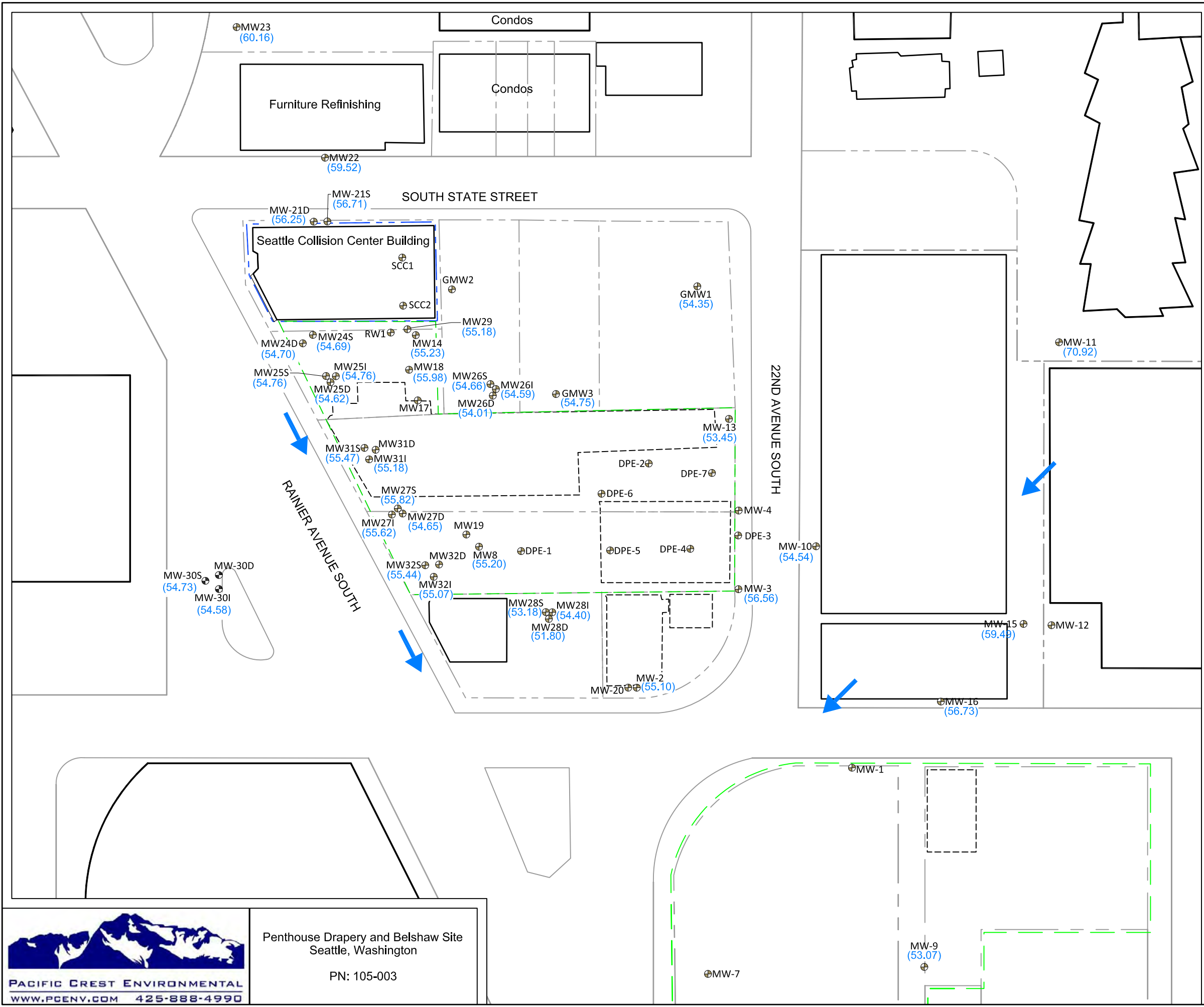


Figure 11  
**Soil Gasoline-range Petroleum Hydrocarbons and Benzene Concentrations (September 2012)**  
Former Belshaw Brothers Facility  
Seattle, Washington

2/17/2014 Drafting 105-003-024.dwg FIG 12

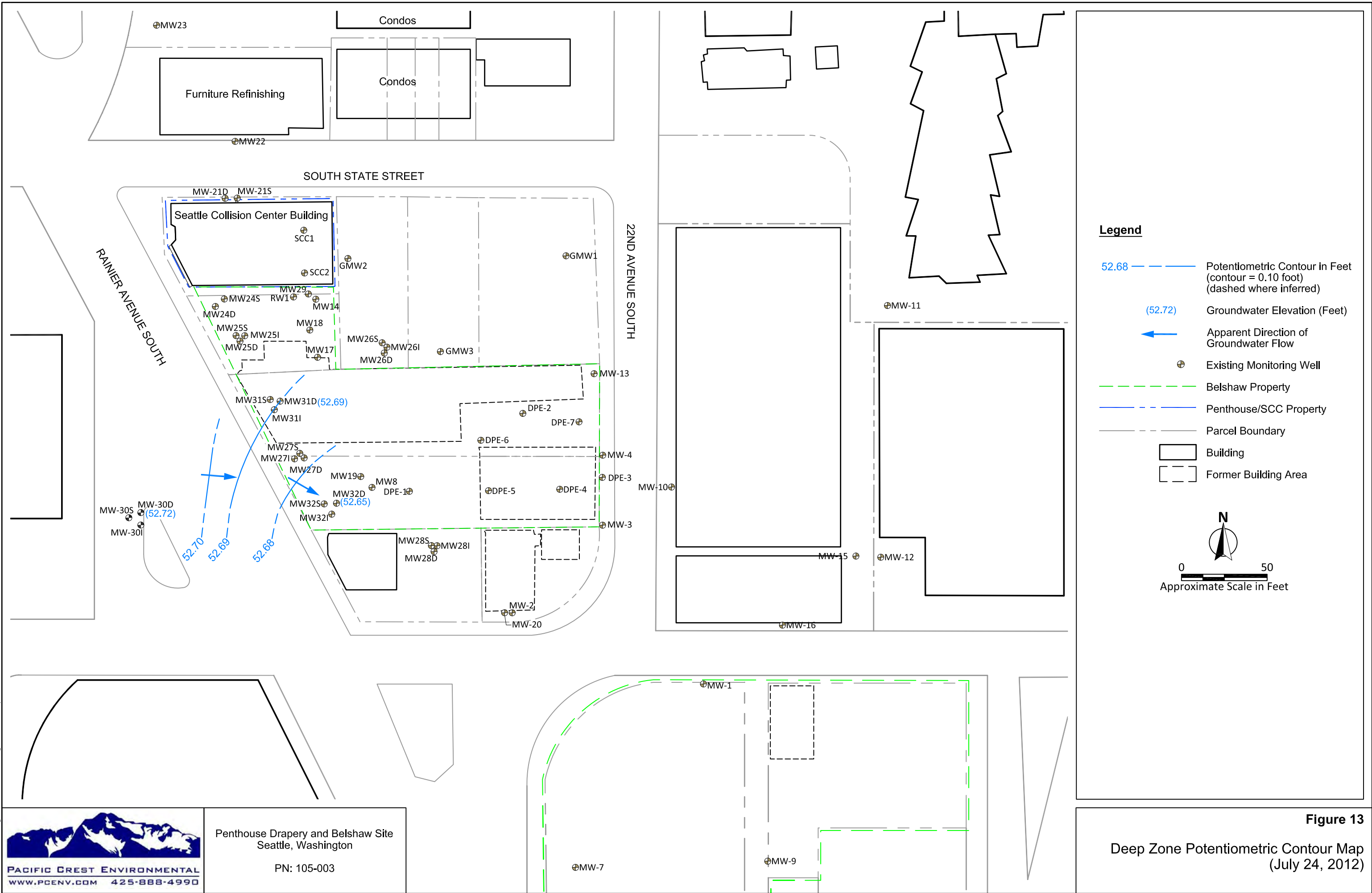


Penthouse Drapery and Belshaw Site  
Seattle, Washington  
PN: 105-003

**Figure 12**  
Shallow Zone Potentiometric Map  
(July 24, 2012)



2/17/2014 Drafting 105-003-022.dwg FIG 13 deep



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Penthouse Drapery and Belshaw Site  
Seattle, Washington  
PN: 105-003

**Figure 13**  
Deep Zone Potentiometric Contour Map  
(July 24, 2012)

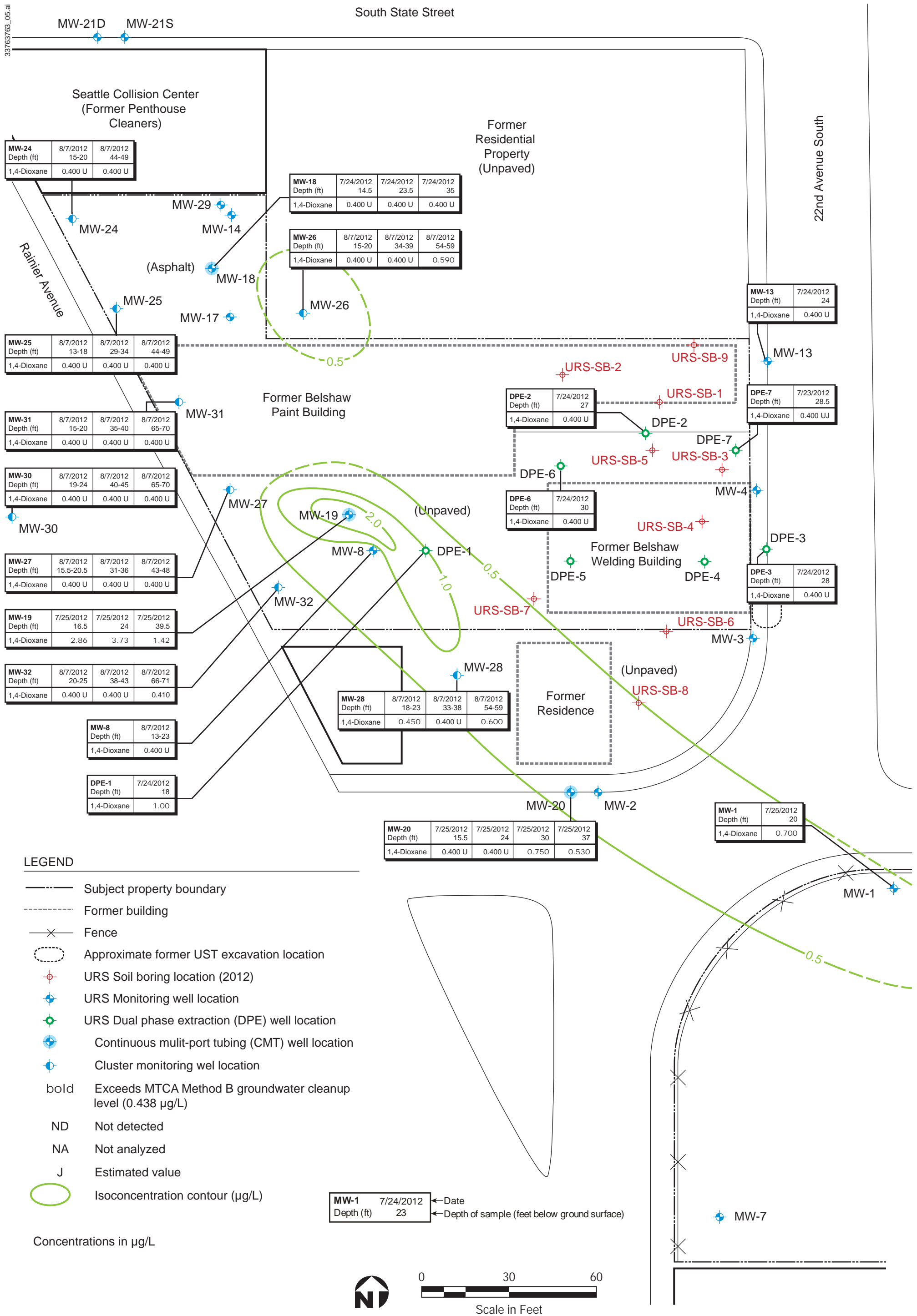


Figure 14

2012 Groundwater 1,4-Dioxane Concentrations

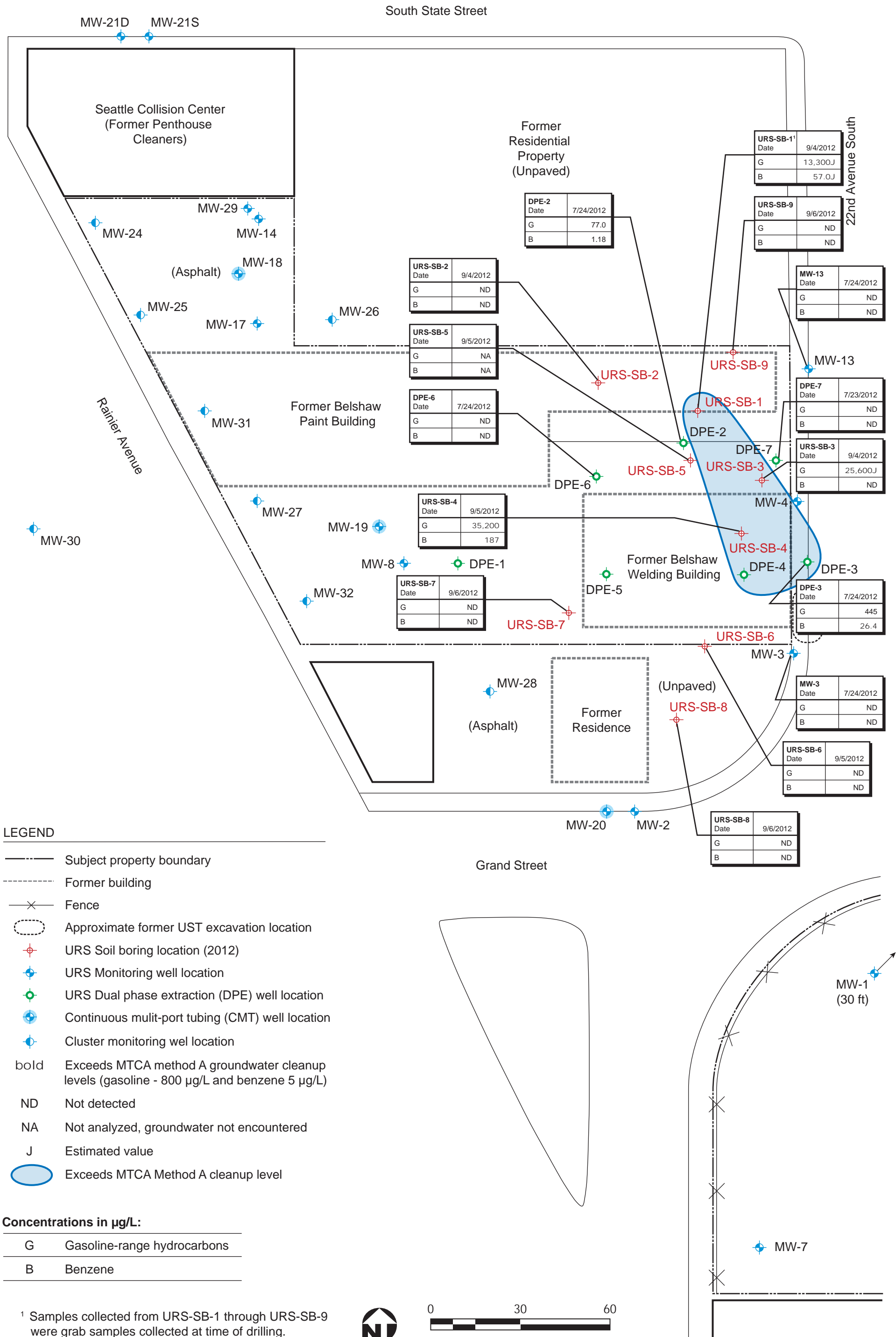
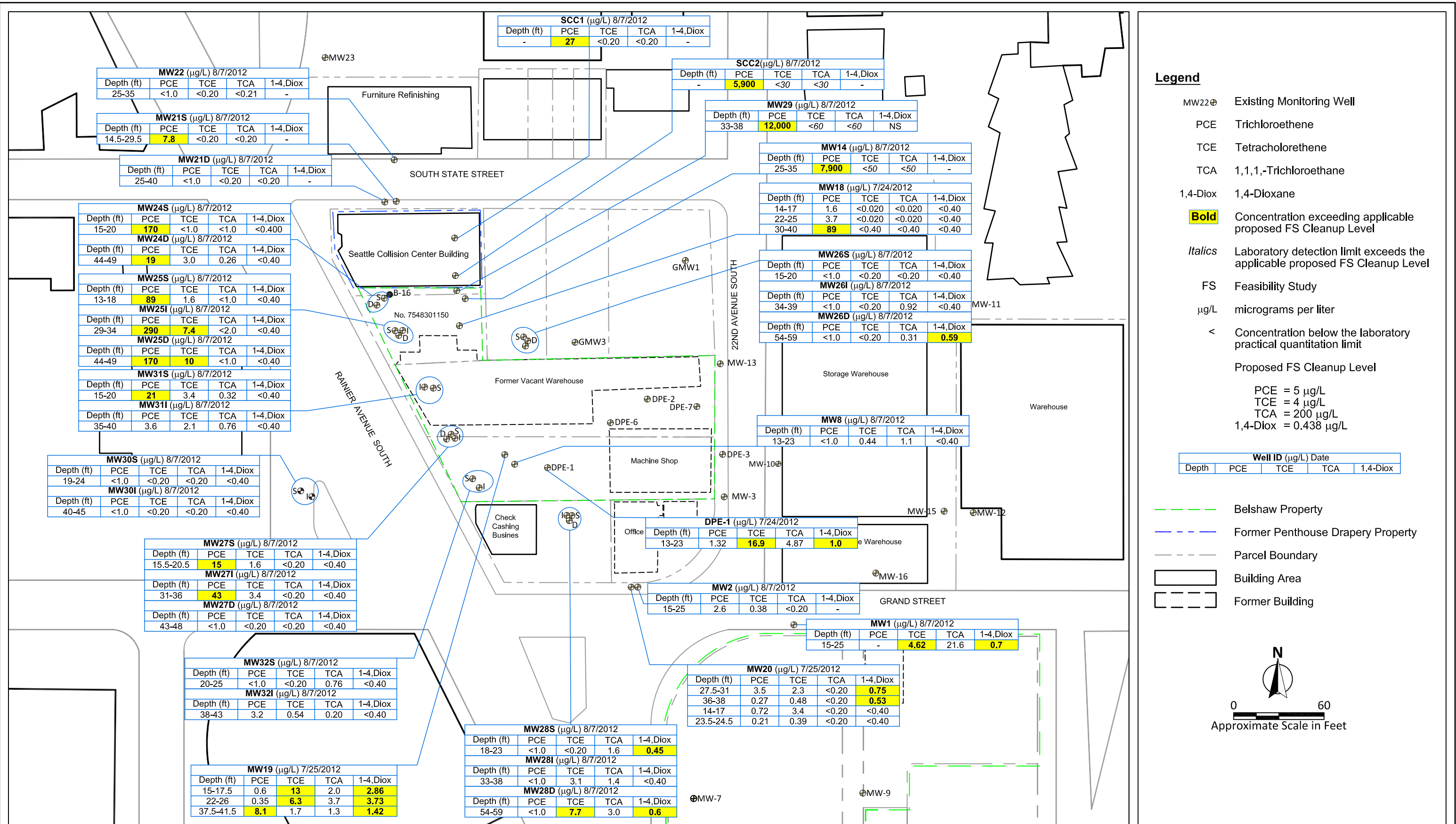


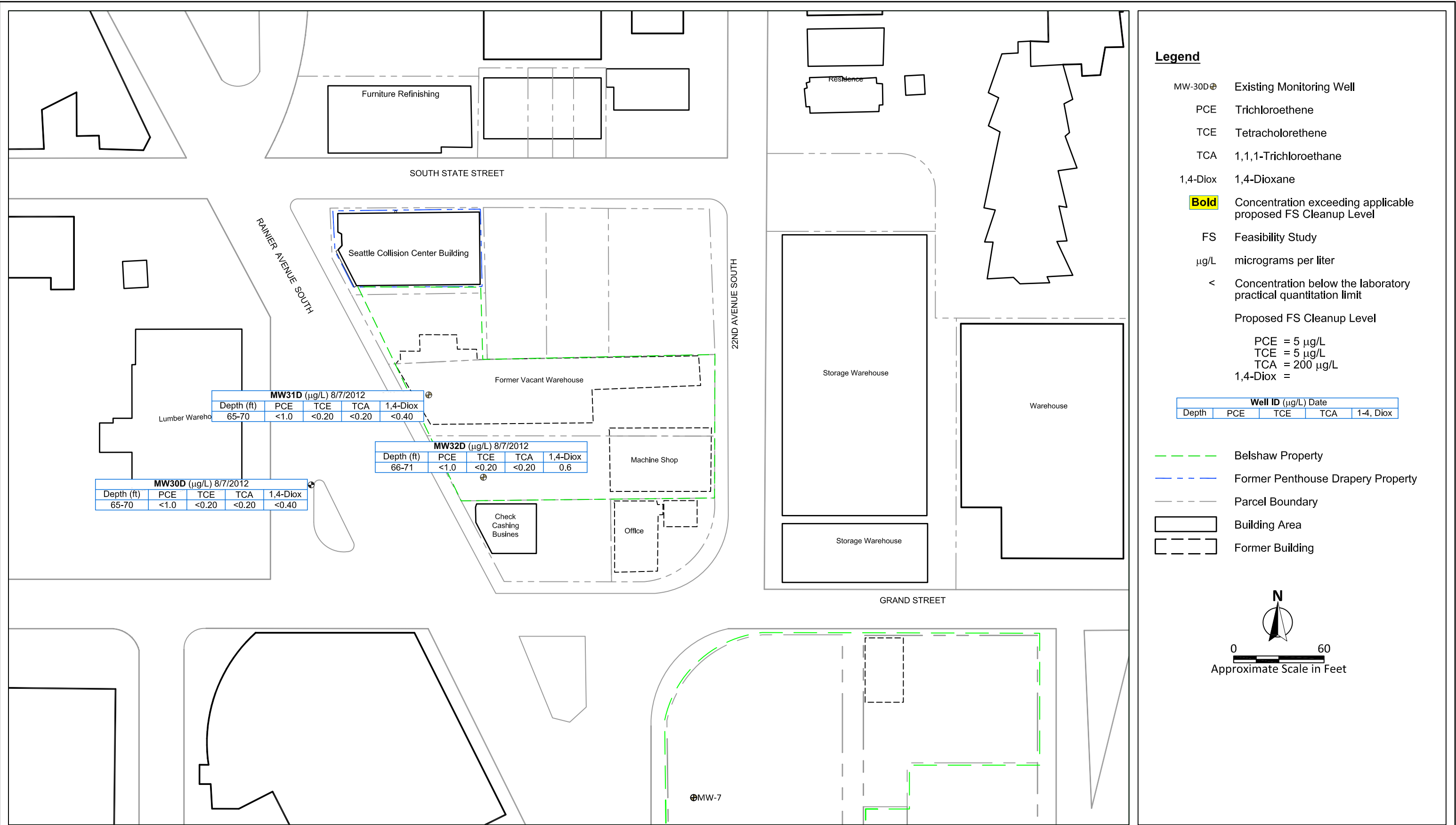
Figure 15  
**2012 Groundwater Gasoline-Range Hydrocarbons and Benzene Concentrations**



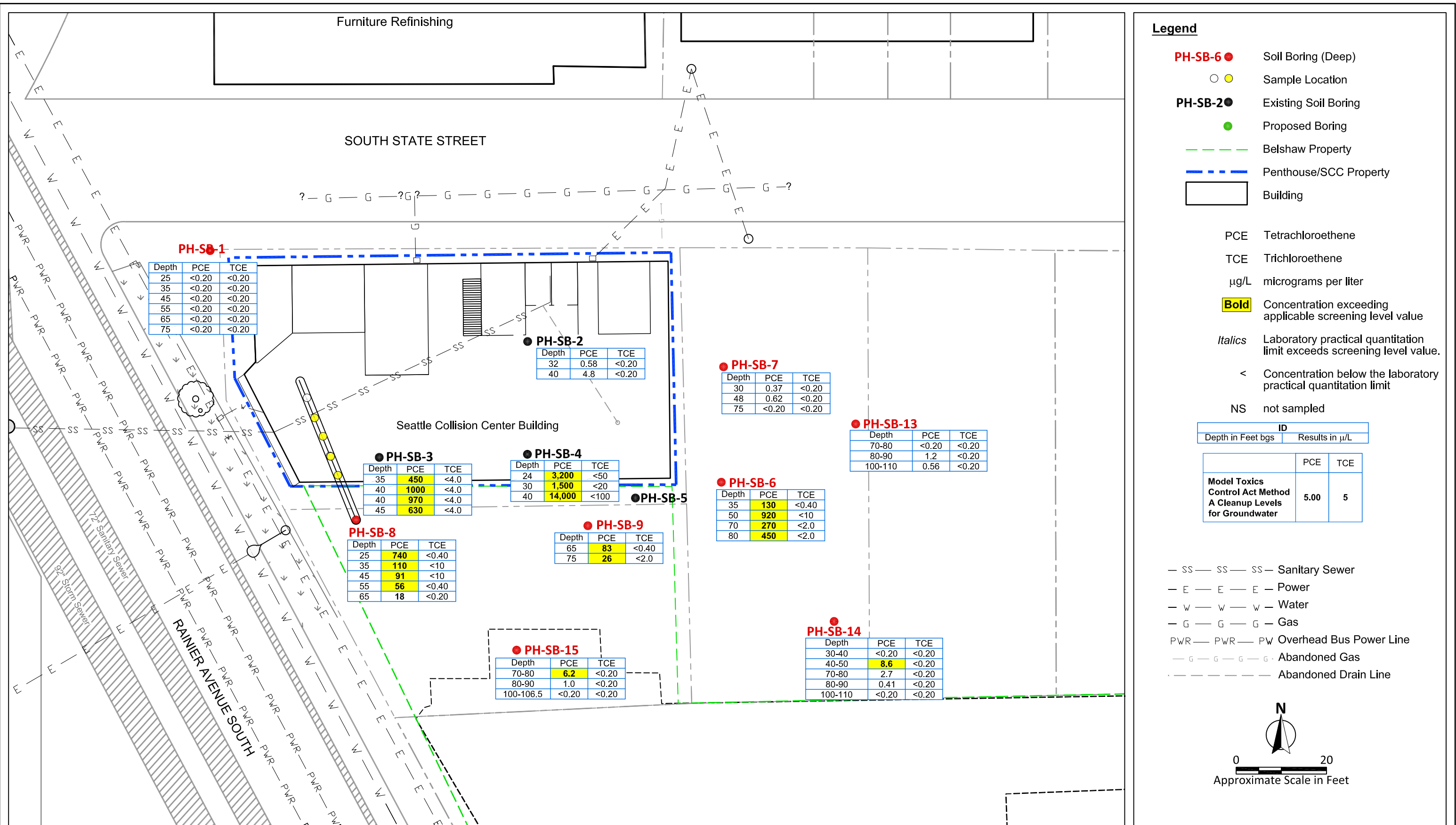
2/17/2014 Drafting 105-003-007.dwg FIG 16 SHA



2/17/2014 Drafting 105-003-026.dwg FIG 17 DEEP

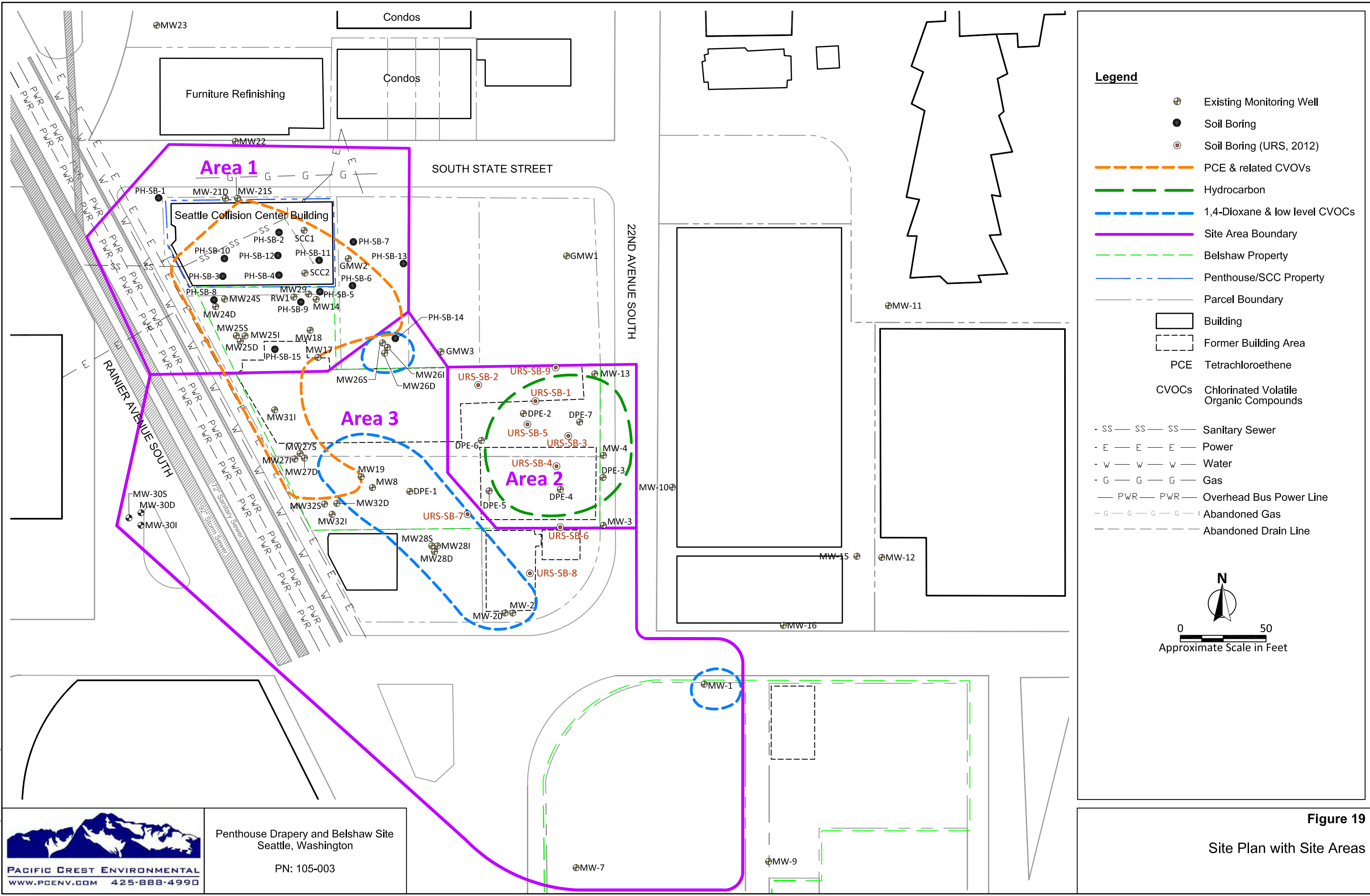


2/17/2014 Drafting 105-003-008.dwg FIG 18 RG-GW

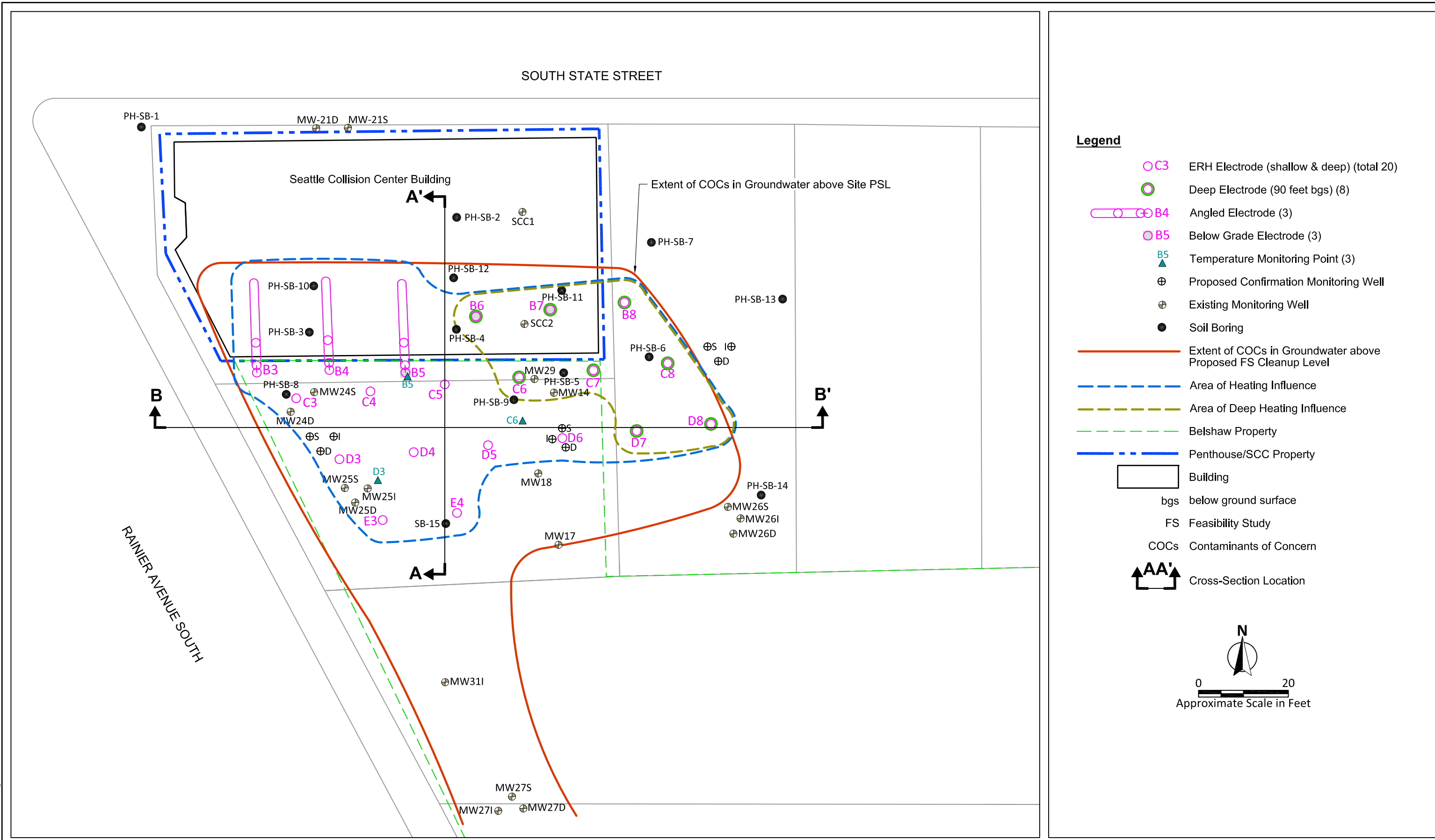




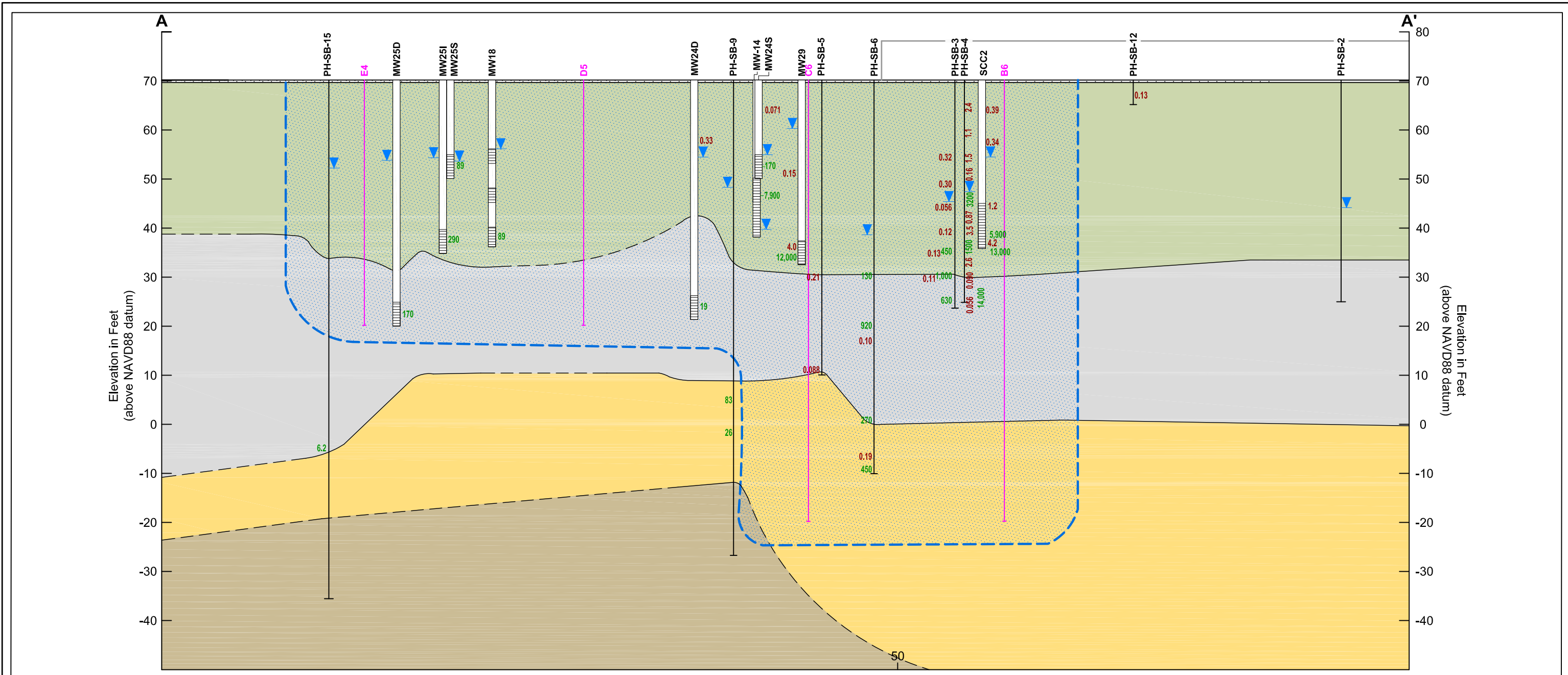
2/17/2014 Drafting 105-003-021.dwg FIG 19



2/17/2014 Drafting 105-003-018.dwg FIG 20



2/17/2014 Drafting 105-003-016.dwg FIG 21 AA-ELECTRDS

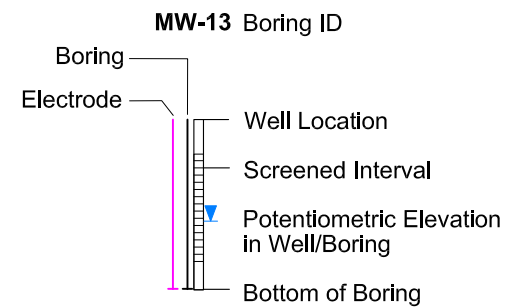


**Legend**

- Asphalt / Fill
- Interbedded Silt/Sand
- Silt (ML)
- Sand or Sand and Gravel containing Silt (SM, SM-GM)
- Sandy Silt
- Contact between Sediment Types (dashed where inferred)
- Building

- 45 Concentration of PCE in Groundwater in µg/L that Exceeds Proposed FS Cleanup Level of 5 µg/L
- 1.5 Concentration of PCE in Soil in mg/kg that Exceeds Proposed FS Cleanup Level of 0.05 mg/kg

Estimated Area of Heating Influence



**Notes:**

Concentrations of PCE are displayed if they exceed the Proposed FS Cleanup Level.

PCE = tetrachloroethene  
µg/L = micrograms per liter  
mg/kg = milligrams per kilogram  
FS = Feasibility Study

Approximate Horizontal Scale in Feet  
Horizontal Exaggeration x 3  
0 6.6  
0 20  
Approximate Vertical Scale in Feet



Penthouse Drapery and Belshaw Site  
Seattle, Washington

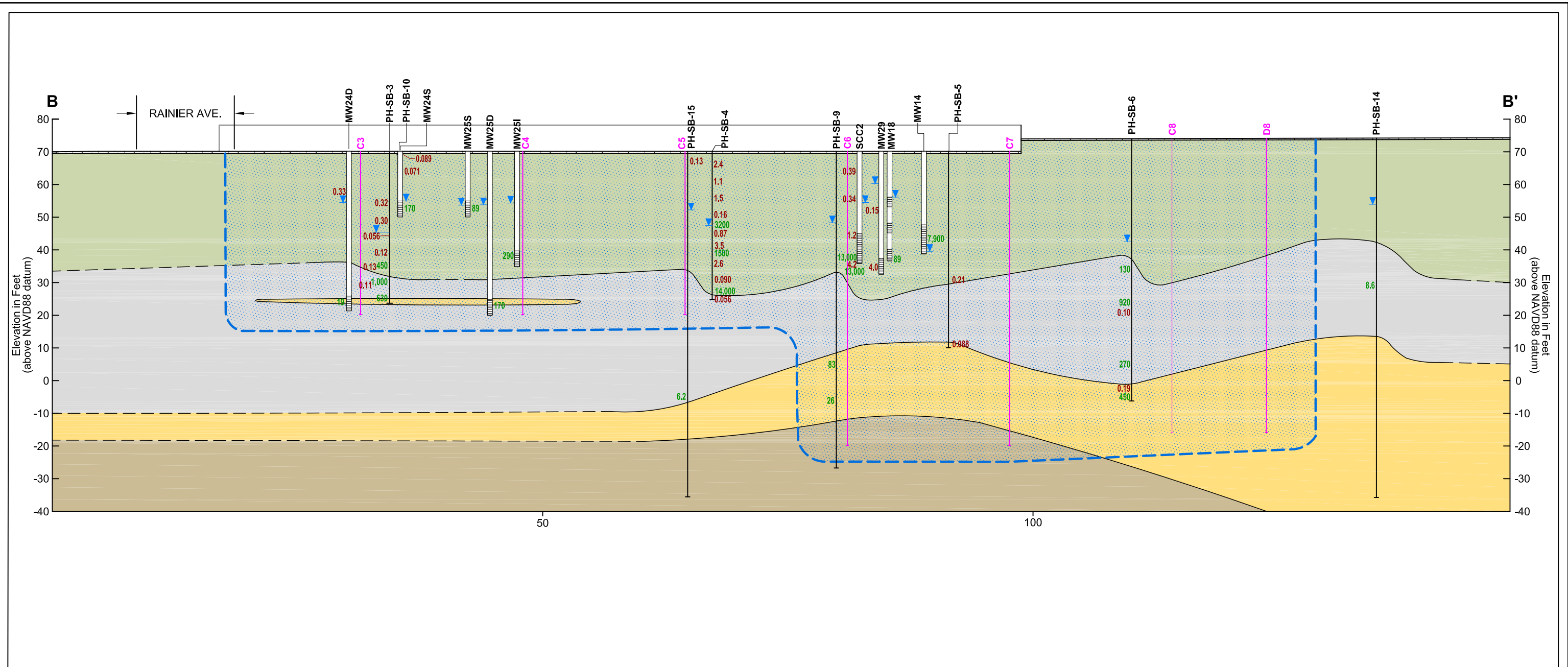
PN: 105-003

**Figure 21**

Cross Section A-A' with Electrodes



2/17/2014 Drafting 105-003-016.dwg FIG 22 BB-ELECTRDS

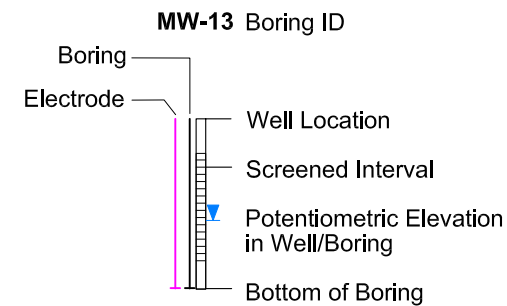


#### Legend

- Asphalt / Fill
- Interbedded Silt/Sand
- Silt (ML)
- Sand or Sand and Gravel containing Silt (SM, SM-GM)
- Sandy Silt
- Contact between Sediment Types (dashed where Inferred)
- Building

- 45 Concentration of PCE in Groundwater in µg/L that Exceeds Proposed FS Cleanup Level of 5 µg/L
- 1.5 Concentration of PCE in Soil in mg/kg that Exceeds Proposed FS Cleanup Level of 0.05 mg/kg

Estimated Area of Heating Influence



#### Notes:

Concentrations of PCE are displayed if they exceed the Proposed FS Cleanup Level.

PCE = tetrachloroethene  
µg/L = micrograms per liter  
mg/kg = milligrams per kilogram  
FS = Feasibility Study

Approximate Horizontal Scale in Feet  
Horizontal Exaggeration x 3  
0 10  
0 30  
Approximate Vertical Scale in Feet



Penthouse Drapery and Belshaw Site  
Seattle, Washington

PN: 105-003

Figure 22

Cross Section B-B' with Electrodes

## **TABLES**

# **DRAFT FOR ECOLOGY REVIEW REMEDIAL INVESTIGATION-FEASIBILITY STUDY REPORT**

**FORMER PENTHOUSE DRAPERY AND BELSHAW SITE  
1752 RAINIER AVENUE SOUTH  
SEATTLE, WASHINGTON**

**PACIFIC CREST PN: 105-003**



**Table 1**  
**Preliminary Screening Levels and Proposed FS Cleanup Levels - Soil**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Screening Level Description	COPCs												
	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,4-Dioxane	Benzene	Toluene	Ethylbenzene	Total Xylenes	1,3,5-Trimethylbenzene	Lead
MTCA Method A Cleanup Level	0.05	0.03	--	--	--	2	**	0.03	7	6	9	**	250
MTCA Method B, Carcinogen, Direct Contact (ingestion only) unrestricted	480	11	--	--	1	**	**	**	**	**	**	800	**
MTCA Method B, Non-Carcinogen, Direct Contact (ingestion only) unrestricted	--	--	160	1,600	--	**	**	**	**	**	**	**	**
MTCA Method B, Three-Phase Model, Soil Leaching to Groundwater	--	0.03	0.4	1	0.00126	**	**	**	**	**	**	**	**
Proposed Feasibility Study (FS) Cleanup Level for COCs only	0.05	0.03	0.4	--	--	**	**	0.03	**	**	**	**	30

**NOTE:**

COPCs=Contaminants of Potential Concern

"--" = Not applicable or not calculated by Pacific Crest

\*\*\*" = Not applicable or not calculated by URS

COCs = Contaminants of concern

Screening Levels in milligrams per kilogram (mg/kg)

**Table 2**  
**Preliminary Screening Levels and Proposed FS Cleanup Levels - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Screening Level Description	COPCs															
	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,4-Dioxane	Benzene	Toluene	Ethylbenzene	Total Xylenes	Lead	Naphthalene
MTCA Method A Cleanup Levels for Groundwater - Ingestion	5	5	-	-	0.2	200	**	**	5	**	5	1,000	700	1,000	15	160
MTCA Method B Cleanup Levels for Groundwater - Ingestion	21	4	16	160	--	**	**	**	**	0.438	**	**	**	**	**	80
MTCA Method B Screening Levels for Groundwater - Vapor Intrusion - Residential	24.5	1.5	160	130	0.35	**	**	**	**	**	**	**	**	**	**	**
MTCA Method B Screening Levels for Groundwater - Vapor Intrusion - Commercial	128.6	13.8	1538	--	3.7	**	**	**	**	**	**	**	**	**	**	**
Proposed Feasibility Study (FS) Cleanup Level for COCs only	5	4	16	--	--	200	**	**	**	0.438	5	1,000	700	1,000	15	160

**NOTE:**

COCs=Contaminants of Concern

"--" = Not applicable or not calculated by Pacific Crest

\*\*\* = Not applicable or not calculated by URS

COCs = Contaminants of concern

Screening Levels in micrograms per liter (ug/L)

1. MTCA Method A 800 ug/l if benzene present. If benzene is not detected, groundwater cleanup level is 1,000 ug/l

**Table 3**  
**Preliminary Screening Levels and Proposed FS Cleanup Levels - Air and Soil Vapor**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Screening Level Description	COPCs				
	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
MTCA Method B Cleanup Level - Indoor Air - Residential	9.6	0.37	16	27	0.28
MTCA Method B Screening Level - Indoor Air - Commercial	50.5	3.3	--	--	3.0
MTCA Method B Screening Level - Shallow Soil Gas (vapor attenuation 0.1)	96	3.7	160	270	2.8
MTCA Method B Screening Level - Shallow Soil Gas (vapor attenuation 0.01)	960	37	1600	2700	28
Proposed Feasibility Study (FS) Cleanup Levels for COCs only	9.6	0.37	16	--	--

**NOTE:**

COPCs=Contaminants of Potential Concern

"--" = Not applicable or not calculated

COCs = Contaminants of concern

Screening Levels in micrograms per cubic meter (ug/m<sup>3</sup>)

**Table 4**  
**CVOC Analytical Results Summary - Soil**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	Sample ID	Sampled By	Sample Date	Sample Depth <sup>2</sup>	Soil Analytical Results (milligrams per kilogram) <sup>1</sup>						Total Organic Carbon (%)	PSOD (g KMnO <sub>4</sub> / kg of Soil)
					Chlorinated Volatile Organic Compounds							
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane		
AW-SB-1	--	A&W	2/18/2002	2.5	0.00354	ND	ND	ND	ND	ND	--	--
AW-SB-2	--	A&W	2/18/2002	7	<0.0055	ND	ND	ND	ND	ND	--	--
AW-SB-3	--	A&W	2/18/2002	2.5	<0.0055	ND	ND	ND	ND	ND	--	--
AW-SB-4	--	A&W	2/18/2002	7	<0.0302	ND	ND	ND	ND	ND	--	--
	--	A&W	2/18/2002	12	ND	ND	ND	ND	ND	ND	--	--
AW-SB-5	--	A&W	2/18/2002	12	ND	ND	ND	ND	ND	ND	--	--
AW-SB-6	SB-6@12'	A&W	2/18/2002	12	ND	ND	ND	ND	ND	ND	--	--
	SB-6@27'	A&W	2/18/2002	27	ND	ND	ND	ND	ND	ND	--	--
AW-SB-7	--	A&W	2/19/2002	2.5	ND	<0.0127	ND	ND	ND	ND	--	--
AW-SB-8	--	A&W	2/19/2002	7	ND	ND	ND	ND	ND	ND	--	--
B-1	--	URS	5/30/2002	--	--	--	--	--	--	--	--	--
MW-2/B-2	--	URS	6/5/2002	--	--	--	--	--	--	--	--	--
MW-3/B-3	--	URS	6/5/2002	--	--	--	--	--	--	--	--	--
MW-4/B-4	--	URS	6/5/2002	--	--	--	--	--	--	--	--	--
B-5	--	URS	5/30/2002	5.5-8	NA	NA	NA	NA	NA	NA	--	--
B-6	--	URS	5/30/2002	--	--	--	--	--	--	--	--	--
MW-5	MW-5-10 (B-7-10)	URS	6/13/2002	10	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	--	--
MW-6	MW-6-10 (B-8-10)	URS	6/13/2002	10	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	--	--
B-9	--	URS	5/30/2002	4-8	NA	NA	NA	NA	NA	NA	--	--
MW-1/B-10	--	URS	6/5/2002	--	--	--	--	--	--	--	--	--
MW-7	--	URS	6/13/2002	--	--	--	--	--	--	--	--	--
B-11	B-11@20	URS	2/20/2003	20	NA	NA	NA	NA	NA	NA	--	--
B-12	B-12@25'	URS	2/20/2003	25	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	--	--
B-13	B-13@5'	URS	2/21/2003	5	NA	NA	NA	NA	NA	NA	--	--
MW-8	--	URS	2/20/2003	2.5	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	--	--
MW-10	MW-10@7.5	URS	2/20/2003	7.5	NA	NA	NA	NA	NA	NA	--	--
MW-11	MW-11,4'	URS	2/21/2003	4	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	--	--
MW-12	MW-12,Composite	URS	2/21/2003	--	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	--	--
MW-13	--	URS	2/21/2003	25	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	--	--
MW-14	--	URS	5/21/2003	3.5	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	--	--
MW-15	MW-15@15'	URS	5/27/2003	15	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	--	--
DPE-1	DPE-1@2.5'	URS	5/20/2003	2.5	ND	ND	ND	ND	ND	ND	--	--
DPE-2	DPE-2@15'	URS	5/20/2003	15	NA	NA	NA	NA	NA	NA	--	--
DPE-3	DPE-3@10'	URS	5/27/2003	10	NA	NA	NA	NA	NA	NA	--	--

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Pacific Crest No: 105-003

Location ID	Sample ID	Sampled By	Sample Date	Sample Depth <sup>2</sup>	Soil Analytical Results (milligrams per kilogram) <sup>1</sup>						Total Organic Carbon (%)	PSOD (g KMnO <sub>4</sub> / kg of Soil)
					Chlorinated Volatile Organic Compounds							
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane		
B-16	--	URS	5/21/2003	3.5	ND	ND	ND	ND	ND	ND	--	--
	--	URS	5/21/2003	20	0.122	ND	ND	ND	ND	ND	--	--
B-17	B-17@9'	URS	5/21/2003	9	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	--	--
MW-17	--	URS	10/13/2003	5	ND	ND	ND	ND	ND	ND	--	--
	--	URS	10/13/2003	25	ND	ND	ND	ND	ND	ND	--	--
TP-1	--	URS	10/6/2003	5	ND	ND	ND	ND	ND	ND	--	--
GMW-1	--	G-Logics	2/15/2005	NA	Soil samples not collected for analysis							
GMW-2	--	G-Logics	2/15/2005	--	Soil samples not collected for analysis							
GMW-3	--	G-Logics	2/15/2005	--	Soil samples not collected for analysis							
MW-18	--	URS	4/25/2005	15	ND	ND	ND	ND	ND	ND	--	--
	--	URS	4/25/2005	31	0.0111	ND	ND	ND	ND	ND	--	--
MW-19	--	URS	4/25/2005	17	ND	ND	ND	ND	ND	ND	--	--
	--	URS	4/25/2005	37	ND	ND	ND	ND	ND	ND	--	--
MW-20	--	URS	4/27/2005	15	ND	ND	ND	ND	ND	ND	--	--
	--	URS	4/27/2005	27	ND	ND	ND	ND	ND	ND	--	--
	--	URS	4/27/2005	37	ND	ND	ND	ND	ND	ND	--	--
MW-21D	--	URS	4/28/2005	27.5	ND	ND	ND	ND	ND	ND	--	--
	--	URS	4/28/2005	37.5	ND	ND	ND	ND	ND	ND	--	--
HA-1	--	URS	5/3/2005	0.5	0.00513	ND	ND	ND	ND	ND	--	--
	--	URS	5/3/2005	1.5	ND	ND	ND	ND	ND	ND	--	--
SCC-1	--	URS	5/17/2008	6.5	0.22	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
	--	URS	5/17/2008	9.5	0.14	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
	--	URS	5/17/2008	11.5	0.16 J <sup>+</sup>	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
SCC-2	--	URS	5/17/2008	5	0.39	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
	--	URS	5/17/2008	15	0.34	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
	--	URS	5/17/2008	25	1.2	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
	--	URS	5/17/2008	35	4.2	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
MW-24S	MW24S-6	Pacific Crest	4/13/2009	6	0.085	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	--	--
	MW-24S-6	URS	4/13/2009	6	0.071	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
MW-24D	MW-24D-6	URS	4/7/2009	6	0.02 U	<0.03	<0.02	<0.02	<0.002	<0.02	0.171	--
	MW-24D-9	URS	4/7/2009	9	0.02	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
	MW-24D-14	URS	4/7/2009	14	0.33	0.03	<0.02	<0.02	<0.002	<0.02	0.079	--
	MW-24D-46	URS	4/7/2009	46	<0.02	<0.03	<0.02	<0.02	<0.002	<0.02	0.107	--

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Location ID	Sample ID	Sampled By	Sample Date	Sample Depth <sup>2</sup>	Soil Analytical Results (milligrams per kilogram) <sup>1</sup>						Total Organic Carbon (%)	PSOD (g KMnO <sub>4</sub> / kg of Soil)
					Chlorinated Volatile Organic Compounds							
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane		
MW-25S	MW25S-6	Pacific Crest	4/13/2009	6	0.0069	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--
	MW-25S-6	URS	4/13/2009	6	<0.02	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
	MW-25S-13	URS	4/13/2009	13	0.036	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
MW-25D	MW25D-13	Pacific Crest	4/9/2009	13	0.021	<0.00077	<0.00077	<0.00077	<0.00077	<0.0077	--	--
	MW-25D-33	URS	4/10/2009	33	Not analyzed (held by URS)						--	--
	MW-25D-45	URS	4/10/2009	45	<0.02	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
MW-26S	MW-26S-15	URS	4/13/2009	15	<0.02	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
MW-26D	MW26D-6	Pacific Crest	4/10/2009	6	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	--	--
	MW-26D-35	URS	4/14/2009	35	<0.02	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
	MW26D-55	Pacific Crest	4/14/2009	55	<0.00087	<0.00087	<0.00087	<0.00087	<0.00087	<0.00087	--	--
	MW-26D-55	URS	4/14/2009	55	<0.02	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
MW-27D	MW-27D-6	Pacific Crest	4/15/2009	6	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	--
	MW-27D-6	URS	4/15/2009	6	<0.02	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
	MW-27D-15	Pacific Crest	4/15/2009	15	0.0038	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	--	--
	MW-27D-16	URS	4/15/2009	16	<0.02	<0.03	<0.02	<0.02	<0.002	<0.02	0.08	1.3
	MW-27D-35	URS	4/15/2009	35	1.1	<0.03	<0.02	<0.02	<0.002	<0.02	0.075	1.3
MW-28D	MW28D-25-26	Pacific Crest	4/10/2009	25-26	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	--	--
	MW-28D-25-26	URS	4/10/2009	25-26	<0.02	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
	MW-28D-38-38.5	URS	4/10/2009	38-38.5	<0.02	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
	MW-28D-56-58	URS	4/10/2009	56-58	<0.02	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
MW-29	MW29-6	Pacific Crest	4/8/2009	6	0.0015	<0.00084	<0.00084	<0.00084	<0.00084	<0.00084	--	--
	MW-29-6	URS	4/8/2009	6	<0.02	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
	MW-29-17	URS	4/8/2009	17	0.15	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
	MW-29-36	URS	4/9/2009	36	4	<0.03	<0.02	<0.02	<0.002	<0.02	--	--
MW-30D	MW30-4.0	Pacific Crest	9/28/2010	4	<0.00072	<0.00072	<0.00072	<0.00072	<0.00072	<0.00072	--	--
	MW30-29.0	Pacific Crest	9/28/2010	29	<0.00064	<0.00064	<0.00064	<0.00064	<0.00064	<0.00064	--	--
	MW30-71.5	Pacific Crest	9/28/2010	71.5	<0.00070	<0.00070	<0.00070	<0.00070	<0.00070	<0.00070	--	--
MW-31D	MW31-10.0	Pacific Crest	9/27/2010	9	0.0018	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	--	--
	MW31-41.5	Pacific Crest	9/27/2010	41.5	0.0053	0.00099	<0.00065	<0.00065	<0.00065	<0.00065	--	--
	MW31-71.5	Pacific Crest	9/27/2010	71.5	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	--	--
MW-32D	MW32-44.0	Pacific Crest	9/29/2010	44	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	--	--
	MW32-71.0	Pacific Crest	9/29/2010	71	0.0015	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	--	--

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					Chlorinated Volatile Organic Compounds							
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane		
PH-SB-1	SB1-0.25-5.0	Pacific Crest	9/11/2012	0.25-5	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--
	SB1-6.5-10	Pacific Crest	9/11/2012	6.5-10	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--
	SB1-10.0-16.0	Pacific Crest	9/11/2012	10-16	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	--	--
	SB1-25.0-30.0	Pacific Crest	9/11/2012	25-30	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	--	--
	SB1-34.0-35.0	Pacific Crest	9/11/2012	34-35	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	--	--
	SB1-40.0-45.0	Pacific Crest	9/11/2012	40-45	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	--	--
	SB1-52.5-55.0	Pacific Crest	9/11/2012	52.5-55	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--
	SB1-63.5-65.0	Pacific Crest	9/11/2012	63.5-65	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	--	--
PH-SB-2	SB2-5.0-6.0	Pacific Crest	8/15/2010	5-6	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	--	--
	SB2-8.5-10.0	Pacific Crest	8/15/2010	8.5-10	0.047	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	--	--
	SB2-13.5-15.0	Pacific Crest	8/15/2010	13.5-15	0.047	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079	--	--
	SB2-18.5-20.0	Pacific Crest	8/15/2010	18.5-20	0.025	<0.00094	<0.00094	<0.00094	<0.00094	<0.00094	--	--
	SB2-23.5-25.0	Pacific Crest	8/15/2010	23.5-25	0.008	<0.00084	<0.00084	<0.00084	<0.00084	<0.00084	--	--
	SB2-26.0-27.5	Pacific Crest	8/15/2010	26-27.5	<0.00081	<0.00081	<0.00081	<0.00081	<0.00081	<0.00081	--	--
	SB2-28.5-30.0	Pacific Crest	8/15/2010	28.5-30	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	--	--
	SB2-33.5-35.0	Pacific Crest	8/15/2010	33.5-35	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	--	--
PH-SB-3	SB2-38.5-40.0	Pacific Crest	8/15/2010	38.5-40	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	--	--
	SB2-43.5-45.0	Pacific Crest	8/15/2010	43.5-45	0.00017	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	--	--
	SB3-5-6.5	Pacific Crest	9/12/2010	5-6.5	<0.00085	<0.00085	<0.00085	<0.00085	<0.00085	<0.00085	--	--
	SB3-15-16.5	Pacific Crest	9/12/2010	15-16.5	0.032	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	--	--
	SB3-20-21.5	Pacific Crest	9/12/2010	20-21.5	<b>0.32</b>	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	--	--
	SB3-25-26.5	Pacific Crest	9/12/2010	25-26.5	<b>0.3</b>	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	--	--
	SB3-25-26.5-DUP	Pacific Crest	9/12/2010	25-26.5	<b>0.056</b>	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	--	--
	SB3-30-31.5	Pacific Crest	9/12/2010	30-31.5	0.049	<0.00081	<0.00081	<0.00081	<0.00081	<0.00081	--	--
	SB3-35-36.5	Pacific Crest	9/12/2010	35-36.5	<b>0.12</b>	<0.00084	<0.00084	<0.00084	<0.00084	<0.00084	--	--
	SB3-40-41.5	Pacific Crest	9/12/2010	40-41.5	<b>0.13</b>	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	--	--
	SB3-45-46.5	Pacific Crest	9/12/2010	45-46.5	<b>0.11</b>	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	--	--
					0.036	<0.00087	<0.00087	<0.00087	<0.00087	<0.00087	--	--

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					Chlorinated Volatile Organic Compounds							
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane		
PH-SB-4	SB4-5-6.5	Pacific Crest	8/22/2010	5-6.5	2.4	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	--	--
	SB4-10-11.5	Pacific Crest	8/22/2010	10-11.5	1.1	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	--	--
	SB4-15-16.5	Pacific Crest	8/22/2010	15-16.5	1.5	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	--	--
	SB4-20-21.5	Pacific Crest	8/22/2010	20-21.5	0.16	<0.00084	<0.00084	<0.00084	<0.00084	<0.00084	--	--
	SB4-25-26.5	Pacific Crest	8/22/2010	25-26.5	0.87	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	--	--
	SB4-30-30.5	Pacific Crest	8/22/2010	30-30.5	3.5	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	--	--
	SB4-35-36.5	Pacific Crest	8/22/2010	35-36.5	2.6	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	--	--
PH-SB-5	SB4-40-41.5	Pacific Crest	8/22/2010	40-41.5	0.09	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	--	--
	SB4-45-46	Pacific Crest	8/22/2010	45-46	0.056	<0.00071	<0.00071	<0.00071	<0.00071	<0.00071	--	--
	SB5-40.0	Pacific Crest	9/30/2010	40	0.21	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	--	--
	SB5-46.0	Pacific Crest	9/30/2010	46	0.023	<0.00089	<0.00089	<0.00089	<0.00089	<0.00089	--	--
	SB5-51.0	Pacific Crest	9/30/2010	51	0.00087	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	--	--
	SB5-56.0	Pacific Crest	9/30/2010	56	0.033	<0.00085	<0.00085	<0.00085	<0.00085	<0.00085	--	--
	SB5-56.0-DUP	Pacific Crest	9/30/2010	56	0.032	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	--	--
PH-SB-6	SB5-61.0	Pacific Crest	9/30/2010	61	0.088	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--
	SB6-2.5-5.0	Pacific Crest	9/4/2012	2.5-5	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	--	--
	SB6-7.5-10	Pacific Crest	9/4/2012	7.5-10	0.0013	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	--	--
	SB6-12.5-15.0	Pacific Crest	9/4/2012	12.5-15	0.0012	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	--	--
	SB6-22.5-25.0	Pacific Crest	9/4/2012	22.5-25	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	--	--
	SB6-33.0-36.0	Pacific Crest	9/5/2012	33-36	0.028	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	--	--
	SB6-46.0-47.0	Pacific Crest	9/5/2012	46-47	0.0038	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	--	--
PH-SB-7	SB6-51.0-55.0	Pacific Crest	9/5/2012	51-55	0.10	<0.00091	<0.00091	<0.00091	<0.00091	<0.00091	--	--
	SB6-62.5-65.0	Pacific Crest	9/6/2012	62.5-65	0.0029	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--
	SB6-75.0-78.0	Pacific Crest	9/6/2012	75-78	0.19	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--
	SB7-2.0-4.0	Pacific Crest	9/4/2012	2-4	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	--	--
	SB7-7.5-9.5	Pacific Crest	9/4/2012	7.5-9.5	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--
	SB7-13.0-17.0	Pacific Crest	9/4/2012	13-17	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	--	--
	SB7-25.0-26.5	Pacific Crest	9/4/2012	25-26.5	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	--	--
PH-SB-7	SB7-34.0-35.0	Pacific Crest	9/4/2012	34-35	<0.00094	<0.00094	<0.00094	<0.00094	<0.00094	<0.00094	--	--
	SB7-42.0-45.0	Pacific Crest	9/4/2012	42-45	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	--	--
	SB7-52.5-55.0	Pacific Crest	9/4/2012	52.5-55	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	--	--
	SB7-62.5-65.0	Pacific Crest	9/4/2012	62.5-65	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--
	SB7-75.0-77.5	Pacific Crest	9/4/2012	75-77.5	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--



Table 4  
CVOC Analytical Results Summary - Soil  
Penthouse Drapery and Belshaw Site  
Seattle, Washington  
Pacific Crest No: 105-003

Location ID	Sample ID	Sampled By	Sample Date	Sample Depth <sup>2</sup>	Soil Analytical Results (milligrams per kilogram) <sup>1</sup>						Total Organic Carbon (%)	PSOD (g KMnO <sub>4</sub> / kg of Soil)
					Chlorinated Volatile Organic Compounds							
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane		
PH-SB-8 <sup>3</sup>	SB8-0.5-6.0	Pacific Crest	9/10/2012	0.5-6	0.0030	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--
	SB8-6.0-10.0	Pacific Crest	9/10/2012	6-10	0.0046	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	--	--
	SB8-10.0-16.5	Pacific Crest	9/10/2012	10-16.5	<b>0.23</b>	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	--	--
	SB8-20.0-26.0	Pacific Crest	9/10/2012	20-26	<b>0.43</b>	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	--	--
	SB8-33.0-35.0	Pacific Crest	9/10/2012	33-35	0.0020	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	--	--
	SB8-40.0-46.0	Pacific Crest	9/10/2012	40-46	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--
	SB8-50.0-55.0	Pacific Crest	9/10/2012	50-55	<b>0.064</b>	<0.00082	<0.00082	<0.00082	<0.00082	<0.00082	--	--
	SB8-64.66.0	Pacific Crest	9/10/2012	64-66	<0.00084	<0.00084	<0.00084	<0.00084	<0.00084	<0.00084	--	--
PH-SB-9	SB8-74.0-80.0	Pacific Crest	9/10/2012	74-80	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	--	--
	SB9-63.5-70.0	Pacific Crest	9/7/2012	63.5-70	<0.00087	<0.00087	<0.00087	<0.00087	<0.00087	<0.00087	--	--
	SB9-70.0-78.5	Pacific Crest	9/7/2012	70-78.5	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--
	SB9-85.0-87.5	Pacific Crest	9/7/2012	85-87.5	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	--	--
PH-SB-10	SB9-95.0-97.5	Pacific Crest	9/7/2012	95-97.5	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	--	--
PH-SB-11	SB10-0-1	Pacific Crest	12/8/2012	0-1	<b>0.089</b>	<0.00094	<0.00094	<0.00094	<0.00094	<0.00094	--	--
	SB11-2-4	Pacific Crest	12/8/2012	2-4	0.0087	<0.00094	<0.00094	<0.00094	<0.00094	<0.00094	--	--
	SB11-8-10	Pacific Crest	12/8/2012	8-10	<b>0.24</b>	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	--	--
PH-SB-12	SB11-10-12	Pacific Crest	12/8/2012	10-12	<b>0.025</b>	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	--	--
PH-SB-12	SB12-2-4	Pacific Crest	12/8/2012	2-4	<b>0.13</b>	<0.00094	<0.00094	<0.00094	<0.00094	<0.00094	--	--
PH-SB-12 (duplicate)	SB12-2-4	Pacific Crest	12/8/2012	2-4	<b>0.084</b>	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	--	--
PH-SB-13	SB13-34-36	Pacific Crest	1/4/2013	34-36	<0.0010	<0.0010	<0.0010	<0.0010	<0.0014	<0.0010	--	--
	SB13-44-46	Pacific Crest	1/4/2013	44-46	<0.00092	<0.00092	<0.00092	<0.00092	<0.0013	<0.00092	--	--
	SB13-54-56	Pacific Crest	1/4/2013	54-56	<0.0012	<0.0012	<0.0012	<0.0012	<0.0017	<0.0012	--	--
	SB13-64-66	Pacific Crest	1/7/2013	64-66	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	--	--
	SB13-74-76	Pacific Crest	1/7/2013	74-76	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	--	--
	SB13-86-88	Pacific Crest	1/7/2013	86-88	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	--	--
	SB13-94-96	Pacific Crest	1/7/2013	94-96	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--
	SB13-104-106	Pacific Crest	1/7/2013	104-106	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	--	--
	SB13-DUP-104-106	Pacific Crest	1/7/2013	104-106	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--

**Table 4**  
**CVOC Analytical Results Summary - Soil**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	Sample ID	Sampled By	Sample Date	Sample Depth <sup>2</sup>	Soil Analytical Results (milligrams per kilogram) <sup>1</sup>						Total Organic Carbon (%)	PSOD (g KMnO <sub>4</sub> / kg of Soil)		
					Chlorinated Volatile Organic Compounds									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane				
PH-SB-14	SB14-34-36	Pacific Crest	12/26/2012	34-36	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	--	--		
	SB14-44-46	Pacific Crest	12/26/2012	44-46	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	--	--		
	SB14-54-56	Pacific Crest	12/27/2012	54-56	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--		
	SB14-64-66	Pacific Crest	12/27/2012	64-66	0.0082	<0.00093	<0.00093	<0.00093	<0.00093	<0.00093	--	--		
	SB14-74-76	Pacific Crest	12/27/2012	74-76	0.0071	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--		
	SB14-84-86	Pacific Crest	12/28/2012	84-86	0.0037	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--		
	SB14-94-96	Pacific Crest	12/28/2012	94-96	0.0016	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	--	--		
PH-SB-15	SB14-104-106	Pacific Crest	12/28/2012	104-106	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--		
	SB15-64-66	Pacific Crest	1/2/2013	64-66	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--		
	SB15-74-76	Pacific Crest	1/2/2013	74-76	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	--	--		
	SB15-84-86	Pacific Crest	1/2/2013	84-86	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--		
	SB15-94-96	Pacific Crest	1/3/2013	94-96	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	--	--		
SB15-104-106					Pacific Crest	1/3/2013	104-106	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	--	--
MTCA Method A Cleanup Level					0.05	0.03	--	--	--	2	NA			
MTCA Method B, Carcinogen, Direct Contact (ingestion only) unrestricted					480	11	--	--	1	**				
MTCA Method B, Non-Carcinogen, Direct Contact (ingestion only) unrestricted					--	--	160	1,600	--	**				
MTCA Method B, Three-Phase Model, Soil Leaching to Groundwater					--	0.03	0.4	1	0.00126	**				
Proposed Feasibility Study (FS) Cleanup Level					0.05	0.03	0.4	--	--	**				

**NOTES:**

<sup>1</sup>Analyzed by SW-846 Method 8260B

<sup>2</sup>Depth in feet below ground surface

<sup>3</sup>SB-8 drilled at 25 degree angle

ND = reported as non-detect; laboratory detection limit not provided. Results unverifiable due to unavailable analytical reports.

NA = not analyzed

< = concentration not detected at or above the laboratory detection limit

**Bold** = concentration exceeds the applicable Proposed Feasibility Study Cleanup Level

*Italics* = laboratory detection limit exceeds the applicable Proposed Feasibility Study Cleanup Level

-- = No information available

\*\*\*\* = Not applicable or not calculated by URS

COPCs = Contaminants of Potential Concern

PSOD = Permanganate Soil Oxidant Demand

g KMnO<sub>4</sub>/kg of soil = grams of potassium permanganate per kilogram of soil

MTCA = Model Toxics Control Act

Pacific Crest = Pacific Crest Environmental, LLC

A&W = Aaron and Wright Technical Services, Inc.

G-Logics = G-Logics, Inc.

URS = URS Corporation

Table 5  
Summary of Soil Analytical Results  
Belshaw - Seattle Collision Center  
Seattle, Washington

Sample ID	Sample Depth (ft bgs)	Sample Date	Gasoline-Range TPH (mg/kg)	Voltaile Organic Compounds (mg/kg)												Total Lead (mg/kg)
				Benzene	Toluene	Ethylbenzene	Total Xylenes	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	sec-Butylbenzene	4-Isopropyltoluene	1,2,4-Trimethylbenzene	Naphthalene	
SB-1	26	09/04/12	4,300	ND	ND	ND	ND	0.744	7.83	8.42	0.334	4.80	3.93	8.35	ND	2.94
	31	09/04/12	30.2	ND	ND	ND	ND	ND	0.112	0.242	0.112	0.0320	0.0231	0.697	ND	1.31
	41	09/04/12	10.2	ND	ND	ND	ND	ND	0.0529	0.112	ND	0.0238	0.0148	0.283	ND	1.88
SB-2	25.5	09/04/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0386	ND	1.15
	36	09/04/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.65
	46	09/04/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.95
SB-3	20.5	09/04/12	ND	0.0455	ND	ND	0.1835	ND	ND	0.0509	ND	ND	ND	0.0952	0.0385	1.53
	31	09/04/12	5.15	0.586	0.318	0.232	0.947	ND	0.0471	0.0834	ND	ND	ND	0.321	0.0834	1.28
	36	09/04/12	ND	0.0379	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.93
SB-4	26	09/05/12	16.2 <sup>a</sup>	ND	2.22	0.473	2.514	ND	0.0745	0.156	ND	ND	ND	0.581	0.157	1.51
	31	09/05/12	ND	0.0345	ND	ND	0.2301	ND	ND	0.0416	ND	ND	ND	0.132	0.0326	1.78
	41	09/05/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.57
SB-5	26	09/05/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.14
	41	09/05/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.57
	56.5	09/05/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.54
SB-6	21	09/05/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.57
	31	09/05/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.42
	46	09/05/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.75
SB-7	26	09/06/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.95
	31	09/06/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.71
	41	09/06/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.89
SB-8	21	09/06/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.46
	31	09/06/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.60
	41.5	09/06/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.26
SB-9	26	09/06/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.94
	36	09/06/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.48
	41	09/06/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.17
MTCA Method A or B Soil Screening Level			30 / 100 <sup>b</sup> (A)	0.03 (A)	7 (A)	6 (A)	9 (A)	8,000 (B)	8,000 (B)	800 (B)	NE	NE	NE	NE	5 (A)	250 (A) (R) 1,000 (A) (I)

Notes:

Values in **bold** font indicate that the result reported meets or exceeds the most current MTCA level based on the Ecology website.  
Model Toxics Control Act (MTCA) Cleanup Regulation, WAC 173-340. MTCA Method A values are from Ecology website CLARC tables downloaded October 2012 (<https://fortress.wa.gov/ecy/clarc/reporting/CLARCReporting.aspx>).  
MTCA Method B values are presented only when no MTCA Method A values are established.  
(A) - MTCA Method A  
(B) - MTCA Method B  
(R) - MTCA cleanup level for unrestricted land use.  
(I) - MTCA cleanup level for industrial property.

mg/kg - milligram per kilogram

ft bgs - feet below ground surface

ND - not detected

TPH - total petroleum hydrocarbon

<sup>a</sup> Matches the standard chromatogram for gasoline

<sup>b</sup> The MTCA Method A soil cleanup level is 100 mg/kg if benzene is not present and the total of ethylbenzene, toluene, and xylenes is less than 1% of the gasoline mixture. The MTCA Method A cleanup level for all other gasoline mixtures is 30 mg/kg.

**Table 6**  
**Water Level Measurements and Water Quality Parameter Summary**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	Sampled By	Date Gauged	Sample Date	CMT Well Port	Top of Casing Elevation <sup>1</sup>	Screen Interval <sup>2</sup>	Depth to Groundwater <sup>2</sup>	Potentiometric Surface (feet)	Pump Intake Depth <sup>2</sup>	Groundwater Quality Parameters					
										Temperature ( °C )	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	Oxidation Reduction Potential (mV)	Comments
MW-1	URS	6/13/2002	6/10/2002	NA	70.21	15-25	17.69	52.52	23	15	1.6	3.8	6.8	NM	
	URS	3/6/2003	3/6/2003				18.31	51.90	21	13.5	0.529	2.24	6.14	NM	
	URS	5/6/2005	5/2/2005				18.46	51.75	21	14.17	0.359	4.74	6.19	NM	
	URS	5/27/2008	5/27/2008				17.64	52.57	21.5	14.85	0.791	4.64	5.53	373	
	URS	4/17/2009	4/9/2009				17.29	52.92	20	13	0.374	4.31	6.35	195	
	URS	7/23/2012	7/25/2012				--	--	--	--	--	--	--	--	
MW-2	URS	6/13/2002	6/10/2002	NA	69.17	6-21	13.87	55.3	20	16	0.43	2.8	6.8	NM	
	URS	3/6/2003	3/7/2003				14.09	55.08	17	13.5	0.338	0	5.31	NM	
	URS	1/14/2005	2/9/2005				16.32	52.85	19	15	0.284	1.91	5.04	NM	
	URS	5/6/2005	5/3/2005				13.88	55.29	18	15.97	0.155	0.56	5.91	NM	
	URS	5/27/2008	5/30/2008				14.19	54.98	18	15.51	0.674	0	5.34	110	
	URS	4/17/2009	4/9/2009				12.78	56.39	15	13.7	0.958	1.02	5.29	270	
	Pacific Crest	7/23/2012	8/7/2012				14.07	55.1	NM	NM	NM	NM	NM	NM	
MW-3	URS	6/13/2002	6/10/2002	NA	71.7	20-30	15.87	55.83	25	15	0.72	2.8	6.9	NM	
	URS	3/6/2003	3/6/2003				16.33	55.37	22	13.7	0.652	0	6.43	NM	
	URS	5/28/2004	5/21/2004				18.3	53.4	22	15.72	0.64	0	6.56	NM	
	URS	8/6/2004	8/7/2004				19.7	52	28	16.2	0.592	1.65	7.67	NM	
	URS	11/10/2004	11/10/2004				20.26	51.44	22	13.44	0.709	5.39	7.15	41	
	URS	1/14/2005	2/9/2005				18.88	52.82	22	12.4	0.681	1.17	6.01	NM	
	URS	5/6/2005	5/3/2005				16.16	55.54	22	16.32	0.655	0.99	7.53	NM	
	URS	9/15/2005	9/1/2005				21.03	50.67	22	--	--	--	--	--	
	URS	2/7/2007	2/7/2007				14.55	57.15	22	--	--	--	--	--	
	URS	5/27/2008	5/27/2008				15.57	56.13	23	15.68	0.999	0.2	6.4	337	
	URS	4/17/2009	4/9/2009				14.81	56.89	27	15.5	0.9	0.13	6.88	196	
	URS	7/23/2012	7/23/2012				15.14	56.56	NM	NM	NM	NM	NM	NM	
MW-4	URS	6/13/2002	6/10/2002	NA	73.24	20-35	20.68	52.56	30	15	0.017	2	7.4	NM	
	URS	3/6/2003	3/6/2003				21.29	51.95	24	14.2	0.65	0	6.47	NM	
	URS	5/28/2004	5/21/2004				25.45	47.79	25	15.75	0.687	0	6.38	-143	
	URS	8/6/2004	8/7/2004				24.6	48.64	27	15.4	0.452	0.92	7.94	NM	
	URS	11/10/2004	11/10/2004				26.04	47.2	27	13.4	0.443	6.55	7.4	2	
	URS	1/14/2005	2/9/2005				25.3	47.94	27	15	0.39	2.65	6.81	NM	
	URS	5/6/2005	5/3/2005				21.27	51.97	27	15.9	0.602	2.48	7.17	NM	
	URS	9/15/2005	9/1/2005				24.68	48.56	27	--	--	--	--	--	
	URS	10/12/2006	10/12/2006				22.11	51.13	27	--	--	--	--	--	
	URS	5/24/2007	5/24/2007				20.58	52.66	27	--	--	--	--	--	
	URS	5/27/2008	5/30/2008				20.62	52.62	27.5	14.4	0.999	0	6.6	220	
	URS	4/17/2009	4/9/2009				19.71	53.53	30	15.2	0.999	0	5.82	206	
	URS	7/23/2012	NS				NA	NA	NA	NA	NA	NA	NA	NA	Damaged.
MW-5	URS	6/13/2002	NS	NA	77.74	10-20	Dry	NA	NA	NA	NA	NA	NA	NA	Decommissioned 7/10/02
	URS	6/18/2002	NS				Dry	NA	NA	NA	NA	NA	NA	NA	
MW-6	URS	6/13/2002	NS	NA	77.61	10-20	Dry	NA	NA	NA	NA	NA	NA	NA	Decommissioned 7/10/02
	URS	6/18/2002	NS				Dry	NA	NA	NA	NA	NA	NA	NA	
MW-7	URS	6/13/2002	6/21/2002	NA	68.29	17-32	25	43.29	20	15.9	813	0.49	7.11	NM	
	URS	3/6/2003	3/6/2003				16.46	51.83	21	13.4	0.48	0.42	6.82	NM	
	URS	5/6/2005	5/3/2005				16.78	51.51	21	13.64	0.256	0.99	6.69	NM	
	URS	5/27/2008	5/27/2008				15.1	53.19	24.5	15.66	0.933	1.2	6.5	352	
	URS	4/17/2009	4/9/2009				15.93	52.36	24.5	14.1	0.447	2.37	6.13	186	
	URS	7/23/2012	NS				NA	NA	NA	NA	NA	NA	NA	NA	Not located.

**Table 6**  
**Water Level Measurements and Water Quality Parameter Summary**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	Sampled By	Date Gauged	Sample Date	CMT Well Port	Top of Casing Elevation <sup>1</sup>	Screen Interval <sup>2</sup>	Depth to Groundwater <sup>2</sup>	Potentiometric Surface (feet)	Pump Intake Depth <sup>2</sup>	Groundwater Quality Parameters					
										Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	Oxidation Reduction Potential (mV)	Comments
MW-8	URS	3/6/2003	3/7/2003	NA	70.68	13-23	15.56	55.12	20	13.1	0.812	4.77	6.42	NM	
	URS	5/6/2005	5/4/2005				16.19	54.49	20	13.52	0.517	4.88	6.58	NM	
	URS	5/27/2008	5/29/2008				15.99	54.69	19.5	13.65	0.999	2.19	6.03	350	
	URS	4/17/2009	4/13/2009				15.2	55.48	20	11.7	53.2	7.07	6.06	258	
	Pacific Crest	10/7/2010	8/19/2010				17.28	53.4	22	14.75	0.507	2.11	6.46	326.2	
	Pacific Crest	7/23/2012	8/7/2012				15.48	55.20	NM	NM	NM	NM	NM	NM	
MW-9	URS	3/6/2003	3/6/2003	NA	68.7	15-25	16.64	52.06	20	13.1	0.423	1.78	5.81	NM	
	URS	5/6/2005	5/2/2005				16.63	52.07	20	13.9	0.38	1.53	5.96	NM	
	URS	5/27/2008	5/27/2008				15.3	53.4	20.5	16.38	0.916	0	5.53	345	
	URS	4/17/2009	4/9/2009				15.86	52.84	20	12.8	0.9	0	5.32	181	
	Pacific Crest	7/23/2012	NS				15.63	53.07	NM	NM	NM	NM	NM	NM	
	URS	3/6/2003	3/6/2003				18.83	53.46	21	13.8	0.537	6.41	7.74	NM	
MW-10	URS	5/27/2008	5/28/2008	NA	72.29	18-28	18.63	53.66	23.5	15.34	0.661	6.36	5.65	394	
	URS	4/17/2009	4/9/2009				18.35	53.94	25	15.3	0.814	6.68	5.55	244	
	Pacific Crest	7/23/2012	NS				17.75	54.54	NM	NM	NM	NM	NM	NM	
	URS	3/6/2003	3/6/2003				7.25	65.04	8.5	12.3	0.831	0	6.06	NM	
MW-11	URS	5/3/2005	5/3/2005	NA	78.42	5-10	7.2	71.22	8.5	13.24	0.695	0.49	6.79	NM	
	URS	4/17/2009	4/10/2009				5.51	72.91	8	10.1	0.661	0	6.43	-3	
	URS	7/23/2012	NS				7.5	70.92	NM	NM	NM	NM	NM	NM	
	URS	3/6/2003	3/7/2003				9.85	--	20	13.8	0.208	0	6.32	NM	Sheen and odor
MW-12	URS	5/2/2005	5/2/2005	NA	NA	20-30	NA	NA	22	15	0.306	0.45	7.18	NM	
	URS	7/23/2012	NS				14.49	--	NM	NM	NM	NM	NM	NM	
	URS	3/6/2003	3/6/2003				22.48	51.79	25	14.1	1.28	0	6.95	NM	
MW-13	URS	8/6/2004	8/7/2004	NA	74.27	20-30	23.85	50.42	26	15.3	0.911	1.37	7.58	NM	
	URS	11/10/2004	11/10/2004				25.54	48.73	25	13.93	0.007	5.56	6.48	140	
	URS	1/14/2005	2/9/2005				23.86	50.41	25	15.1	0.299	6.7	7.59	NM	
	URS	5/6/2005	5/3/2005				22.5	51.77	25	15.24	0.303	6.22	6.97	NM	
	URS	5/27/2008	5/27/2008				21.68	52.59	25.5	15.93	0.522	8.45	5.68	392	
	URS	4/17/2009	4/9/2009				21.36	52.91	25	14.8	0.222	10.04	6.67	146	
	Pacific Crest	7/23/2012	NS				20.82	53.45	NM	NM	NM	NM	NM	NM	
	URS	6/11/2003	6/11/2003				16.9	53.08	22	15.3	123.1	3.8	6.89	NM	
MW-14	URS	10/21/2003	10/21/2003	NA	69.98	22-32	17.81	52.17	25	15.9	0.354	3.02	6.69	179	
	URS	5/6/2005	5/4/2005				16.04	53.94	24	14.86	0.286	4.85	6.75	NM	
	URS	5/27/2008	5/29/2008				15.64	54.34	27	14.3	0.659	3.77	5.92	299	
	URS	4/17/2009	4/10/2009				14.72	55.26	27	15.6	0.944	0.47	9.54**	-175	
	Pacific Crest	10/7/2010	10/7/2010				16.39	53.59	30	16.45	0.347	4.52	6.38	182.1	
	URS	7/23/2012	8/7/2012				14.75	55.23	NM	NM	NM	NM	NM	NM	
	URS	6/11/2003	6/11/2003				16.03	53.95	--	--	--	--	--	--	
MW-15	URS	--	5/2/2005	NA	76.38	10-20	14.75	61.63	17.5	16.62	0.392	0.61	6.84	NM	
	URS	4/17/2009	4/10/2009				16.5	11.4	0.551	11.4	0.551	0	6.38	168	
	Pacific Crest	4/17/2009	4/10/2009				12.87	63.51	16.5	11.4	0.551	0	6.38	168	
	URS	7/23/2012	NS				16.89	59.49	NM	NM	NM	NM	NM	NM	
	URS	--	5/2/2005				17.2	54.77	22	16.34	0.656	0.75	6.67	NM	
MW-16	URS	4/17/2009	4/9/2009	NA	71.97	20-30	15.78	56.19	25	14.7	0.738	0	6.65	94	
	URS	7/23/2012	NS				15.24	56.73	NM	NM	NM	NM	NM	NM	

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**Water Level Measurements and Water Quality Parameter Summary**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	Sampled By	Date Gauged	Sample Date	CMT Well Port	Top of Casing Elevation <sup>1</sup>	Screen Interval <sup>2</sup>	Depth to Groundwater <sup>2</sup>	Potentiometric Surface (feet)	Pump Intake Depth <sup>2</sup>	Groundwater Quality Parameters					
										Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	Oxidation Reduction Potential (mV)	Comments
MW-17	URS	10/21/2003	10/21/2003	NA	69.71	20-30	17.61	52.1	25	15.1	0.792	5.89	7.21	177	
	URS		10/29/2003						21	13.5	0.44	3.56	6.43	149	
	URS		10/29/2003						25	13.2	0.453	3.14	6.45	166	
	URS		10/29/2003						29	13.1	0.92	3.18	6.99	162	
	URS		8/6/2004						29.5	--	--	--	--	--	
	URS	5/6/2005	5/4/2005				15.62	54.09	22	14.06	0.301	5.17	6.56	NM	
	URS	5/27/2008	5/29/2008				15.22	54.49	25	13.28	0.974	4.29	5.97	333	
	URS	4/17/2009	4/10/2009				14.4	55.31	25	13.7	0.9	7.46	8.85**	189	
	Pacific Crest	10/7/2010	8/18/2010				16.25	53.46	25	16.92	0.34	5.82	6.21	304.2	
	Pacific Crest	7/23/2014	NS				NA	NA	NA	NA	NA	NA	NA	NA	Destroyed.
MW-18	URS	5/6/2005	5/5/2005	(Port #1)	69.91	14-17	14.45	55.46	16.3	--	--	--	--	--	
	URS	5/27/2008	5/29/2008				14.32	55.59	15.5	13.87	0.835	8.58	5.44	378	
	URS	4/17/2009	4/13/2009				12.58	57.33	14.5	11.3	0.346	6.17	6.2	172	
	Pacific Crest	NM	10/5/2010				NM	NM	16.5	NM	NM	NM	NM	NM	
	Pacific Crest	7/24/2012	7/24/2012				13.93	55.98	16.5	23.74	0.408	7.68	6.34	107.7	
	URS	5/6/2005	5/5/2005	(Port #2)	69.91	22-25	15.4	54.51	23.3	14.68	0.509	2.15	6.61	NM	
	URS	5/27/2008	5/29/2008				14.93	54.98	23.5	13.99	0.784	2.2	5.7	195	
	URS	4/17/2009	4/13/2009				14.03	55.88	23.5	12.6	0.345	2.99	6.38	152	
	Pacific Crest	NM	10/5/2010				NM	NM	24	15.79	0.400	3.27	6.32	107.1	
	Pacific Crest	NM	7/24/2012				NM	NM	23.5	15.45	0.415	3.9	4.27	14.5	
	URS	5/6/2005	5/5/2005	(Port #3)	69.91	30-40	15.9	54.01	31.8	14.77	0.489	1.5	7.08	NM	
	URS	5/27/2008	5/29/2008				15.34	54.57	32	13.83	0.778	1.15	5.85	218	
	URS	4/17/2009	4/13/2009				14.71	55.2	33.5	12.9	0.365	0	6.55	146	
	Pacific Crest	NM	10/5/2010				NM	NM	35	14.99	0.402	2.40	6.34	198.7	
	Pacific Crest	NM	7/24/2012				NM	NM	35	15.59	0.405	2.66	5.41	21.1	
MW-19	URS	5/6/2005	5/5/2005	(Port #1)	70.45	15-17.5	15.55	54.9	16.6	13.95	2.94	1.69	6.69	NM	
	URS	5/27/2008	5/28/2008				15.15	55.3	17	13.62	0.999	0.09	6.69	339	
	URS	4/17/2009	4/13/2009				14.59	55.86	16.5	11	0.668	1.01	6.91	189	
	Pacific Crest	NM	10/5/2010				NM	NM	15	NM	NM	NM	NM	NM	
	Pacific Crest	NM	7/25/2012				NM	NM	16	14.37	0.486	2.73	5.23	123.6	
	URS	5/6/2005	5/5/2005	(Port #2)	70.45	22-26	15.75	54.7	23.5	15.23	1.23	0.84	7.75	NM	
	URS	5/27/2008	5/28/2008				15.57	54.88	24	13.89	0.999	0	6.38	341	
	URS	4/17/2009	4/13/2009				17.48	52.97	24	12.5	0.478	0	6.58	33	
	Pacific Crest	NM	10/5/2010				NM	NM	23	15.15	0.459	2.37	6.47	-20.8	
	Pacific Crest	NM	7/25/2012				NM	NM	24	15.68	0.424	1.72	5.61	22.1	
	URS	5/6/2005	5/5/2005	(Port #6)	70.45	37.5-41.5	15.85	54.6	39.1	15.83	0.465	1	7.63	NM	
	URS	5/27/2008	5/28/2008				15.61	54.84	39.5	15.02	0.804	1.18	6.44	308	
	Pacific Crest	4/17/2009	4/13/2009				14.92	55.53	39.5	13.1	0.358	0	6.69	96	
	URS	4/17/2009	4/13/2009												
	Pacific Crest	NM	10/5/2010				NM	NM	40	14.68	0.381	1.58	6.54	122.2	
	Pacific Crest	NM	7/25/2012				NM	NM	39.5	15.35	0.352	1.94	4.91	93.1	

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**Water Level Measurements and Water Quality Parameter Summary**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	Sampled By	Date Gauged	Sample Date	CMT Well Port	Top of Casing Elevation <sup>1</sup>	Screen Interval <sup>2</sup>	Depth to Groundwater <sup>2</sup>	Potentiometric Surface (feet)	Pump Intake Depth <sup>2</sup>	Groundwater Quality Parameters					
										Temperature ( °C )	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	Oxidation Reduction Potential (mV)	Comments
MW-20	URS	5/6/2006	5/6/2005	(Port #1)	71.16	27.5-31	15.84	55.32	29	16.15	0.461	2.55	7.06	NM	
	URS	5/27/2008	5/30/2008				15.25	55.91	29.5	15.88	0.772	0	6.02	195	
	URS	4/17/2009	4/9/2009				14.64	56.52	30	14.1	0.394	0	6.59	-41	
	Pacific Crest	NM	7/25/2012				NM	NM	28.5	16.86	0.245	1.17	5.21	-43.2	
	URS	5/6/2006	5/6/2005	(Port #2)	71.16	36-38	16.5	54.66	36.7	17.37	0.99	1.11	8.78	NM	
	URS	5/27/2008	5/30/2008				16	55.16	37	16.43	0.999	0	6.79	-15	
	Pacific Crest	4/17/2009	4/10/2009				15.63	55.53	37	13.5	0.9	0	9.52**	-150	
	URS	4/17/2009	4/10/2009					71.16							
	Pacific Crest	NM	7/25/2012				NM	NM	37	18	0.406	0.41	7.22	16	
	URS	5/6/2006	5/6/2005	(Port #3)	71.16	14-17	14.65	56.51	16.6	--	--	--	--	--	
	URS	5/27/2008	5/30/2008				14.33	56.83	15.5	15.47	0.814	2.63	6.25	182	
	URS	4/17/2009	4/10/2009				13.66	57.5	15.5	12.9	0.999	10.71	9.1**	140	
	Pacific Crest	NM	7/25/2012				NM	NM	15.5	18.1	0.298	7.2	6.75	212	
	URS	5/27/2008	5/31/2008	(Port #5)	71.16	23.5-24.5	15.06	56.1	24	16.52	0.999	0	6.88	-25	
	URS	4/17/2009	4/10/2009				14.5	56.66	24	13.6	0.999	1.7	10.6**	-180	
	Pacific Crest	NM	7/25/2012				NM	NM	24	18.4	0.62	3.45	7.71	-81	
MW-21S	URS	5/6/2006	5/5/2005	NA	71.26	14.5-29.5	15.72	55.54	37	14.68	0.463	2.83	6.16	NM	
	URS	5/27/2008	5/30/2008				15.37	55.89	23	14.52	0.917	1.92	5.33	395	
	URS	4/17/2009	4/10/2009				15.04	56.22	25	13.7	0.411	2.58	6.16	187	
	Pacific Crest	10/7/2010	8/18/2010				16.12	55.14	25	16.43	0.441	3.82	5.86	338.6	
	Pacific Crest	7/23/2012	8/7/2012				14.55	56.71	NM	NM	NM	NM	NM	NM	
MW-21D	URS	5/6/2006	5/5/2005	NA	71.12	35-40	16.01	55.11	23	15.16	0.732	0.55	6.98	NM	
	URS	5/27/2008	5/30/2008				15.72	55.4	37.5	14.69	0.999	0	5.65	390	
	URS	4/17/2009	4/10/2009				15.26	55.86	37.5	14.2	0.452	0	6.46	162	
	Pacific Crest	10/7/2010	8/18/2010				16.39	54.73	25	16.44	0.37	2.43	6.32	327.2	
	Pacific Crest	7/23/2012	8/7/2012				14.87	56.25	NM	NM	NM	NM	NM	NM	
MW-22	URS	5/6/2006	5/4/2005	NA	71.33	25-35	11.92	59.41	27	14.68	0.826	1	8.14	NM	
	URS	5/27/2008	5/30/2008				12.31	59.02	30	15.45	0.845	0	6.38	368	
	URS	4/17/2009	4/10/2009				11.82	59.51	30	15.1	0.9	0	9.04**	99	
	Pacific Crest	10/7/2010	8/18/2010				13.02	58.31	25	17.6	0.314	0.51	6.84	303.5	
	Pacific Crest	7/23/2012	8/7/2012				11.81	59.52	NM	NM	NM	NM	NM	NM	
MW-23	URS	5/6/2006	5/4/2005	NA	70.47	16-31	10.02	60.45	18	16.59	0.99	4.04	7.49	NM	
	URS	5/27/2008	5/28/2008				10.42	60.05	23	15.76	0.999	0	5.93	332	
	URS	4/17/2009	4/16/2009				9.96	60.51	23.5	14.4	0.472	0	6.32	173	
	Pacific Crest	7/23/2012	NS				10.31	60.16	NM	NM	NM	NM	NM	NM	
MW-24S	URS	4/17/2009	4/15/2009	NA	69.3	15-20	14.15	55.15	18	13.7	0.098	7.36	6.07	189	
	Pacific Crest	10/7/2010	10/7/2010				15.44	53.86	19	16.79	0.383	1.47	5.89	124.2	
	Pacific Crest	7/23/2012	8/7/2012				14.61	54.69	NM	NM	NM	NM	NM	NM	
MW-24D	URS	4/17/2009	4/15/2009	NA	69.31	44-49	14.35	54.96	46	14.5	63	2.04	6.96	-205	
	Pacific Crest	10/7/2010	10/7/2010				15.62	53.69	47	15.75	0.670	0.55	7.08	-109.9	
	Pacific Crest	7/23/2012	8/7/2012				14.61	54.7	NM	NM	NM	NM	NM	NM	
MW-25S	URS	4/17/2009	4/15/2009	NA	69.02	13-18	13.59	55.43	15.5	12.8	0.691	8.16	6.44	114	
	Pacific Crest	10/7/2010	10/6/2010				15.14	53.88	17.5	15.47	0.608	3.77	6.19	294.6	
	Pacific Crest	7/23/2012	8/7/2012				14.26	54.76	NM	NM	NM	NM	NM	NM	
MW-25I	URS	4/17/2009	4/15/2009	NA	68.85	29-34	13.55	55.3	31.5	13.8	0.493	8.08	6.65	8	
	Pacific Crest	10/7/2010	10/6/2010				15.08	53.77	33	15.72	0.385	3.32	6.13	300.7	
	Pacific Crest	7/23/2012	8/7/2012				14.09	54.76	NM	NM	NM	NM	NM	NM	
MW-25D	URS	4/17/2009	4/15/2009	NA	69.03	44-49	14.13	54.9	46.5	13.9	0.726	1.69	7.29	-130	
	Pacific Crest	10/7/2010	10/6/2010				15.45	53.58	47	14.77	0.456	2.32	6.48	264.3	
	Pacific Crest	7/23/2012	8/7/2012				14.41	54.62	NM	NM	NM	NM	NM	NM	

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**Pacific Crest No: 105-003**

Location ID	Sampled By	Date Gauged	Sample Date	CMT Well Port	Top of Casing Elevation <sup>1</sup>	Screen Interval <sup>2</sup>	Depth to Groundwater <sup>2</sup>	Potentiometric Surface (feet)	Pump Intake Depth <sup>2</sup>	Groundwater Quality Parameters					
										Temperature ( °C )	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	Oxidation Reduction Potential (mV)	Comments
MW-26S	URS	4/17/2009	4/16/2009	NA	72.4	15-20	17.79	54.61	19.5	12.5	1.32	8.52	7.29	84	
	Pacific Crest	10/7/2010	8/18/2010				19.23	53.17	19.5	18.14	0.331	6.92	6.18	314	
	Pacific Crest	7/23/2012	8/7/2012				17.74	54.66	NM	NM	NM	NM	NM	NM	
MW-26I	URS	4/17/2009	4/16/2009	NA	72.32	34-39	17.8	54.52	36.5	13.3	51	5.82	6.49	167	
	Pacific Crest	10/7/2010	8/18/2010				19.28	53.04	25	15.66	0.348	2.16	6.84	297.4	
	Pacific Crest	7/23/2012	8/7/2012				17.73	54.59	NM	NM	NM	NM	NM	NM	
MW-26D	URS	4/17/2009	4/16/2009	NA	72.23	54-57	18.45	53.78	55.5	15.2	0.536	0.4	7.31	-132	
	Pacific Crest	10/7/2010	8/18/2010				19.58	52.65	30	14.89	0.282	5.85	6.56	306.2	
	Pacific Crest	7/23/2012	8/7/2012				18.22	54.01	NM	NM	NM	NM	NM	NM	
MW-27S	URS	4/17/2009	4/16/2009	NA	69.4	15.5-20.5	12.17	57.23	18	12.1	0.096	10.44	6.49	162	
	Pacific Crest	10/7/2010	8/19/2010				15.52	53.88	19	14.45	0.212	5.25	5.9	337	
	Pacific Crest	7/23/2012	8/7/2012				13.58	55.82	NM	NM	NM	NM	NM	NM	
MW-27I	URS	4/17/2009	4/16/2009	NA	69.46	31-36	12.68	56.78	34	13.3	38.9	9.86	6.17	213	
	Pacific Crest	10/7/2010	8/19/2010				15.73	53.73	28	15.12	0.195	6.28	5.94	342	
	Pacific Crest	7/23/2012	8/7/2012				13.84	55.62	NM	NM	NM	NM	NM	NM	
MW-27D	URS	4/17/2009	4/16/2009	NA	69.23	43-48	35.78	33.45	46	--	--	--	--	--	Bailed dry
	Pacific Crest	10/7/2010	8/19/2010				16.44	52.79	45	14.94	0.348	2.53	7.15	319.2	
	Pacific Crest	7/23/2012	8/7/2012				14.58	54.65	NM	NM	NM	NM	NM	NM	
MW-28S	URS	4/17/2009	4/15/2009	NA	70.01	18-23	15.6	54.41	21	12.6	0.118	7.38	7.01	204	
	Pacific Crest	7/23/2012	8/7/2012				16.83	53.18	NM	NM	NM	NM	NM	NM	
MW-28I	URS	4/17/2009	4/15/2009	NA	69.87	33-38	15.56	54.31	36	13.7	53.3	2.27	6.4	150	
	Pacific Crest	7/23/2012	8/7/2012				15.47	54.4	NM	NM	NM	NM	NM	NM	
MW-28D	URS	4/17/2009	4/15/2009	NA	69.57	54-59	17.15	52.42	57	13.9	69.1	1.7	6.62	-171	
	Pacific Crest	7/23/2012	8/7/2012				17.77	51.8	NM	NM	NM	NM	NM	NM	
MW-29	URS	4/17/2009	4/15/2009	NA	70.11	33-38	14.9	55.21	36	14.6	54.1	3.93	6.63	-44	
	Pacific Crest	10/7/2010	10/7/2010				16.45	53.66	37	15.83	0.459	0.59	6.44	185.5	
	Pacific Crest	7/23/2012	8/7/2012				14.93	55.18	NM	NM	NM	NM	NM	NM	
MW-30S	Pacific Crest	10/7/2010	10/6/2010	NA	69.73	19-24	15.38	54.35	23	18.01	1.243	2.48	6.74	120.2	
	Pacific Crest	7/23/2012	8/7/2012				15	54.73	NM	NM	NM	NM	NM	NM	
MW-30I	Pacific Crest	10/7/2010	10/4/2010	NA	69.68	40-45	15.54	54.14	43	15.96	0.913	1.38	7.00	-86.0	
	Pacific Crest	7/23/2012	8/7/2012				15.1	54.58	NM	NM	NM	NM	NM	NM	
MW-30D	Pacific Crest	10/7/2010	10/6/2010	NA	69.54	65-70	17.74	51.8	68	16.53	0.954	0.6	7.35	-162.0	
	Pacific Crest	7/23/2012	8/7/2012				16.82	52.72	NM	NM	NM	NM	NM	NM	
MW-31S	Pacific Crest	10/7/2010	10/6/2010	NA	70.01	15-20	16.14	53.87	19	15.98	1.328	7.79	6.96	248.4	
	Pacific Crest	7/23/2012	8/7/2012				14.54	55.47	NM	NM	NM	NM	NM	NM	
MW-31I	Pacific Crest	10/7/2010	10/6/2010	NA	69.98	35-40	16.40	53.58	39	15.26	0.549	1.62	6.85	239	
	Pacific Crest	7/23/2012	8/7/2012				14.80	55.18	NM	NM	NM	NM	NM	NM	
MW-31D	Pacific Crest	10/7/2010	10/5/2010	NA	69.97	66-71	18.27	51.70	60	14.71	0.521	0.62	7.91	-99.7	
	Pacific Crest	7/23/2012	8/7/2012				17.28	52.69	NM	NM	NM	NM	NM	NM	
MW-32S	Pacific Crest	10/7/2010	10/4/2010	NA	70.01	20-25	16.61	53.40	20	14.62	1.372	6.62	6.82	223.8	
	Pacific Crest	7/23/2012	8/7/2012				14.57	55.44	NM	NM	NM	NM	NM	NM	
MW-32I	Pacific Crest	10/7/2010	10/4/2010	NA	70.09	38-43	16.78	53.31	40	14.83	0.474	8.15	6.92	163.9	
	Pacific Crest	7/23/2012	8/7/2012				15.02	55.07	NM	NM	NM	NM	NM	NM	
MW-32D	Pacific Crest	10/7/2010	10/4/2010	NA	69.8	66-71	18.05	51.75	50	14.57	0.552	0.56	6.91	-157.5	
	Pacific Crest	7/23/2012	8/7/2012				17.15	52.65	NM	NM	NM	NM	NM	NM	



**Table 6**  
**Water Level Measurements and Water Quality Parameter Summary**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	Sampled By	Date Gauged	Sample Date	CMT Well Port	Top of Casing Elevation <sup>1</sup>	Screen Interval <sup>2</sup>	Depth to Groundwater <sup>2</sup>	Potentiometric Surface (feet)	Pump Intake Depth <sup>2</sup>	Groundwater Quality Parameters					
										Temperature (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	Oxidation Reduction Potential (mV)	Comments
DPE-1	URS	6/11/2003	6/11/2003	NA	71.41	13-23	17.25	54.16	20	16.1	0.165	3.8	6.82	NM	
	URS	5/28/2004	5/21/2004				17.2	54.21	20	14.5	0.339	7.33	5.63	172	
	URS	8/6/2004	8/6/2004				19.9	51.51	22	17	0.298	4.34	6.71	NM	
	URS	11/10/2004	11/10/2004				20.56	50.85	22	14.24	0.273	7	6.01	201	
	URS	1/14/2005	2/9/2005				18.15	53.26	20	14.3	0.248	7.03	7.03	NM	
	URS	5/6/2005	5/4/2005				17.46	53.95	20	13.83	0.298	6.52	6.27	NM	
	URS	11/30/2005	12/2/2005				20.43	50.98	20	--	--	--	--	--	
	URS	5/27/2008	5/29/2008				17.09	54.32	20	13.8	0.636	6.15	5.66	346	
	URS	4/17/2009	4/13/2009				16.3	55.11	20	12.2	26.2	6.76	5.82	272	
	URS	7/23/2012	7/24/2012				--	--	--	--	--	--	--	--	
DPE-2	URS	1/14/2005	2/9/2005	NA	74.03	17-32	--	--	25	14.2	0.575	0.54	8.12	NM	
	URS	5/6/2005	5/3/2005				--	--	27	15.76	0.771	0.47	8.48	NM	
	URS	8/19/2005	9/1/2005				--	--	27	--	--	--	--	--	
	URS	11/30/2005	12/2/2005				--	--	27	--	--	--	--	--	
	URS	6/6/2006	6/6/2006				21.83	52.2	27	--	--	--	--	--	
	URS	10/12/2006	10/12/2006				22.7	51.33	27	--	--	--	--	--	
	URS	2/7/2007	2/7/2007				20.91	53.12	27	--	--	--	--	--	
	URS	5/24/2007	5/24/2007				21.33	52.7	27	--	--	--	--	--	
	URS	8/10/2007	8/10/2007				22.02	52.01	27	--	--	--	--	--	
	URS	12/27/2007	12/27/2007				21.82	52.21	24.99	--	--	--	--	--	
	URS	3/27/2008	3/27/2008				21.61	52.42	25	12.32	0.728	0.3	6.43	-121	
	URS	5/27/2008	5/30/2008				21.4	52.63	26.5	14.55	0.999	0	6.42	-104	
	URS	4/17/2009	4/13/2009				21.17	52.86	28	13.4	44.5	1.7	6.17	-51	
	URS	7/23/2012	7/24/2012				--	--	--	--	--	--	--	--	
	URS	6/11/2003	6/11/2003				20.9	51.8	25	18.6	0.284	1.78	7.37	NM	
DPE-3	URS	8/6/2004	8/6/2004	NA	72.7	20-35	--	--	25	16	0.613	0.35	7.81	NM	
	URS	11/10/2004	11/10/2004				--	--	25	13.35	0.624	5.47	7.03	21	
	URS	1/14/2005	2/9/2005				--	--	25	15.2	0.601	0.36	8.55	NM	
	URS	5/6/2005	5/3/2005				--	--	25	16.11	0.781	0.42	8.48	NM	
	URS	8/19/2005	9/1/2005				--	--	25	--	--	--	--	--	
	URS	11/30/2005	12/2/2005				--	--	25	--	--	--	--	--	
	URS	6/6/2006	6/6/2006				19.92	52.78	25	--	--	--	--	--	
	URS	10/12/2006	10/12/2006				20.75	51.95	25	--	--	--	--	--	
	URS	2/7/2007	2/7/2007				18.6	54.1	25	--	--	--	--	--	
	URS	5/24/2007	5/24/2007				19.19	53.51	25	--	--	--	--	--	
	URS	8/10/2007	8/10/2007				19.9	52.8	25	--	--	--	--	--	
	URS	12/27/2007	12/21/2007				19.65	53.05	22.83	--	--	--	--	--	
	URS	3/27/2008	3/27/2008				19.39	53.31	25	12.6	1.07	0.32	6.74	-104	
	URS	5/27/2008	5/30/2008				19.37	53.33	27.5	15.35	1.1	0	6.9	-129	
	URS	7/23/2012	7/24/2012				--	--	--	--	--	--	--	--	
DPE-4	URS	--	5/21/2004	NA	--	20-35	--	--	34.8	15.52	1.57	0	7.35	11	
	URS	--	9/1/2005				--	--	35	--	--	--	--	--	
	URS	--	8/10/2007				--	--	35	--	--	--	--	--	
	Pacific Crest	--	4/13/2009				--	--	28	--	--	--	--	--	
	URS	--	4/13/2009				--	--	28	13.8	80.1	1.66	6.59	-84	
	URS	7/23/2012	NS				NA	NA	NA	NA	NA	NA	NA	NA	Destroyed.
DPE-5	URS	--	12/27/2007	NA	--	19.5-34.5	--	--	32.85	--	--	--	--	--	
	URS	7/23/2012	NS				NA	NA	NA	NA	NA	NA	NA	NA	Destroyed.

**Table 6**  
**Water Level Measurements and Water Quality Parameter Summary**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	Sampled By	Date Gauged	Sample Date	CMT Well Port	Top of Casing Elevation <sup>1</sup>	Screen Interval <sup>2</sup>	Depth to Groundwater <sup>2</sup>	Potentiometric Surface (feet)	Pump Intake Depth <sup>2</sup>	Groundwater Quality Parameters					
										Temperature ( °C )	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH	Oxidation Reduction Potential (mV)	Comments
DPE-6	URS	--	5/21/2004	NA	--	20-40	--	--	39.1	15.41	1.74	0.18	7.63	-49	
	URS	--	3/27/2008				--	--	25	8.37	0.251	5.74	6.39	140	
	Pacific Crest	--	4/13/2009				--	--	30	13.1	20.2	6.56	6.14	274	
	URS	--	4/13/2009				--	--	30						
	URS	7/23/2012	7/24/2012				--	--	--	--	--	--	--	--	
DPE-7	URS	--	9/1/2005	NA	--	20-35	--	--	29	--	--	--	--	--	
	URS	11/30/2005	12/2/2005				--	--	27	--	--	--	--	--	
	URS	6/6/2006	6/6/2006				20.92	--	27	--	--	--	--	--	
	URS	10/12/2006	10/12/2006				21.9	--	27	--	--	--	--	--	
	URS	2/7/2007	2/7/2007				19.65	--	27	--	--	--	--	--	
	URS	5/24/2007	5/24/2007				20.14	--	27	--	--	--	--	--	
	URS	--	8/10/2007				--	--	28.5	--	--	--	--	--	
	URS	--	12/27/2007				--	--	20.8	--	--	--	--	--	
	URS	--	3/27/2008				--	--	--	25	11.64	0.143	3.4	6.59	
	URS	7/23/2012	7/23/2012				--	--	--	--	--	--	--	--	
GMW-1	G-Logics	2/23/2005	2/23/2005	NA	77.68	20-35	25.27	52.41	--	--	--	--	--	--	
	URS	4/17/2009	4/10/2009				24.01	53.67	30	--	--	--	--	--	
	Pacific Crest	7/23/2012	NS				23.33	54.35	NM	NM	NM	NM	NM	NM	
GMW-2	G-Logics	2/23/2005	2/23/2005	NA	73.99	15-30	19.63	54.36	--	--	--	--	--	--	
GMW-3	G-Logics	2/23/2005	2/23/2005	NA	73.8	15-30	20.91	52.89	--	--	--	--	--	--	
	URS	4/17/2009	4/10/2009				18.94	54.86	25	--	--	--	--	--	
	Pacific Crest	7/23/2012	NS				19.05	54.75	NM	NM	NM	NM	NM	NM	
SCC-1	URS	5/27/2008	5/17/2008	NA	--	27.5-37.5	--	--	--	--	--	--	--	--	
	URS		5/28/2008				--	--	32.5	15.26	0.999	0	6.28	286	
	Pacific Crest	10/7/2010	8/17/2010				16.32	--	30	16.01	0.378	1.14	6.27	285	
	Pacific Crest	7/23/2012	8/7/2012				14.72	--	NM	NM	NM	NM	NM	NM	
SCC-2	URS	5/27/2008	5/17/2008	NA	--	25-35	--	--	--	--	--	--	--	--	
	URS		5/28/2008				--	--	30	15.02	0.999	2.99	6.95	312	
	Pacific Crest	10/7/2010	8/17/2010				16.18	--	25	16.28	0.273	5.27	6.21	331.9	
	Pacific Crest	7/23/2012	8/7/2012				15.16	--	NM	NM	NM	NM	NM	NM	

**NOTES:**

<sup>1</sup>Elevation of top of casing (NAVD88)

<sup>2</sup>Depth below top of well casing

C = celsius

mS/cm = millisiemens per centimeter

mg/L = milligrams per liter

mV = millivolts

NA = not applicable

NM = not measured

NS = not sampled

-- = not reported

Pacific Crest = Pacific Crest Environmental, LLC

G-Logics = G-Logics, Inc.

URS = URS Corporation

**Table 7a**  
**Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
MW-1	NA	15-25	URS	6/10/2002	<1.00	<b>12.8</b>	<1.00	<1.00	<0.500	<b>202</b>	<1.00	31.1	2.04	--
			URS	6/10/2002	<5.00	<b>12.9</b>	<5.00	<5.00	195	<5.00	32	<5.00	--	
			URS	3/6/2003	<1.00	<b>10.8</b>	<1.00	<1.00	<1.00	192	<1.00	51.5	1.89	--
			URS	3/6/2003	<10.0	<10.0	<10.0	<10.0	<10.0	159	<10.0	40.4	<10.00	--
			URS	5/2/2005	<4.00	<b>9.08</b>	<4.00	<4.0	<4.0	98.6	<4.0	29.3	<4.0	<b>9.13</b>
			URS	5/27/2008	<1.0	<b>5.9</b>	<1.0	<1.0	<0.2	52	<1.0	32	<1.0	--
			URS	4/9/2009	<1.0	<b>4.2</b>	2.5	<1.0	<0.2	30	<1.0	15	<1.0	--
URS	7/25/2012	<1.0	<b>4.62</b>	<1.0	<1.0	<0.2	21.6	<0.01	9.51	<1.0	<b>0.7</b>			
MW-2	NA	6-21	URS	6/10/2002	<b>14.1</b>	<1.00	<1.00	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	--
			URS	3/7/2003	<b>26.3</b>	<b>11.8</b>	<b>93.4</b>	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	--
			URS	2/9/2005	<b>16.8</b>	<b>4.97</b>	<b>20.3</b>	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	--
			URS	5/3/2005	<b>5.46</b>	1.44	4.29	<0.20	<0.20	<0.200	<0.20	<0.20	<0.20	--
			URS	5/30/2008	<b>12</b>	2.7	7.1	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/9/2009	<b>9.9</b>	2.3	7.4	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	8/7/2012	2.6	0.38	0.27	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--
MW-3	NA	20-30	URS	6/10/2002	<1.0	<1.0	<1.0	<1.0	<1.0	<1.00	<1.0	<1.0	<1.0	--
			URS	3/6/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.00	<1.0	<1.0	<1.0	--
			URS	5/21/2004	<0.02	<0.02	<0.02	<0.02	<0.02	<0.200	<0.20	<0.20	<0.20	--
			URS	8/7/2004	<0.02	<0.02	<0.02	<0.02	<0.02	<0.200	<0.20	<0.20	<0.20	--
			URS	11/10/2004	<0.02	<0.02	<0.02	<0.02	<0.02	<0.200	<0.20	<0.20	<0.20	--
			URS	2/9/2005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.200	<0.20	<0.20	<0.20	--
			URS	5/3/2005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.200	<0.20	<0.20	<0.20	--
			URS	9/1/2005	<0.02	<0.02	<0.02	<0.02	<0.02	<0.200	<0.20	<0.20	<0.20	--
			URS	2/7/2007	<0.02	<0.02	<0.02	<0.02	<0.02	<0.200	<0.20	<0.20	<0.20	--
			URS	5/27/2008	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	7/24/2012	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--

**Table 7a**  
**Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
MW-4	NA	20-35	URS	6/10/2002	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	--
			URS	3/6/2003	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	--
			URS	5/21/2004	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.0	<2.0	<2.0	--
			URS	8/7/2004	<0.200	<0.200	<0.200	<0.200	<0.200	0.4	<0.20	<0.20	0.6	--
			URS	11/10/2004	<0.200	<0.200	<0.200	<0.200	<0.200	0.57	<0.20	<0.20	0.49	--
			URS	2/9/2005	<0.200	<0.200	<0.200	<0.200	<0.200	0.53	<0.20	<0.20	0.39	--
			URS	5/3/2005	<0.200	<0.200	<0.200	<0.200	<0.200	0.26	<0.20	<0.20	<0.20	--
			URS	9/1/2005	<0.200	<0.200	<0.200	<0.200	<0.200	0.49	<0.20	<0.20	0.25	--
			URS	10/12/2006	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.20	<0.20	<0.20	--
			URS	5/24/2007	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.20	<0.20	<0.20	--
			URS	5/30/2008	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	7/23/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
MW-5	NA	10-20	URS	6/13/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
			URS	6/18/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
MW-6	NA	10-20	URS	6/13/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
			URS	6/18/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
MW-7	NA	17-32	URS	6/21/2002	<0.200	<0.200	<0.200	ND	ND	<0.200	<0.20	<0.20	<0.20	--
			URS	3/6/2003	<1.00	<1.00	<1.00	<1.00	<1.00	0.83	<1.00	<1.00	<1.00	--
			URS	5/3/2005	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.0
			URS	5/27/2008	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	7/23/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	--

**Table 7a**  
**Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
MW-8	NA	13-23	URS	3/7/2003	<1.00	8.69	<1.00	ND	ND	13.4	1.8	2.66	1.96	-
			URS	5/4/2005	<1.00	14.2	<1.00	ND	ND	11.6	2.37	3.39	2	20.5
			URS	5/29/2008	<1.0	15	<1.0	<1.0	<1.0	11	<1.0	3.6	1.9	--
			URS	4/13/2009	<1.0	8.6	<1.0	<1.0	<0.2	5.7	<1.0	<1.0	1.1	--
			Pacific Crest	8/19/2010	0.29	12	0.29	<0.20	<0.20	6.3	0.72	2	1.1	--
			Pacific Crest/URS	8/7/2012	<1.0	0.44	<0.2	<0.2	<0.2	1.1	<0.2	<0.2	0.24	<0.40
MW-9	NA	15-25	URS	3/6/2003	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
			URS	5/2/2005	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.20	<0.20	<0.20	<1.0
			URS	5/27/2008	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	8/7/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
MW-10	NA	18-28	URS	3/6/2003	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
			URS	5/28/2008	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	7/23/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11	NA	5-10	URS	3/6/2003	<1.00	<1.00	<1.00	<1.00	<1.00	7.29	<1.00	<1.00	18.4	--
			URS	5/3/2005	<1.0	<1.0	<1.0	<1.0	<1.0	23.4	<1.0	<1.0	22.4	<1.0
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<0.2	8.9	<1.0	<1.0	11	--
			URS	8/7/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
MW-12	NA	20-30	URS	3/7/2003	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.07	--
			URS	5/2/2005	<0.20	0.23	<0.20	<0.20	<0.20	0.23	<0.2	0.3	2.06	<1.0
			URS	8/7/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

**Table 7a**  
**Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
MW-13	NA	20-30	URS	3/6/2003	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.0	<1.0	<1.0	--
			URS	8/7/2004	<0.200	<0.200	<0.200	<0.200	<0.200	0.45	<0.20	<0.20	<0.20	--
			URS	11/10/2004	<0.200	<0.200	<0.200	<0.200	<0.200	0.38	<0.20	<0.20	<0.20	--
			URS	2/9/2005	<0.200	<0.200	<0.200	<0.200	<0.200	0.47	<0.20	<0.20	<0.20	--
			URS	5/3/2005	<0.200	<0.200	<0.200	<0.200	<0.200	0.4	<0.20	<0.20	<0.20	--
			URS	5/27/2008	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	8/7/2012	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<0.40
MW-14	NA	22-32	URS	6/11/2003	<b>127</b>	<1.00	<1.00	ND	ND	<1.00	<1.0	<1.0	<1.0	--
			URS	10/21/2003	<b>232</b>	<5.00	<80.0	ND	ND	<200	<5.0	0.073 U	800 U	<7.95
			URS	5/4/2005	<b>442</b>	<5.00	<5.00	ND	ND	<5.00	<5.0	<5.0	<5.0	<1.0
			URS	5/29/2008	<b>1,700</b>	<200	<200	<200	<200	<200	<200	<200	<200	--
			URS	4/10/2009	<b>6,800</b>	<50	<50	<50	<10	<50	<50	<50	<50	--
			Pacific Crest	10/7/2010	<b>12,000</b>	<60	<60	<60	<60	<60	<60	<60	<60	--
			Pacific Crest	8/7/2012	<b>7,900</b>	<50	<50	<50	<50	<50	<50	<50	<50	--
MW-15	NA	10-20	URS	6/11/2003	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1.55	--
			URS	5/2/2005	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<1.0
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<0.5	6	<1.0	<1.0	2.2	--
			Pacific Crest	4/10/2009	<0.20	<0.20	<0.20	<0.2	<0.2	1.7	<0.20	<0.20	0.79	--
			URS	8/7/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-16	NA	20-30	URS	10/21/2003	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--
			URS	5/2/2005	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.0
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
			URS	7/23/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	--

**Table 7a**  
**Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
MW-17	NA	20-30	URS	10/21/2003	<5.00	<5.00	<80.0	ND	ND	<200	<5.0	<0.073	<800	<7.95
			URS	10/29/2003	<5.00	<5.00	<80.0	ND	ND	<200	<5.0	<0.073	<800	<7.95
			URS	10/29/2003	<5.00	<5.00	<80.0	ND	ND	<200	<5.0	<0.073	<800	<7.95
			URS	10/29/2003	<5.00	<5.00	<80.0	ND	ND	<200	<5.0	<0.073	<800	<7.95
			URS	8/6/2004	<0.200	<0.200	<0.200	ND	ND	0.83	<0.20	<0.20	<0.20	--
			URS	5/4/2005	<0.200	<0.200	<0.200	ND	ND	0.69	<0.20	<0.20	<0.20	<1.0
			URS	5/29/2008	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	8/18/2010	<0.20	<0.20	<0.20	<0.20	<0.20	0.35	<0.20	<0.20	<0.20	--
MW-18	(Port #1)	14-17	URS	5/5/2005	0.86	<0.200	<0.200	ND	ND	<0.200	<0.20	<0.20	<0.20	<2.17
			URS	5/29/2008	2.7	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/13/2009	1.5	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	10/5/2010	1.3	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
			Pacific Crest/URS	7/24/2012	1.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.40
	(Port #2)	22-25	URS	5/5/2005	4.42	<0.200	<0.200	ND	ND	<0.200	<0.20	<0.20	<0.20	<1.0
			URS	5/29/2008	3.7	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/13/2009	3.4	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	10/5/2010	2.4	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
			Pacific Crest/URS	7/24/2012	3.7	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.40
	(Port #3)	30-40	URS	5/5/2005	30	<0.200	<0.200	ND	ND	0.25	<0.20	<0.20	<0.20	<1.0
			URS	5/29/2008	52	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/13/2009	42	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	10/5/2010	31	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
			Pacific Crest/URS	7/24/2012	89	<0.40	<0.40	<0.40	<0.40	<0.40	<0.20	<0.20	<0.20	<0.40

**Table 7a**  
**Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
MW-19	(Port #1)	15-17.5	URS	5/5/2005	3.28	<b>6.65</b>	<1.00	ND	ND	1.14	2.28	<1.0	<1.0	<b>6.64</b>
			URS	5/28/2008	1.6	<b>34</b>	<1.0	<1.0	<0.2	7.5	<1.0	2.6	3.3	--
			URS	4/13/2009	<1.0	<b>14</b>	<1.0	<1.0	<0.2	2.6	<1.0	<1.0	1.5	--
			Pacific Crest	10/5/2010	<0.20	1.2	<0.2	<0.2	<0.2	0.5	0.44	<0.20	0.56	--
			Pacific Crest/URS	7/25/2012	0.6	<b>13</b>	0.23	<0.20	<0.20	2	0.47	0.6	0.68	<b>2.86</b>
	(Port #2)	22-26	URS	5/5/2005	1.76	3.82	<1.00	ND	ND	4.95	<1.0	1.45	1.05	<b>5.94</b>
			URS	5/28/2008	<1.0	<b>7.5</b>	<1.0	<1.0	<0.2	7.1	<1.0	2.6	1.2	--
			URS	4/13/2009	<1.0	<b>5.2</b>	<1.0	<1.0	<0.2	4.8	<1.0	<1.0	<1.0	--
			Pacific Crest	10/5/2010	0.33	<b>5.7</b>	<0.20	<0.20	<0.20	4.9	0.69	1.3	0.77	--
			Pacific Crest/URS	7/25/2012	0.35	<b>6.3</b>	<0.20	<0.20	<0.20	3.7	0.49	1.3	0.61	<b>3.73</b>
	(Port #6)	37.5-41.5	URS	5/5/2005	<b>5.32</b>	0.74	1.89	ND	ND	1.57	<0.20	<0.20	<0.20	<1.0
			URS	5/28/2008	<b>8.3</b>	1.9	2.2	<1.0	<0.2	2.5	<1.0	<1.0	<1.0	--
			Pacific Crest	4/13/2009	<b>5.9</b>	1.2	1.8	<0.2	<0.2	1.4	<0.20	<0.20	<0.20	--
			URS	4/13/2009	4.6	1.1	1.6	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	10/5/2010	<b>5.8</b>	1.7	1.5	<0.20	<0.20	1.7	<0.20	<0.20	<0.20	--
			Pacific Crest/URS	7/25/2012	<b>8.1</b>	1.7	1.2	<0.20	<0.20	1.3	<0.2	<0.2	<0.2	<b>1.42</b>



**Table 7a**  
**Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
MW-20	(Port #1)	27.5-31	URS	5/6/2005	1.12	2.27	159	ND	ND	0.4	<0.20	0.39	<0.20	<1.0
			URS	5/30/2008	18	10	95	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/9/2009	8.6	5.8	48	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest/URS	7/25/2012	3.5	2.3	11	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	0.75
	(Port #2)	36-38	URS	5/6/2005	<1.00	<1.00	1.23	ND	ND	<1.0	<1.0	<1.0	<1.0	<1.0
			URS	5/30/2008	<1.0	<1.0	7.9	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	4/10/2009	<0.20	<0.20	2.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest/URS	7/25/2012	0.27	0.48	3.7	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	0.53
	(Port #3)	14-17	URS	5/6/2005	<0.200	1.35	11.7	ND	ND	<0.200	<0.20	<0.20	<0.20	<1.0
			URS	5/30/2008	3.8	12	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/10/2009	<1.0	3	10	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	7/25/2012	0.72	3.4	6.7	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.40
	(Port #5)	23.5-24.5	URS	5/31/2008	<1.0	1.9	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/10/2009	<1.0	<1.0	8.6	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest/URS	7/25/2012	0.21	0.39	3.9	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.40
MW-21S	NA	14.5-29.5	URS	5/5/2005	0.23	<0.200	<0.200	ND	ND	<0.200	<0.20	<0.20	<0.20	<1.0
			URS	5/30/2008	3.1	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/10/2009	1.8	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	8/18/2010	3.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	7.8	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--

**Table 7a**  
**Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
MW-21D	NA	35-40	URS	5/5/2005	<0.200	<0.200	<0.200	ND	ND	<0.200	<0.20	<0.20	<0.20	<1.0
			URS	5/30/2008	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	8/18/2010	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.39	--
			Pacific Crest	8/7/2012	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.27	--
MW-22	NA	25-35	URS	5/4/2005	<0.200	<0.200	<0.200	ND	ND	--	<0.20	<0.20	0.34	<1.0
			URS	5/30/2008	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	8/18/2010	<0.20	<0.20	<0.20	<0.20	<0.20	0.25	<0.20	<0.20	0.42	--
			Pacific Crest	8/7/2012	<0.20	<0.20	<0.20	<0.20	<0.20	0.21	<0.20	<0.20	0.31	--
MW-23	NA	16-31	URS	5/4/2005	<1.00	<b>44.7</b>	9.97	ND	ND	<1.00	<1.0	<1.0	<1.0	<1.0
			URS	5/28/2008	<1.0	<b>35</b>	4.7	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/16/2009	<1.0	<b>45</b>	8.1	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	8/7/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-24S	NA	15-20	URS	4/15/2009	<b>300</b>	<b>11</b>	6.5	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	10/7/2010	<b>210</b>	<b>11</b>	5.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest/URS	8/7/2012	<b>170</b>	<b>7.9</b>	2.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.400
MW-24D	NA	44-49	URS	4/15/2009	<b>300</b>	1.9	6.2	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	10/7/2010	2.9	0.67	<b>94</b>	<0.40	<0.40	<0.40	<0.4	0.42	<0.2	--
			Pacific Crest/URS	8/7/2012	<b>19</b>	3	15	<0.20	<0.20	0.26	<0.20	<0.20	<0.20	<0.400
MW-25S	NA	13-18	URS	4/15/2009	<b>180</b>	<b>12</b>	4.7	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	10/6/2010	<b>110</b>	3.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	10/6/2010 <sup>3</sup>	<b>110</b>	3.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest/URS	8/7/2012	<b>89</b>	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.400

**Table 7a**  
**Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
MW-25I	NA	29-34	URS	4/15/2009	413	14	11	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	10/6/2010	210	7.1	5.6	<1.0	<1.0	<1.0	<1.0	<1.0	--	
			Pacific Crest/URS	8/7/2012	290	7.4	6.6	<2.0	<2.0	<2.0	<2.0	<2.0	<0.400	
MW-25D	NA	44-49	URS	4/15/2009	100	6.2	14	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	10/6/2010	170	11	9.9	<1.0	<1.0	<1.0	<1.0	<1.0	--	
			Pacific Crest	8/7/2012	170	10	7.4	<1.0	<1.0	<1.0	<1.0	<1.0	<0.400	
MW-26S	NA	15-20	URS	4/16/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	8/18/2010	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	<1.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.400
MW-26I	NA	34-39	URS	4/16/2009	<1.0	<1.0	3.4	<1.0	<0.2	6.2	<1.0	<1.0	<1.0	--
			Pacific Crest	8/18/2010	<0.20	<0.20	0.53	<0.20	<0.20	1.8	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	<0.20	<0.20	<0.20	<0.20	<0.20	0.92	<0.20	<0.20	<0.20	<0.400
MW-26D	NA	54-57	URS	4/16/2009	4.8	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	8/18/2010	0.28	<0.20	<0.20	<0.20	<0.20	0.47	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	<1.0	<0.20	<0.20	<0.20	<0.20	0.31	<0.20	<0.20	<0.20	0.59
MW-27S	NA	15.5-20.5	URS	4/16/2009	25	1.6	2.7	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	8/19/2010	28	2.2	0.44	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	15	1.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.400
MW-27I	NA	31-36	URS	4/16/2009	68	6.4	4.6	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	8/19/2010	38	3.3	1.3	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	43	3.4	0.74	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.400
MW-27D	NA	43-48	URS	4/16/2009	1.2	<1.0	3	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	8/19/2010	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	<1.0	<0.20	0.24	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.400
MW-28S	NA	18-23	URS	4/15/2009	<1.0	4.7	<1.0	<1.0	<0.2	6.66	<1.0	<1.0	<1.0	--
			Pacific Crest	8/7/2012	<1.0	<0.20	<0.20	<0.20	<0.20	1.6	0.33	0.29	0.51	0.45

**Table 7a**  
**Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
MW-28I	NA	33-38	URS	4/15/2009	<1.0	<1.0	<1.0	<1.0	<0.2	5.8	<1.0	<1.0	<1.0	--
			Pacific Crest	8/7/2012	<1.0	3.1	<0.20	<0.20	<0.20	1.4	<0.20	<0.20	<0.20	<0.400
MW-28D	NA	54-59	URS	4/15/2009	<1.0	<1.0	<1.0	<1.0	<0.2	5.4	<1.0	<1.0	<1.0	--
			Pacific Crest	8/7/2012	<1.0	<b>7.7</b>	<0.20	<0.20	<0.20	3	0.36	0.87	0.48	<b>0.6</b>
MW-29	NA	33-38	URS	4/15/2009	<b>15,000 J</b>	<50	<50	<50	<0.2	<50	<50	<50	<50	--
			Pacific Crest	10/7/2010	<b>13,000</b>	<60	<60	<60	<60	<60	<60	<60	<60	--
			Pacific Crest	8/7/2012	<b>12,000</b>	<60	<60	<60	<60	<60	<60	<60	<60	NS
MW-30S	NA	19-24	Pacific Crest	10/6/2010	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.400
MW-30I	NA	40-45	Pacific Crest	10/4/2010	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.400
MW-30D	NA	65-70	Pacific Crest	10/6/2010	0.26	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.400
MW-31S	NA	15-20	Pacific Crest	10/6/2010	<b>27</b>	<b>5.3</b>	0.67	<0.20	<0.20	0.42	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	<b>21</b>	3.4	<0.20	<0.20	<0.20	0.32	<0.20	<0.20	<0.20	<0.400
MW-31I	NA	35-40	Pacific Crest	10/6/2010	2.3	1.3	0.60	<0.20	<0.20	1.3	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	3.6	2.1	0.36	<0.20	<0.20	0.76	<0.20	<0.20	<0.20	<0.400
MW-31D	NA	65-70	Pacific Crest	10/5/2010	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.400
MW-32S	NA	20-25	Pacific Crest	10/4/2010	1.8	<0.20	<0.20	<0.20	<0.20	0.84	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	<1.0	<0.20	<0.20	<0.20	<0.20	0.76	<0.20	<0.20	<0.20	<0.400
MW-32I	NA	38-43	Pacific Crest	10/4/2010	<b>7.1</b>	1.1	3.2	<0.20	<0.20	0.39	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	3.2	0.54	0.38	<0.20	<0.20	0.2	<0.20	<0.20	<0.20	<0.400
MW-32D	NA	66-71	Pacific Crest	10/4/2010	1.1	0.24	0.37	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	0.41

**Table 7a**  
**Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
DPE-1	NA	13-23	URS	6/11/2003	1.12	<b>18.3</b>	<1.00	ND	ND	9.59	<1.0	2.18	<1.0	--
			URS	5/21/2004	1.62	<b>25.9</b>	<1.00	ND	ND	8.23	<1.0	1.89	<1.0	--
			URS	8/6/2004	<1.00	<b>41.9</b>	<1.00	ND	ND	14.4	<1.0	4.1	1.31	--
			URS	11/10/2004	0.77	<b>16.9</b>	0.36	ND	ND	6.26	0.55	3.54	1.7	--
			URS	2/9/2005	<1.00	<b>18.5</b>	<1.00	ND	ND	8.31	<1.0	2.15	1.36	--
			URS	5/4/2005	1.09	<b>20.2</b>	<1.00	ND	ND	6.82	<1.0	1.78	<1.0	--
			URS	12/2/2005	<1.00	<b>4.83</b>	<1.00	ND	ND	2.66	<1.0	<1.0	<1.0	--
			URS	5/29/2008	1.6	<b>22</b>	<1.0	<1.0	<0.2	7.8	<1.0	2.1	<1.0	--
			URS	4/13/2009	<1.0	<b>13</b>	<1.0	<1.0	<0.2	3.8	<1.0	<1.0	<1.0	--
			URS	7/24/2012	1.32	<b>16.9</b>	<1.00	<1.0	<0.2	4.87	<1.0	<1.0	<1.0	<b>1</b>
DPE-2	NA	17-32	URS	2/9/2005	<1.00	<1.00	<1.00	ND	ND	<1.00	<b>6.27</b>	<1.0	1.12	--
			URS	5/3/2005	<4.00	<4.00	<4.00	ND	ND	<4.00	<4.00	<4.00	<4.00	--
			URS	9/1/2005	<0.200	<0.200	<0.200	ND	ND	0.42	3.74	<0.20	1.18	--
			URS	12/2/2005	<0.200	<0.200	<0.200	ND	ND	0.34	3.14	<0.20	0.72	--
			URS	6/6/2006	<0.400	<0.400	<0.400	ND	ND	<0.400	2.22	0.400 U	0.76	--
			URS	10/12/2006	<0.200	<0.200	<0.200	ND	ND	<0.200	1.72	<0.20	<0.800	--
			URS	2/7/2007	<0.200	<0.200	<0.200	ND	ND	<0.200	2.28	<0.20	1.02	--
			URS	5/24/2007	<0.200	<0.200	<0.200	ND	ND	<0.200	0.870 J	<0.20	<0.20	--
			URS	8/10/2007	<0.800	<0.800	<0.800	ND	ND	<0.800	0.800 U	0.800 U	<0.800	--
			URS	12/27/2007	<0.200	0.27	<0.200	ND	ND	<0.200	3.46	<0.20	1.09	--
			URS	3/27/2008	<0.200	0.25	<0.200	ND	ND	<0.200	1.49	<0.20	<0.20	--
			URS	5/30/2008	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	4/13/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	7/24/2012	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<0.400

**Table 7a**  
**Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
DPE-3	NA	20-35	URS	6/11/2003	<1.00	<1.00	<1.00	ND	ND	<1.00	<1.0	<1.0	<1.0	--
			URS	8/6/2004	<20.0	<20.0	<20.0	ND	ND	<20.0	<20.0	<20.0	<20.0	--
			URS	11/10/2004	<1.00	<1.00	<1.00	ND	ND	<1.00	11	<1.0	<1.0	--
			URS	2/9/2005	<1.00	<1.00	<1.00	ND	ND	<1.00	8.14	<1.0	<1.0	--
			URS	5/3/2005	<4.00	<4.00	<4.00	ND	ND	<4.00	5.64	<4.00	<4.00	--
			URS	9/1/2005	<0.200	0.42	0.22	ND	ND	0.37	4.87	0.38	1.08	--
			URS	12/2/2005	<2.00	<2.00	<2.00	ND	ND	<2.00	4.94	<2.0	<2.0	--
			URS	6/6/2006	<0.200	0.8	<0.200	ND	ND	<0.200	4.99	0.47	0.67	--
			URS	10/12/2006	<0.200	0.48	<0.200	ND	ND	<0.200	4.3	0.2	0.53	--
			URS	2/7/2007	<0.200	<0.200	<0.200	ND	ND	<0.200	3.72	<0.20	<0.20	--
			URS	5/24/2007	<0.200	<0.200	<0.200	ND	ND	<0.200	5.54 J	<0.20	0.230 J	--
			URS	8/10/2007	<0.200	<0.200	<0.200	ND	ND	<0.200	5.57	<0.20	<0.20	--
			URS	12/21/2007	<0.200	0.36	<0.200	ND	ND	<0.200	5.59	<0.20	<0.20	--
			URS	3/27/2008	<0.200	<0.200	<0.200	ND	ND	<0.200	3.14	<0.20	<0.20	--
			URS	5/30/2008	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	3	<1.0	--
			URS	7/24/2012	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	2.86	<1.0	<1.0	<0.400
DPE-4	NA	20-35	URS	5/21/2004	<0.200	<0.200	<0.200	ND	ND	<0.200	0.69	<0.20	0.38	-
			URS	9/1/2005	<0.200	<0.200	<0.200	ND	ND	1.03	0.75	<0.20	0.7	--
			URS	8/10/2007	<0.200	<0.200	<0.200	ND	ND	<0.200	0.78	<0.20	0.2	--
			Pacific Crest	4/13/2009	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	--
			URS	4/13/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
DPE-5	NA	19.5-34.5	URS	7/23/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
			URS	12/27/2007	<0.200	0.27	<0.200	ND	ND	3.28	<0.20	0.45	0.24	--
			URS	7/23/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

**Table 7a**  
**Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
DPE-6	NA	20-40	URS	5/21/2004	<0.200	0.59	<0.200	ND	ND	1.28	<0.20	<0.20	<0.20	--
			URS	3/27/2008	<0.200	0.89	<0.200	ND	ND	0.63	<0.20	<0.20	<0.20	--
			Pacific Crest	4/13/2009	0.25	1.1	<0.20	<0.2	<0.2	0.59	<0.20	<0.20	<0.20	--
			URS	4/13/2009	<1.0	1.1	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	7/24/2012	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<0.400
DPE-7	NA	20-35	URS	9/1/2005	<0.200	<0.200	<0.200	ND	ND	0.35	2.41	<0.20	1.02	--
			URS	12/2/2005	<0.200	<0.200	<0.200	ND	ND	0.2	1.06	<0.20	0.22	--
			URS	6/6/2006	<0.200	<0.200	<0.200	ND	ND	<0.200	1.06	<0.20	0.32	--
			URS	10/12/2006	<0.200	<0.200	<0.200	ND	ND	<0.200	2.05	<0.20	<1.0	--
			URS	2/7/2007	<0.200	<0.200	<0.200	ND	ND	0.2	0.79	<0.20	0.24	--
			URS	5/24/2007	<0.200	<0.200	<0.200	ND	ND	<0.200	0.330 J	<0.20	<0.20	--
			URS	8/10/2007	<0.200	<0.200	<0.200	ND	ND	<0.200	0.29	<0.20	<0.20	--
			URS	12/27/2007	<0.200	<0.200	<0.200	ND	ND	<0.200	<0.20	<0.20	<0.20	--
			URS	3/27/2008	<0.200	<0.200	<0.200	ND	ND	<0.200	<0.20	<0.20	<0.20	--
			URS	7/23/2012	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	<0.400

**Table 7a**  
**Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
GMW-1	NA	20-35	G-Logics	2/23/2005	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	NA
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	NA	NA	<1.0	NA
			Pacific Crest	8/7/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
GMW-2	NA	15-30	G-Logics	2/23/2005	<b>22</b>	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	NA
GMW-3	NA	15-30	G-Logics	2/23/2005	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	NA
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0	NA	NA	<1.0	NA
			Pacific Crest	8/7/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SCC-1	NA	27.5-37.5	URS	5/17/2008	1.6	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	5/28/2008	1.7	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			Pacific Crest	8/17/2010	<b>6.6</b>	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
			Pacific Crest	8/7/2012	<b>27</b>	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--



Table 7a  
Analytical Results Summary - CVOCs and 1,4-dioxane - Groundwater  
Penthouse Drapery and Belshaw Site  
Seattle, Washington  
Pacific Crest No: 105-003

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)									
					CVOCs and 1,4-dioxane <sup>1</sup>									
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,1-Dichloroethane	1,4-Dioxane
SCC-2	NA	25-35	URS	5/17/2008	15,000 J	<1.0	<1.0	<1.0	<0.2	<1.0	<1.0	<1.0	<1.0	--
			URS	5/28/2008	57,000	<200	<200	<200	<200	<200	<200	<200	<200	--
			Pacific Crest	8/17/2010	13,000	<50	<50	<50	<50	<50	<50	<50	<50	--
			Pacific Crest	8/7/2012	5,900	<30	<30	<30	<30	<30	<30	<30	<30	--
MTCA Method A Cleanup Levels for Groundwater - Ingestion					5	5	--	--	0.2	200	5	**	**	**
MTCA Method B Cleanup Levels for Groundwater - Ingestion					21	4	16	160	--	**	**	**	**	0.438
MTCA Method B Screening Levels - Groundwater - Vapor Intrusion - Residential					24.5	1.5	160	130	0.35	**	**	**	**	**
MTCA Method B Screening Level - Groundwater - Vapor Intrusion - Commercial					128.6	13.8	1538	--	3.70	**	**	**	**	**
Proposed Feasibility Study (FS) Cleanup Level					5	4	16	--	--	200	**	**	**	0.438

NOTES:

<sup>1</sup>Analyzed by SW-846 Method 8260B.

<sup>2</sup>Feet below ground surface

<sup>3</sup>Duplicate sample

ND = reported as non-detect; laboratory detection limit not provided.

NA = not analyzed

< or U = concentration not detected at or above the laboratory detection limit

**Bold** = concentration exceeds the applicable Proposed Feasibility Study Cleanup Level

*Italics* = laboratory detection limit exceeds the applicable Proposed Feasibility Study Cleanup Level

-- = No information available

\*\*\* = Not applicable or not calculated by URS

COPCs = Contaminants of Potential Concern

CVOCs = Chlorinated Volatile Organic Compounds

MTCA = Model Toxics Control Act

Pacific Crest = Pacific Crest Environmental, LLC

G-Logics = G-Logics, Inc.

URS = URS Corporation

**Table 7b**  
**Analytical Results Summary -Gasoline Range Petroleum Indicator Hazardous Substances - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)								
					Gasoline Range Petroleum Indicator Hazardous Substances <sup>1</sup>								
					Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead	Gasoline Range Organics (GRO)
MW-1	NA	15-25	URS	6/10/2002	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	6/10/2002	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	3/6/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
			URS	3/6/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
			URS	5/2/2005	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	NA	NA
			URS	5/27/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/9/2009	4.2	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
MW-2	NA	6-21	URS	7/25/2012	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
			URS	6/10/2002	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	3/7/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	2/9/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	5/3/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	NA
			URS	5/30/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
MW-3	NA	20-30	Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
			URS	6/10/2002	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	NA	<50
			URS	3/6/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	5/21/2004	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	8/7/2004	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	11/10/2004	2.38	6.41	0.32	7.47	<0.500	2.71	0.97	NA	57.5
			URS	2/9/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	5/3/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	9/1/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	2/7/2007	0.9	2.25	0.63	2.61	<2.5	0.45	<0.5	NA	<50
			URS	5/27/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	7/24/2012	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<50

**Table 7b**  
**Analytical Results Summary -Gasoline Range Petroleum Indicator Hazardous Substances - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)								
					Gasoline Range Petroleum Indicator Hazardous Substances <sup>1</sup>								
					Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead	Gasoline Range Organics (GRO)
MW-4	NA	20-35	URS	6/10/2002	<1.0	1.45	9.97	92	17.7	167	116	NA	5220
			URS	3/6/2003	1.11	1.53	23.7	44.58	18.7	118	77.6	NA	3490
			URS	5/21/2004	<2.0	<2.0	9.5	<2.0	7.7	56	24.1	NA	1400
			URS	8/7/2004	<0.200	<0.200	0.23	0.5	<0.500	3.28	1.34	NA	155
			URS	11/10/2004	4.73	10.5J	0.7	14.96	1.53	8.35J	2.91	NA	159
			URS	2/9/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	5/3/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	9/1/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	10/12/2006	0.68	1.2	0.2	1.67	<2.5	0.3	<0.5	NA	<50
			URS	5/24/2007	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	78.4 J
			URS	5/30/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	7/23/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	NA	10-20	URS	6/13/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS
			URS	6/18/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	NA	10-20	URS	6/13/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS
			URS	6/18/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	NA	17-32	URS	6/21/2002	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	3/6/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	5/3/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	NA
			URS	5/27/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Table 7b**  
**Analytical Results Summary -Gasoline Range Petroleum Indicator Hazardous Substances - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)								
					Gasoline Range Petroleum Indicator Hazardous Substances <sup>1</sup>								
					Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead	Gasoline Range Organics (GRO)
MW-8	NA	13-23	URS	3/7/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	5/4/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
			URS	5/29/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/13/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/19/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest/URS	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-9	NA	15-25	URS	3/6/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	5/2/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	NA
			URS	5/27/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-10	NA	18-28	URS	3/6/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	5/28/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	7/23/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-11	NA	5-10	URS	3/6/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	83
			URS	5/3/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	7/23/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12	NA	20-30	URS	3/7/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	231
			URS	5/2/2005	<0.2	<0.2	<0.2	0.52	<0.5	<0.2	<0.5	NA	NA
			URS	7/23/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS

**Table 7b**  
**Analytical Results Summary -Gasoline Range Petroleum Indicator Hazardous Substances - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)								
					Gasoline Range Petroleum Indicator Hazardous Substances <sup>1</sup>								
					Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead	Gasoline Range Organics (GRO)
MW-13	NA	20-30	URS	3/6/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	8/7/2004	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	11/10/2004	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	2/9/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	5/3/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	5/27/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
MW-14	NA	22-32	URS	7/24/2012	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<50
			URS	6/11/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA
			URS	10/21/2003	<5.00	<1,000	<700	<1,000	<160	NA	<5	NA	<1,000
			URS	5/4/2005	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<200	NA	NA
			URS	5/29/2008	<200	<200	<200	<200	<200	<200	<50	NA	NA
			URS	4/10/2009	<50	<50	<50	<50	<200	<50	<50	NA	NA
			Pacific Crest	10/7/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-15	NA	10-20	Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
			URS	6/11/2003	<1.0	<1.0	<1.0	<3.0	3.29	3.32	<1.0	NA	NA
			URS	5/2/2005	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	NA	NA
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	4/10/2009	<0.2	<1.0	<0.2	<0.6	<1.0	<0.2	<0.2	NA	NA
MW-16	NA	20-30	URS	7/23/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS
			URS	10/21/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
			URS	5/2/2005	<0.2	<0.2	<0.2	<0.75	<0.5	<0.2	<0.5	NA	NA
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	7/23/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS

**Table 7b**  
**Analytical Results Summary -Gasoline Range Petroleum Indicator Hazardous Substances - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)								
					Gasoline Range Petroleum Indicator Hazardous Substances <sup>1</sup>								
					Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead	Gasoline Range Organics (GRO)
MW-17	NA	20-30	URS	10/21/2003	<5.00	<1,000	<700	<1,000	<160	NA	NA	NA	<1,000
			URS	10/29/2003	<5.00	<1,000	<700	<1,000	<160	NA	NA	NA	<1,000
			URS	10/29/2003	<5.00	<1,000	<700	<1,000	<160	NA	NA	NA	<1,000
			URS	10/29/2003	<5.00	<1,000	<700	<1,000	<160	NA	NA	NA	<1,000
			URS	8/6/2004	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	NA
			URS	5/4/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	NA
			URS	5/29/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/18/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-18	(Port #1)	14-17	URS	7/23/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
			URS	5/5/2005	<0.200	0.2	<0.200	<0.250	<0.500	<0.200	<0.5	NA	NA
			URS	5/29/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/13/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	10/5/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
	(Port #2)	22-25	Pacific Crest	7/24/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
			URS	5/5/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	NA
			URS	5/29/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/13/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	10/5/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	7/24/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
	(Port #3)	30-40	URS	5/5/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	NA
			URS	5/29/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/13/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	10/5/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	7/24/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Table 7b**  
**Analytical Results Summary -Gasoline Range Petroleum Indicator Hazardous Substances - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)								
					Gasoline Range Petroleum Indicator Hazardous Substances <sup>1</sup>								
					Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead	Gasoline Range Organics (GRO)
MW-19	(Port #1)	15-17.5	URS	5/5/2005	<1.0	2	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
			URS	5/28/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/13/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	10/5/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	7/25/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
	(Port #2)	22-26	URS	5/5/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
			URS	5/28/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/13/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	10/5/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	7/25/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
	(Port #6)	37.5-41.5	URS	5/5/2005	<0.200	0.21	<0.200	<0.250	<0.500	<0.200	<0.500	NA	NA
			URS	5/28/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	4/13/2009	<0.2	<1.0	<0.2	<0.6	<1.0	<0.2	<0.2	NA	NA
			URS	4/13/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	10/5/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	7/25/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Table 7b**  
**Analytical Results Summary -Gasoline Range Petroleum Indicator Hazardous Substances - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)								
					Gasoline Range Petroleum Indicator Hazardous Substances <sup>1</sup>								
					Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead	Gasoline Range Organics (GRO)
MW-20	(Port #1)	27.5-31	URS	5/6/2005	<0.200	0.21	<0.200	<0.250	<0.500	<0.200	<0.5	NA	NA
			URS	5/30/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/9/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	7/25/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
	(Port #2)	36-38	URS	5/6/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
			URS	5/30/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	4/10/2009	<0.2	<1.0	<0.2	<0.6	<1.0	<0.2	<0.2	NA	NA
			Pacific Crest	7/25/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
	(Port #3)	14-17	URS	5/6/2005	<0.200	0.24	<0.200	<0.250	<0.500	<0.200	<0.5	NA	NA
			URS	5/30/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	7/25/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
	(Port #5)	23.5-24.5	URS	5/31/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	7/25/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-21S	NA	14.5-29.5	URS	5/5/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	NA
			URS	5/30/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/18/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-21D	NA	35-40	URS	5/5/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	NA
			URS	5/30/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/18/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA



**Table 7b**  
**Analytical Results Summary -Gasoline Range Petroleum Indicator Hazardous Substances - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)								
					Gasoline Range Petroleum Indicator Hazardous Substances <sup>1</sup>								
					Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead	Gasoline Range Organics (GRO)
MW-22	NA	25-35	URS	5/4/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	NA
			URS	5/30/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/18/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-23	NA	16-31	URS	5/4/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
			URS	5/28/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/16/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-24S	NA	15-20	URS	4/15/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	10/7/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest/URS	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-24D	NA	44-49	URS	4/15/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	10/7/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest/URS	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-25S	NA	13-18	URS	4/15/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	10/6/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	10/6/2010 <sup>3</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest/URS	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-25I	NA	29-34	URS	4/15/2009	<1.0	3.8	<1.0	3.6	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	10/6/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest/URS	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-25D	NA	44-49	URS	4/15/2009	<1.0	1.4	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	10/6/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Table 7b**  
**Analytical Results Summary -Gasoline Range Petroleum Indicator Hazardous Substances - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)								
					Gasoline Range Petroleum Indicator Hazardous Substances <sup>1</sup>								
					Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead	Gasoline Range Organics (GRO)
MW-26S	NA	15-20	URS	4/16/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/18/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-26I	NA	34-39	URS	4/16/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/18/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-26D	NA	54-57	URS	4/16/2009	<1.0	1	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/18/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-27S	NA	15.5-20.5	URS	4/16/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/19/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-27I	NA	31-36	URS	4/16/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/19/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-27D	NA	43-48	URS	4/16/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/19/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-28S	NA	18-23	URS	4/15/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-28I	NA	33-38	URS	4/15/2009	<1.0	1.6	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-28D	NA	54-59	URS	4/15/2009	<1.0	3	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-29	NA	33-38	URS	4/15/2009	<50	<50	<50	<50	<200	<50	<50	NA	NA
			Pacific Crest	10/7/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-30S	NA	19-24	Pacific Crest	10/6/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-30I	NA	40-45	Pacific Crest	10/4/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Table 7b**  
**Analytical Results Summary -Gasoline Range Petroleum Indicator Hazardous Substances - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)								
					Gasoline Range Petroleum Indicator Hazardous Substances <sup>1</sup>								
					Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead	Gasoline Range Organics (GRO)
MW-30D	NA	65-70	Pacific Crest	10/6/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-31S	NA	15-20	Pacific Crest	10/6/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-31I	NA	35-40	Pacific Crest	10/6/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-31D	NA	65-70	Pacific Crest	10/5/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-32S	NA	20-25	Pacific Crest	10/4/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-32I	NA	38-43	Pacific Crest	10/4/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-32D	NA	66-71	Pacific Crest	10/4/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Table 7b**  
**Analytical Results Summary -Gasoline Range Petroleum Indicator Hazardous Substances - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)								
					Gasoline Range Petroleum Indicator Hazardous Substances <sup>1</sup>								
					Benzene	Toluene	Ethylbenzene	Total Xylenes	Napthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead	Gasoline Range Organics (GRO)
DPE-1	NA	13-23	URS	6/11/2003	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	5/21/2004	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	8/6/2004	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	11/10/2004	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	2/9/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	5/4/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	12/2/2005	<0.500	<1.0	<0.500	<1.0	<1.0	<1.0	<1.0	NA	<50
			URS	5/29/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	4/13/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
DPE-2	NA	17-32	URS	7/24/2012	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<50
			URS	2/9/2005	<b>236</b>	193	24.4	393	21.6	98.9	63.5	NA	<b>3380</b>
			URS	5/3/2005	<b>98</b>	116	25.9	261.2	16.5	85.9	43.4	NA	<b>3790</b>
			URS	9/1/2005	<b>157</b>	189	32.1	272.5	19.9	133	32.8	NA	<b>3,450</b>
			URS	12/2/2005	<b>80.6</b>	96.9	11.6	141.1	9.05	61.9	27.2	NA	<b>2160</b>
			URS	6/6/2006	<b>121</b>	205	27.2	226.8	16.7	132	34.9	NA	<b>5740</b>
			URS	10/12/2006	<b>61</b>	81.4	24.4	279.9	18.5	99.4	20.6	NA	<b>1920</b>
			URS	2/7/2007	<b>77.4</b>	95.9	31.8	176	27	115	20.9	NA	<b>3160</b>
			URS	5/24/2007	<b>33.5 J</b>	212 J	32.7 J	166 J	16.8 J	65.3 J	14.1 J	NA	<b>2,880 J</b>
			URS	8/10/2007	<b>35.1</b>	261	41	202	17.2	71.9	18.5	NA	<b>3220</b>
			URS	12/27/2007	<b>143</b>	276	34.4	279	17.9	113	24.4	NA	<b>3570</b>
			URS	3/27/2008	<b>67.2</b>	129	27.6	134	6.33	64.9	13.1	NA	<b>1990</b>
			URS	5/30/2008	<b>39</b>	37	20	110	8.7	69	2.7	NA	NA
			URS	4/13/2009	<b>10</b>	5.6	12	51	3.7	46	1.3	NA	NA
			URS	7/24/2012	1.18	<1.0	<1.0	<1.0	<1.0	4.65	<1.0	1.06	77

**Table 7b**  
**Analytical Results Summary -Gasoline Range Petroleum Indicator Hazardous Substances - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)								
					Gasoline Range Petroleum Indicator Hazardous Substances <sup>1</sup>								
					Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead	Gasoline Range Organics (GRO)
DPE-3	NA	20-35	URS	6/11/2003	3250	7460	826	6390	318	1450	366	NA	49600
			URS	8/6/2004	258	186	29.8	285.6	62.8	154	59	NA	6830
			URS	11/10/2004	474	872	57.5	1264	90.6	484	172	NA	10600
			URS	2/9/2005	221	227	24.2	517	37.6	221	73.6	NA	5683
			URS	5/3/2005	121	73.6	11.4	103.9	11.2	75.5	19.6	NA	3020
			URS	9/1/2005	111	46.3	14	74.4	12.5	75.1	10.3	NA	2,100
			URS	12/2/2005	47.5	23.6	2.34	39.7	2.44	14.2	2.62	NA	886
			URS	6/6/2006	194	249	21.9	302	12.7	105	27.9	NA	3490
			URS	10/12/2006	91.8	79.9	9	191.8	6.98	32.1	8.01	NA	1630
			URS	2/7/2007	324	345	80.4	382	33.8	114	34.8	NA	4680
			URS	5/24/2007	438 J	551 J	156 J	394 J	57.4 J	168 J	40.6 J	NA	7,030 J
			URS	8/10/2007	444	352	191	318	66.8	208	33.5	NA	5280
			URS	12/21/2007	235	218	62.8	318	19.8	118	20.2	NA	3470
			URS	3/27/2008	129	30.5	47.2	57.1	5.99	43.7	<0.5	NA	1420
			URS	5/30/2008	140	56	33	70	11	56	1.2	NA	NA
			URS	7/24/2012	26.4	<1.0	7.17	36.4	<1.0	<1.0	<1.0	1.45	445
DPE-4	NA	20-35	URS	5/21/2004	0.84	0.2	<0.200	<0.250	<0.500	0.94	<0.5	NA	177
			URS	9/1/2005	10.1	0.68	0.49	4.86	<0.500	1.31	<0.5	NA	211
			URS	8/10/2007	21.7	0.71	1.65	0.81	<2.5	0.33	<0.5	NA	394
			Pacific Crest	4/13/2009	24	<1.0	0.26	0.34	<1.0	0.6	<1.0	NA	NA
			URS	4/13/2009	23	<1.0	<1.0	<1.0	1.8	<1.0	<1.0	NA	NA
			URS	7/23/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS
DPE-5	NA	19.5-34.5	URS	12/27/2007	<0.200	<0.200	<0.200	<0.750	<2.5	<0.200	<0.5	NA	<50
			URS	7/23/2012	NS	NS	NS	NS	NS	NS	NS	NS	NS
DPE-6	NA	20-40	URS	5/21/2004	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	<0.5	NA	<50
			URS	3/27/2008	<0.200	<0.200	<0.200	0.7<50	<2.5	<0.200	<0.5	NA	<50
			Pacific Crest	4/13/2009	<0.2	<1.0	<0.2	<0.6	<1.0	<0.2	<0.2	NA	NA
			URS	4/13/2009	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	7/24/2012	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<50

**Table 7b**  
**Analytical Results Summary -Gasoline Range Petroleum Indicator Hazardous Substances - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)								
					Gasoline Range Petroleum Indicator Hazardous Substances <sup>1</sup>								
					Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead	Gasoline Range Organics (GRO)
DPE-7	NA	20-35	URS	9/1/2005	146	50	13.8	92	5.31	36.8	23.5	NA	1,670
			URS	12/2/2005	<0.200	<0.200	<0.200	<0.250	<0.500	<0.200	1.07	NA	531
			URS	6/6/2006	54.5	57.3	9.02	59.9	5.48	24.1	13.8	NA	1210
			URS	10/12/2006	133	73.2	9.1	141.9	5.31	23.3	6.75	NA	1140
			URS	2/7/2007	27.7	5.86	0.73	14.9	<2.5	5.14	2.38	NA	369
			URS	5/24/2007	10.2 J	4.47 J	1.38 J	6.51 J	<2.5	1.77 J	0.790 J	NA	205 J
			URS	8/10/2007	21.7	7.59	3.85	15.4	<2.5	6.16	2.01	NA	408
			URS	12/27/2007	0.6	<0.200	<0.200	<0.750	<2.5	<0.200	<0.5	NA	<50
			URS	3/27/2008	0.24	<0.200	<0.200	<0.750	<2.5	0.36	<0.5	NA	<50
GMW-1	NA	20-35	URS	7/23/2012	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.57	<50
			G-Logics	2/23/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.5	<100
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
GMW-2	NA	15-30	Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
			G-Logics	2/23/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.5	<100
GMW-3	NA	15-30	G-Logics	2/23/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.5	<100
			URS	4/10/2009	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA
SCC-1	NA	27.5-37.5	URS	5/17/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	5/28/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			Pacific Crest	8/17/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Table 7b**  
**Analytical Results Summary -Gasoline Range Petroleum Indicator Hazardous Substances - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	CMT Well Port	Screen Interval <sup>2</sup>	Sampled By	Sample Date	Groundwater Analytical Results (micrograms per liter)								
					Gasoline Range Petroleum Indicator Hazardous Substances <sup>1</sup>								
					Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Lead	Gasoline Range Organics (GRO)
SCC-2	NA	25-35	URS	5/17/2008	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	NA	NA
			URS	5/28/2008	<200	<200	<200	<200	<200	<200	NA	NA	
			Pacific Crest	8/17/2010	NA	NA	NA	NA	NA	NA	NA	NA	
			Pacific Crest	8/7/2012	NA	NA	NA	NA	NA	NA	NA	NA	
MTCA Method A Cleanup Levels for Groundwater - Ingestion					5	1000	700	1,000	160	**	**	15	800/1,000
MTCA Method B Cleanup Levels for Groundwater - Ingestion					**	**	**	**	**	**	80	**	**
MTCA Method B Screening Levels - Groundwater - Vapor Intrusion - Residential					**	**	**	**	**	**	**	**	**
MTCA Method B Screening Level - Groundwater - Vapor Intrusion - Commercial					**	**	**	**	**	**	**	**	**
Proposed Feasibility Study (FS) Cleanup Level					5	1000	700	1,000	160.0	**	80	15	800/1,000

**NOTES:**

<sup>1</sup>Analyzed by SW-846 and Ecology methods

<sup>2</sup>Feet below ground surface

<sup>3</sup>Duplicate sample

NA = not analyzed

< = concentration not detected at or above the laboratory detection limit

j = concentration estimated

**Bold** = concentration exceeds the applicable Proposed Feasibility Study Cleanup Level

*Italics* = laboratory detection limit exceeds the applicable Proposed Feasibility Study Cleanup Level

\*\*\* = Not applicable or not calculated by URS

COPCs = Contaminants of Potential Concern

MTCA = Model Toxics Control Act

Pacific Crest = Pacific Crest Environmental, LLC

G-Logics = G-Logics, Inc.

URS = URS Corporation

**Table 8**  
**VOC Analytical Results Summary - Reconnaissance Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	Sample ID	Sampled By	Sample Date	Sample Depth <sup>2</sup>	Reconnaissance Groundwater Analytical Results (micrograms per liter) <sup>1</sup>							
					Select Chlorinated Volatile Organic Compounds							
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethene	1,1-Dichloroethane
AW-SB-3	SB-3-GWS	A&W	2/18/2002	27	ND	14.9	ND	<0.39	ND	ND	<0.5	<0.33
AW-SB-6	SB-6-GWS	A&W	2/19/2002	27	ND	<36	ND	<39	ND	<38	<50	<33
AW-SB-7	SB-7-GWS	A&W	2/19/2002	12	ND	8.58	ND	0.637	ND	22.7	13.3	12.4
B-9	URS-B9	URS	5/30/2002	11	<1.00	1.50	1.07	<1.00	<1.00	23.7	1.83	22.1
B-14	URS-B14	URS	5/20/2003	25	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
B-15	URS-B15	URS	5/21/2003	29.5	<1.00	<1.00	<1.00	<1.00	<1.00	2.24	<1.00	<1.00
B-18	URS-B18	URS	5/22/2003	24.5	<1.00	<1.00	<1.00	<1.00	<1.00	1.59	<1.00	<1.00
B-19	URS-B19	URS	10/13/2003	10	<1.00	<1.00	<1.00	<1.00	<1.00	1.99	<1.00	<1.00
	URS-B19	URS	10/13/2003	25	<1.00	<1.00	<1.00	<1.00	<1.00	6.48	3.42	1.19
SB-1	URS-SB-1	URS	9/4/2012	26	<1.00	<1.00	<1.00	<1.00	<0.20	<1.00	<1.00	<1.00
SB-2	URS-SB-2	URS	9/4/2012	26	<1.00	<1.00	<1.00	<1.00	<0.20	<1.00	<1.00	<1.00
SB-3	URS-SB-3	URS	9/4/2012	31	<1.00	<1.00	<1.00	<1.00	<0.20	<1.00	<1.00	<1.00
SB-4	URS-SB-4	URS	9/5/2012	31	<1.00	<1.00	<1.00	<1.00	<0.20	<1.00	<1.00	<1.00
SB-6	URS-SB-6	URS	9/5/2012	30	<1.00	<1.00	<1.00	<1.00	<0.20	<1.00	<1.00	<1.00
SB-7	URS-SB-7	URS	9/6/2012	30	<1.00	<1.00	<1.00	<1.00	<0.20	1.74	<1.00	<1.00
SB-8	URS-SB-8	URS	9/6/2012	29	<1.00	<1.00	<1.00	<1.00	<0.20	<1.00	<1.00	<1.00
SB-9	URS-SB-9	URS	9/16/2012	25	<1.00	<1.00	<1.00	<1.00	<0.20	<1.00	<1.00	<1.00
PH-SB-1	SB1-25-RGW	Pacific Crest	9/11/2012	25	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB1-35-RGW	Pacific Crest	9/11/2012	35	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB1-45-RGW	Pacific Crest	9/11/2012	45	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB1-55-RGW	Pacific Crest	9/11/2012	55	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB1-65-RGW	Pacific Crest	9/11/2012	65	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB1-75-RGW	Pacific Crest	9/11/2012	75	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
PH-SB-2	SB2-32-RGW	Pacific Crest	8/15/2010	32	0.58	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.22
	SB2-40-RGW	Pacific Crest	8/15/2010	40	4.8	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.4



**Table 8**  
**VOC Analytical Results Summary - Reconnaissance Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Location ID	Sample ID	Sampled By	Sample Date	Sample Depth <sup>2</sup>	Reconnaissance Groundwater Analytical Results (micrograms per liter) <sup>1</sup>							
					Select Chlorinated Volatile Organic Compounds							
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethene	1,1-Dichloroethane
PH-SB-3	SB3-35-RGW	Pacific Crest	9/12/2010	35	450	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
	SB3-40-RGW	Pacific Crest	9/12/2010	40	1,000	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
	SB3-40-RGW-DUP	Pacific Crest	9/12/2010	40	970	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
	SB3-45-RGW	Pacific Crest	9/12/2010	45	630	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
PH-SB-4	SB4-24-RGW	Pacific Crest	8/22/2010	24	3,200	<50	<50	<50	<50	<50	<50	<50
	SB4-30-RGW	Pacific Crest	8/22/2010	30	1,500	<20	<20	<20	<20	<20	<20	<20
	SB4-40-RGW	Pacific Crest	8/22/2010	40	14,000	<100	<100	<100	<100	<100	<100	<100
PH-SB-6	SB6-35 RG	Pacific Crest	9/5/2012	35	130	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
	SB6-50 RG	Pacific Crest	9/5/2012	50	920	<10	<10	<10	<10	<10	<10	<10
	SB6-70 RG	Pacific Crest	9/6/2012	70	270	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	SB6-80 RG	Pacific Crest	9/6/2012	80	450	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PH-SB-7	SB7-30.0 RG	Pacific Crest	9/4/2012	30	0.37	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB7-48.0 RG	Pacific Crest	9/4/2012	48	0.62	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB7-75.0 RG	Pacific Crest	9/4/2012	75	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
PH-SB-8 <sup>3</sup>	SB8-25.0 RG	Pacific Crest	9/10/2012	25	740	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
	SB8-35.0 RG	Pacific Crest	9/10/2012	35	110	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	SB8-45.0 RG	Pacific Crest	9/10/2012	45	91	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	SB8-55.0 RG	Pacific Crest	9/10/2012	55	56	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	SB8-65.0 RG	Pacific Crest	9/10/2012	65	18	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
PH-SB-9	SB9-65 RG	Pacific Crest	9/7/2012	65	83	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
	SB9-75 RG	Pacific Crest	9/7/2012	75	26	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
PH-SB-13	SB13-70-80RG	Pacific Crest	1/7/2013	70-80	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB13-80-90RG	Pacific Crest	1/7/2013	80-90	1.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB13-100-110RG	Pacific Crest	1/8/2013	100-110	0.56	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB13-DUP-100-110RG	Pacific Crest	1/8/2013	100-110	0.57	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Table 8  
VOC Analytical Results Summary - Reconnaissance Groundwater  
Penthouse Drapery and Belshaw Site  
Seattle, Washington  
Pacific Crest No: 105-003

Location ID	Sample ID	Sampled By	Sample Date	Sample Depth <sup>2</sup>	Reconnaissance Groundwater Analytical Results (micrograms per liter) <sup>1</sup>							
					Select Chlorinated Volatile Organic Compounds							
					Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethene	1,1-Dichloroethane
PH-SB-14	SB14-30-40RG	Pacific Crest	12/26/2012	30-40	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB14-40-50RG	Pacific Crest	12/27/2012	40-50	<b>8.6</b>	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB14-70-80RG	Pacific Crest	12/28/2012	70-80	2.7	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB14-80-90RG	Pacific Crest	12/28/2012	80-90	0.41	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB14-100-110RG	Pacific Crest	12/28/2012	100-110	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
PH-SB-15	SB15-70-80RG	Pacific Crest	1/2/2013	70-80	<b>6.2</b>	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB15-80-90RG	Pacific Crest	1/2/2013	80-90	1.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
	SB15-100-106.5RG	Pacific Crest	1/3/2013	100-106.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MTCA Method A Cleanup Levels for Groundwater - Ingestion					5	5	--	--	0.2	200	**	**
MTCA Method B Cleanup Levels for Groundwater - Ingestion					21	4	16	160	--	**	**	**
MTCA Method B Screening Levels for Groundwater - Vapor Intrusion - Residential					24.5	1.5	160	130	0.35	**	**	**
MTCA Method B Screening Levels for Groundwater - Vapor Intrusion - Commercial					128.6	13.8	1538	--	3.7	**	**	**
Proposed Feasibility Study (FS) Cleanup Level					5	4	16	--	--	200	**	**

**NOTES:**

<sup>1</sup> Analyzed by SW-846 Method 8260B.

<sup>2</sup> Depth in feet below ground surface

<sup>3</sup> SB-8 drilled at 25 degree angle

< = concentration not detected at or above the laboratory detection limit. ND is used when detection limits were not provided in historical reports.

\*\*\* = Not applicable or calculated by URS

**Bold** = concentration exceeds the applicable Proposed Feasibility Study Cleanup Level

*Italics* = laboratory detection limit exceeds the applicable Proposed Feasibility Study Cleanup Level

-- indicates not applicable

MTCA = Model Toxics Control Act

Pacific Crest = Pacific Crest Environmental, LLC

Table 9  
Summary of Grab Sample Groundwater Analytical Results  
Belshaw - Seattle Collision Center  
Seattle, Washington

Sample ID	Sample Date	Sample Depth (ft bgs)	Gasoline-Range TPH (ug/L)	Voltaile Organic Compounds (ug/L)												Total Lead (ug/L)	
				Benzene	Toluene	Ethylbenzene	Total Xylenes	Isopropylbenzene	n-Propylbenzene	1,3,5- Trimethylbenzene	tert- Butylbenzene	sec- Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	1,2,4- Trimethylbenzene		Naphthalene
SB-1	09/04/12	26	13,300 J*	57.0 J*	15.0	15.1	53.0	28.7	93.0 J*	191 J*	1.55	19.6	19.9	91.3 J*	621 J*	9.37	16.3
SB-2	09/04/12	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.49
SB-3	09/04/12	31	25,600 J*	ND	ND	5.41 J	13.32 J	37.6 J	123 J*	245 J*	1.72 J	23.4 J	14.9 J	120 J*	816 J*	10.1 J	23.0
SB-4	9/5/2012 <sup>a</sup>	31	35,200	187	1,020	996	3,350	84.5	111	274	ND	ND	3.35	ND	1,030	305	2.37
SB-6	09/05/12	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.8
SB-7	9/6/2012 <sup>b</sup>	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.04
SB-8	09/06/12	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.20
SB-9	09/06/12	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.34
MTCA Method A or B Screening Level			800 / 1,000 <sup>c</sup>	5 (A)	1,000 (A)	700 (A)	1,000 (A)	800 (B)	800 (B)	80 (B)	NE	NE	NE	NE	NE	160 (A)	15 (A)

**Notes:**  
Values in **bold** font indicate that the result reported meets or exceeds the most current MTCA level based on the Ecology website.  
Model Toxics Control Act (MTCA) Cleanup Regulation, WAC 173-340. MTCA Method A values are from Ecology website CLARC tables downloaded October 2012 (<https://fortress.wa.gov/ecy/clarc/reporting/CLARCReporting.aspx>). MTCA Method B values are presented only when no MTCA Method A values are established.  
ft bgs - feet below ground surface  
ug/L - microgram per liter  
J - estimated value  
J\* - Concentration exceeded linear range of the instrument. There was insufficient sample to perform a dilution.  
ND - not detected  
TPH - total petroleum hydrocarbon  
<sup>a</sup> Chloromethane was detected at 1.07 ug/L.  
<sup>b</sup> 1,1,1-Trichloroethane was detected at 1.74 ug/L.  
<sup>c</sup> The MTCA Method A groundwater cleanup level is 800 ug/L if benzene is present. If benzene is not detected, the groundwater cleanup level is 1,000 ug/L.

**Table 10**  
**Miscellaneous Analytical Results Summary - Groundwater**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Well ID	Sampled By	Sample Date	Groundwater Analytical Results												
			Dissolved Ca (mg/L)	Dissolved Fe (mg/L)	Dissolved Mg (mg/L)	Dissolved Mn (mg/L)	Methane (ppmv)	Ethene (ppmv)	Ethane (ppmv)	Volatile Organic Acid Anions (mg/L)	Total Hardness (mg equivalent CaCO <sub>3</sub> /L)	Alkalinity (mg/L CaCO <sub>3</sub> )	Total Organic Carbon	Nitrate	Sulfate
MW-28S	URS	4/15/2009	17	<0.2	<0.04	23	0.09	<0.01	<0.01	<1.0	137	152	6.4	2.4	42
MW-28I	URS	4/15/2009	16	<0.2	21	0.014	0.53	<0.01	<0.01	<1.0	127	170	5.9	0.8	37
MW-28D	Pacific Crest	4/15/2009	21	<0.2	30	0.343	2.4	0.18	0.18	<1.0	176	166	4.9	0.4	33
MW-28D DUP	Pacific Crest	4/15/2009	18	<0.2	26	0.311	2.6	0.23	0.19	<1.0	150	166	4.9	0.4	34

**NOTES:**

< = concentration not detected at or above the laboratory detection limit

mg/L = milligrams per liter

ppmv = parts per million by volume

CaCO<sub>3</sub> = calcium carbonate

Dissolved Metals (calcium [Ca], iron [Fe], magnesium [Mg] and manganese [Mn]) by SW-846 Method 6020

Methane, ethane and ethene by RSK 175

Volatile Organic Acid Anions analytes are Acetic, Propionic, Butiric, Pyruvic, Lactic, Formic, Baleric

Total Hardness by SW-846 Method SM 2340B

Alkalinity by SM 2320B

Total Organic Carbon by SM 5310B

Nitrate and Sulfate by SW-846 Method 300.0

**Table 11**  
**Analytical Results Summary - Soil Vapor and Ambient Air**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Sample ID	Location	Sampled By	Sample Date	Air Analytical Results (micrograms per cubic meter) <sup>1</sup>				
				Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride
SV-081710	Soil vapor - subslab	Pacific Crest	8/17/2010	<b>4,700</b>	<18	<13	<13	<8.4
AA-081710	Ambient air	Pacific Crest	8/17/2010	<1.2	<0.92	<0.68	<0.68	<0.44
<b>MTCA Method B Cleanup Level - Indoor Air - Residential</b>				<b>9.6</b>	<b>0.37</b>	<b>16</b>	<b>27</b>	<b>0.28</b>
<b>MTCA Method B Screening Level - Indoor Air - Commercial</b>				<b>50.5</b>	<b>3.3</b>	--	--	<b>1.20</b>
<b>MTCA Method B Screening Level - Shallow Soil Gas (vapor attenuation 0.1)</b>				<b>96</b>	<b>3.7</b>	<b>160</b>	<b>270</b>	<b>2.8</b>
<b>MTCA Method B Screening Level - Shallow Soil Gas (vapor attenuation 0.01)</b>				<b>960</b>	<b>37</b>	<b>1,600</b>	<b>2,700</b>	<b>28</b>
<b>Proposed Feasibility Study (FS) Cleanup Level</b>				<b>9.6</b>	<b>0.37</b>	<b>16</b>	--	--

**NOTES:**

<sup>1</sup>Analyzed by TO-15 Selective Ion Monitoring. Only Site contaminants of potential concern listed.

<sup>2</sup>The MTCA Method B Cleanup Level was calculated based on a residential exposure scenario

< = concentration not detected at or above the laboratory detection limit

**Bold** = concentration exceeds the applicable Proposed Feasibility Study Cleanup Level

*Italics* = laboratory detection limit exceeds the applicable Proposed Feasibility Study Cleanup Level

-- = No information available

MTCA = Model Toxics Control Act

Pacific Crest = Pacific Crest Environmental, LLC

**Table 12**  
**Remediation Technology Screening**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Media	Remedial Technology	Description	Advantages	Disadvantages	Relative Cost
Soil	Excavation	Conventional source removal technology consisting of excavation of unsaturated soil with concentrations of COCs above applicable MTCA cleanup levels (CULs)	Highly effective and can be completed more quickly than other technologies.	Source area located beneath the existing building requiring demolition of the Building and disruption of existing business. Due to the proximity of Rainier Ave an extensive shoring system would be required to complete excavation. Effective for soil remediation only.	High due to constraints of the Building and Rainier Ave.
	Soil Vapor Extraction (SVE) Dual Phase Vapor Extraction (DPE)	Traditional treatment technology consisting of extraction of soil vapor and groundwater to reduce concentrations of COCs.	Moderate capital equipment costs and can be implemented without significant disruption to the business operations. Eliminates potential VI issues. DPE is effective for soil and groundwater remediation and SVE for soil only.	SVE pilot test results indicated limited vacuum radius and low mass removal rate with low vacuum equipment. High vacuum (liquid ring or rotary claw) required to be effective. Due to shallow groundwater, the radius of influence of DPE wells may be somewhat limited. Long term operation and maintenance required to achieve cleanup standards.	Medium to high
	Electric Resistive Heating (ERH)	ERH uses multiphase electricity to resistively heat the soil and groundwater to the boiling point of water. Heating increases the volatility of contaminants. Steam is generated that enhances contaminant extraction. The steam and contaminant vapor is collected from the subsurface by SVE and treated above ground to achieve applicable discharge permit limits.	Effective, can be implemented without significant disruption to existing building and public right-of-ways, eliminates VI issues, permanent mass reduction, rapid cleanup. Effective for soil and groundwater remediation. Short time frame to achieve cleanup standards.	High capital costs associated with resistive heating equipment and well installation.	High

**Table 12**  
**Remediation Technology Screening**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Media	Remedial Technology	Description	Advantages	Disadvantages	Relative Cost
Groundwater	Pump and Treat	Conventional hydraulic control remedial alternative consisting of pumping affected groundwater to minimize the potential for off-site migration.	Controls potential for further migration.	Unlikely to result in significant reductions in COC concentrations in groundwater or to achieve CULs. Not effective at sites with DNAPL. Requires long term operation and monitoring. Applicable to groundwater remediation only.	High
	Air Sparging	In-situ treatment. Consist of injection of compressed air into groundwater to volatilize containants.	Effective for groundwater.	Requires SVE to capture contaminants in soil vapor. Not effective in low permeability heterogeneous soil.	Medium
	ERH	See above.	Effective for soil and groundwater remediation.	Effective for soil and groundwater remediation. Effective at sites with DNAPL.	High
	DPE	Traditional treatment technology consisting of extraction of soil vapor and groundwater to reduce concentrations of CVOCs.	Effective for soil and groundwater remediation.	The limit for extraction of groundwater using vacuum lift is approximately 30-feet. Groundwater located deeper than 30-feet bgs requires secondary submersible pump.	Medium to high
Groundwater	In-situ chemical oxidation (ISCO)	Groundwater remediation using ISCO involves injecting oxidizing materials (e.g. hydrogen peroxide, potassium permanganate or sodium permanganate) and other amendments directly into the source zone and downgradient plume. The oxidizing materials chemically react with the organic contaminant, resulting in the breakdown of the contaminant into benign substances such as carbon dioxide and water.	Highly effective if chemical oxidants can be brought into contact with COCs. May require less long term monitoring than other cleanup alternatives.	Disrupts natural attenuation by changing geochemical and biochemical conditions. Rebound likely due to heterogeneous mix of soil at the site. Long term solution that requires multiple injection events to achieve cleanup. Limited effectiveness at sites with DNAPL. Effective for groundwater remediation only.	Medium to Low

**Table 12**  
**Remediation Technology Screening**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Media	Remedial Technology	Description	Advantages	Disadvantages	Relative Cost
	Enhanced Anaerobic bioremediation	Select bacteria (dehalococcoides) that thrive in anaerobic environments are capable of utilizing PCE, TCE, and other CVOC constituents as energy sources and, through the process of reductive dechlorination, transform the CVOCs into innocuous byproducts. Enhanced anaerobic bioremediation using electron receptor substrates (e.g. EOS, HRC, or sodium lactate) results in reductions in the concentrations of the COCs in groundwater by stimulating the existing populations of dehalococcoides. Implementation of this technology is conducted by injecting a solution of water and a substrate compound into groundwater through vertical borings or wells.	Relatively inexpensive and does not alter existing geochemical or biological conditions. The groundwater monitoring results indicate that reductive dechlorination of PCE and other CVOCs is occurring in groundwater at the Site. Commercially available substrates can be added to the subsurface to enhance anaerobic bioremediation including: sodium lactate, molasses, Hydrogen Release Compound (HRC™), and emulsified oil substrate (EOS).	A long term solution that requires groundwater monitoring. Limited effectiveness at sites with DNAPL. Effective for groundwater remediation only.	Medium to Low



**Table 12**  
**Remediation Technology Screening**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Media	Remedial Technology	Description	Advantages	Disadvantages	Relative Cost
<i>Soil Vapor/Indoor Air</i>	Sub-Slab Depressurization	The building foundation slab is drilled and a vent pipe is installed through the slab to the soil or rock base beneath. The vent pipe is fitted with a small fan, which induces a negative pressure in the subsurface, which prevents VOCs from entering the building and venting VOCs that may accumulate under the slab. Vapors are discharged above the roofline of the structure.	Relatively inexpensive and can be designed to address existing buildings.	Requires operation and maintenance until soil and groundwater remediation is complete.	Low
	Foundation and Wall Sealing	This technology involves the application of caulk or other elastomeric sealing compounds along the joints and cracks in building slabs and subgrade walls. This reduces the intrusion of volatile vapors into the structure. This technology is typically implemented in conjunction with active slab depressurization to increase the effectiveness of the vacuum fan.	This approach is more effective than implementation of sub-slab depressurization alone.	Limited to new construction only	Medium to Low

**Table 13**  
**Remediation Alternative Summary - Site Area 1**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Cleanup Action Alternative	Description	General Performance Record	Site Specific Issues
Alternative No. 1 - No Action	Take no further action to monitor or address concentrations of CVOCs in excess of cleanup levels.	Applicable for addressing naturally occurring or background levels of contamination that are not practicable to address using available technologies.	Does not address existing exceedances of cleanup levels in soil, soil vapor or groundwater.
Alternative No. 2 - Targeted Soil Excavation, and In-situ chemical oxidation (ISCO).	Demolition of the Building, excavation of soil to 50 feet bgs in the source area, and implementation of ISCO to address residual COC concentrations in groundwater	Excavation and ISCO have the advantage of being mature technologies that can be implemented quickly, with likely approval by Ecology.	The disadvantages of this alternative include: disruption of SCC's commercial operations due to demolition of the Building; high cost for soil disposal and shoring to achieve the required excavation depth; and repeated injections of ISCO chemicals and long term monitoring to verify that concentrations of the COCs remain below the cleanup levels. Due to the presence of DNAPL ganglia in the immediate vicinity of the source area, excavation to a depth of at least 50-feet bgs would be required. Due to the depth of the excavation, excavation sidewall shoring and a dewatering system would be required. Excavation of contaminated soil located beneath Rainier Avenue South is not feasible and residual impact in the right-of-way would not be addressed by excavation.
Alternative No. 3 - Dual Phase Extraction (DPE), Pump and Treat, Enhanced bioremediation and monitored attenuation.	DPE to address shallow affected soil and groundwater, pump-and-treat to hydraulically control groundwater the deeper zones, and implementation of ERD and MNA in the shallow and deep zones.	DPE systems are utilized to remove contaminants from shallow low permeability or heterogeneous formations. Operation of a similar approach was used with some success on the adjacent Belshaw Site to address petroleum hydrocarbons. However, the DPE system implemented at the Belshaw Site had limited effect on reducing concentrations of CVOCs in groundwater and the initial concentrations of CVOCs in groundwater at the Belshaw Site were lower than the concentrations at the Former Penthouse Drapery Site. Pump and treat is effective for hydraulic control but not for achieving cleanup levels. The generation of vinyl chloride during enhanced bioremediation may result in the need for multiple injection events.	Long term operation of the system could delay redevelopment of the affected properties. Vandalism and theft of capital equipment was a problem for consistent operation of the DPE system that previously operated on the Belshaw Site.

**Table 13**  
**Remediation Alternative Summary - Site Area 1**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Cleanup Action Alternative	Description	General Performance Record	Site Specific Issues
Alternative No. 4 - Electric Resistive Heating (ERH) and enhanced anaerobic bioremediation	ERH is an in-situ treatment of contaminated soils in which electrical current is applied to the subsurface via electrodes. The electrodes are placed in the subsurface and activated so that electrical current passes through the soil creating a resistance which heats the soil to a target temperature of 100 degrees Celsius. The components of this alternative include the following:	ERH has been demonstrated to be effective at sites with DNAPL ganglia.	The preliminary ERH system design includes 20 combination electrode/SVE wells installed within the same borehole. These wells are spaced on a grid with approximately 18 feet centers in the affected area located east of Rainier Avenue South and will extend an average of 50 feet bgs in the western portion of Site Area 1 and 90 feet in the eastern area of Site Area 1. In order to address soil and groundwater contamination beneath the Building wells will either be angled or will be installed through Building slab and connected to treatment equipment outside the Building.

Table 14  
Remediation Alternative MTCA Screening Matrix - Compliance with MTCA Threshold Criteria - Site Area 1  
Penthouse Drapery and Belshaw Site  
Seattle, Washington  
Pacific Crest No: 105-003

Cleanup Action Alternative	Protection of Human Health and the Environment	Compliance with Cleanup Standards	Compliance with Applicable State and Federal Laws	Provisions for Compliance Monitoring	Management of Short Term Risk	Implementability	Public Concern	Reasonable Time Frame	Selection Rationale	Screening Result
Alternative No. 1 - No Action	No - Unlikely to result in permanent mass or risk reduction.	No - Unlikely to achieve cleanup standards due to persistence of CVOCs and likely presence of DNAPL ganglia.	No - Cleanup is required under MTCA	No - No provisions for compliance monitoring	No - Unlikely to manage short term risks.	Yes - Easily implemented.	No - Unlikely to address public concerns.	No - Long time frame.	Does not meet MTCA threshold criteria requirements.	Rejected
Alternative No. 2 - Targeted Soil Excavation and In-situ chemical oxidation.	Yes - Permanent mass and risk reduction through soil and groundwater remediation.	Yes - The combination of remediation technologies are proven to achieve cleanup standards.	Yes - Alternative complies with applicable laws	Yes - Alternative includes provisions for compliance monitoring (i.e., groundwater monitoring)	Yes - Effective in managing short term risks.	Yes - Implementation is complicated due to presence of source area beneath existing building, and depth to DNAPL/residual COCs in soil and groundwater.	Yes - Likely to address public concerns.	Likely to achieve cleanup standards in for groundwater in 10-15 years.	Meets MTCA threshold criteria.	Retained
Alternative No. 3 - Dual Phase Extraction, Pump and Treat, ERD and MNA	Yes - Permanent mass and risk reduction through soil and groundwater remediation.	Yes - The combination of remediation technologies may achieve cleanup standards over time.	Yes - Alternative complies with applicable laws	Yes - Alternative includes provisions for compliance monitoring (i.e., groundwater monitoring)	Yes - Effective in managing short term risks.	Yes - Easily implemented with minimal disruption to Site activities.	Yes - Likely to address public concerns.	Likely to achieve some cleanup standards in 30 years.	Meets MTCA threshold criteria.	Retained
Alternative No. 4 - Electric Resistive Heating and enhanced anaerobic bioremediation	Yes - Permanent mass and risk reduction through soil and groundwater remediation.	Yes - The combination of remediation technologies are proven to achieve cleanup standards.	Yes - Alternative complies with applicable laws	Yes - Alternative includes provisions for compliance monitoring (i.e., groundwater monitoring)	Yes - Effective in managing short term risks.	Yes - Easily implemented with minimal disruption to Site activities.	Yes - Likely to address public concerns.	Yes - Likely to achieve some cleanup standards in 1-5 years.	Meets MTCA threshold criteria.	Retained

Table 15  
Remediation Alternative MTCA Screening Matrix - Weighted Ranking - Site Area 1  
Penthouse Drapery and Belshaw Site  
Seattle, Washington  
Pacific Crest No: 105-003

Cleanup Action Alternative	Protectiveness (30%)	Permanence (20%)	Long Term Effectiveness (20%)	Management of Short Term Risk (10%)	Implementability (10%)	Public Concern (10%)	Screening Result
Alternative No. 2 (A2) - Targeted Soil Excavation, VI mitigation, In-situ chemical oxidation.	2	1	1	0	0	0	1
Alternative No. 3 (A3) - Dual Phase Extraction, Pump and Treat, ERD and MNA	0	0	0	1	2	1	0.4
Alternative No. 4 (A4) - Electric Resistive Heating (ERH), VI mitigation, anaerobic bioremediation	1	2	2	2	1	2	1.6
Explanation	A2 is more protective because it removes the source area completely.	A4 is more permanent because it remediates the source in place, rather than transferring it to another location (landfill).	A4 is more effective in the long term because it is less susceptible to rebound.	Short term risks associated with excavation are higher than the risks associated with ERH and the risks associated with ERH are higher than the risks associated with DPE	Implementability of A2 requires the demolition of the SCC Building and substantial shoring along Rainier Avenue.	Public concern regarding large excavation is higher than an in-situ cleanup.	The screening results indicate A4 is the preferred alternative

Note: Higher number indicates a better ranking (e.g. a rank of "2" for Permanence for A4 indicates that in a paired comparison A4 was a more permanent solution than both A2 and A3)

**Table 16**  
**Remediation Alternative Summary - Site Area 2**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Cleanup Action Alternative	Description	General Performance Record	Site Specific Issues
Alternative No. 1 - Monitored Natural Attenuation	Consists of monitoring the natural reductions of the concentrations of COCs (gaoline-range hydrocarbons) in groundwater until the proposed FS Cleanup Levels are reached.	COC concentrations in groundwater are decreasing and will likely continue to occur until contaminants are completely degraded.	Remediation of the source area would minimize the potential for recontamination of SA-2.
Alternative No. 2 - Targeted Soil Excavation, and Enhanced Aerobic Bioremediation.	Excavation of soil to approximately 30 feet bgs in the source area, and placement of oxygen-releasing compounds to address residual COC concentrations in groundwater within the right-of-way	Excavation and enhanced aerobic bioremediation have the advantage of being mature technologies that can be implemented quickly, with likely approval by Ecology.	The disadvantages of this alternative include: long term monitoring to verify that concentrations of the COCs remain below the cleanup levels. Due to the depth of the excavation and proximity to 22nd Avenue South, excavation sidewall shoring and a dewatering system could be required. Excavation of contaminated soil located beneath 22nd Avenue South is not likely to be feasible and residual impact in the right-of-way would not be addressed by ISCO.
Alternative No. 3 - Electric Resistive Heating (ERH)	ERH is an in-situ treatment of contaminated soils in which electrical current is applied to the subsurface via electrodes. The electrodes are placed in the subsurface and activated so that electrical current passes through the soil creating a resistance which heats the soil to a target temperature of 100 degrees Celsius.	ERH has been demonstrated to be effective at sites with DNAPL ganglia.	The preliminary ERH system design includes 9 combination electrode/SVE wells installed within the same borehole. These wells are spaced on a grid with approximately 17 feet centers in the affected area located west of 22nd Avenue South and will extend an average of 35 feet bgs in Site Area 2. In order to address soil and groundwater contamination beneath the 22nd Avenue South right-of-way wells will be angled.

Table 17  
Remediation Alternative MTCA Screening Matrix - Compliance with MTCA Threshold Criteria - Site Area 2  
Penthouse Drapery and Belshaw Site  
Seattle, Washington  
Pacific Crest No: 105-003

Cleanup Action Alternative	Protection of Human Health and the Environment	Compliance with Cleanup Standards	Compliance with Applicable State and Federal Laws	Provisions for Compliance Monitoring	Management of Short Term Risk	Implementability	Public Concern	Reasonable Time Frame	Selection Rationale	Screening Result
Alternative No. 1 - Monitored Natural Attenuation	Yes - Permanent mass and risk reduction through groundwater remediation.	Yes - Likely to achieve cleanup standards based on monitoring data collected to date over a period of time.	Yes - Alternative complies with applicable laws	Yes - Alternative includes provisions for compliance monitoring (i.e., groundwater monitoring)	Yes - Effective in managing short term risks.	Yes - Easily implemented.	Yes - Likely to address public concerns.	Likely to achieve cleanup standards in groundwater 5 - 10 years.	Meets MTCA threshold criteria.	Retained
Alternative No. 2 - Targeted Soil Excavation, and Enhanced Aerobic Bioremediation.	Yes - Permanent mass and risk reduction through groundwater remediation.	Yes - The combination of remediation technologies are proven to achieve cleanup standards.	Yes - Alternative complies with applicable laws	Yes - Alternative includes provisions for compliance monitoring (i.e., groundwater monitoring)	Yes - Effective in managing short term risks.	Yes - Implementable with appropriate considerations given to adjacent right-of-way	Yes - Likely to address public concerns.	Likely to achieve cleanup standards in for groundwater in 3 years.	Meets MTCA threshold criteria.	Retained
Alternative No. 3 - Electric Resistive Heating (ERH)	Yes - Permanent mass and risk reduction through groundwater remediation.	Yes - This aggressive remediation technology is proven to achieve cleanup standards.	Yes - Alternative complies with applicable laws	Yes - Alternative includes provisions for compliance monitoring (i.e., groundwater monitoring)	Yes - Effective in managing short term risks.	Yes - Implementable with appropriate considerations given to adjacent right-of-way	Yes - Likely to address public concerns.	Likely to achieve some cleanup standards in 1-3 years.	Meets MTCA threshold criteria.	Retained

Table 18  
Remediation Alternative MTCA Screening Matrix - Weighted Ranking - Site Area 2  
Penthouse Drapery and Belshaw Site  
Seattle, Washington  
Pacific Crest No: 105-003

Cleanup Action Alternative	Protectiveness (30%)	Permanence (20%)	Long Term Effectiveness (20%)	Management of Short Term Risk (10%)	Implementability (10%)	Public Concern (10%)	Screening Result
Alternative No. 1 (A1) - MNA	0	0	1	2	2	2	0.8
Alternative No. 2 (A2) - Excavation and Enhanced Aerobic Bioremediation	2	2	2	0	1	1	1.6
Alternative No. 3 (A3) - ERH	2	1	1	1	1	1	1.3
Explanation	A2 and A3 are more protective because they actively remediate COCs.	A2 is more permanent because it will be more likely to remove COCs adsorbed within low-permeability zones within the subsurface.	A2 is more effective in the long term because it is less susceptible to rebound due to repartitioning from low-permeability zones within the subsurface.	Short term risks associated with excavation and ISCO are higher than the risks associated with MNA or ERH	Implementability of MNA is easier than either excavation and ISCO or ERH.	Public concern regarding excavation and ISCO and ERH is typically higher than MNA.	The screening results indicate A2 is the preferred alternative

Note: Higher number indicates a better ranking (e.g. a rank of "2" for Permanence for A4 indicates that in a paired comparison A4 was a more permanent solution than both A2 and A3)



**Table 19**  
**Remediation Alternative Summary - Site Area 3**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Cleanup Action Alternative	Description	General Performance Record	Site Specific Issues
Alternative No. 1 - Monitored Natural Attenuation	Consists of monitoring the natural reductions of the concentrations of COCs (PCE, TCE and 1,4-dioxane) in groundwater until the proposed FS Cleanup Levels are reached.	COC concentrations in groundwater are decreasing and will likely continue to occur until contaminants are completely degraded.	The aggressive remediation activities proposed for concentrations of PCE in SA-1 are intended to remediate the source area beneath the SCC Building and would minimize the potential for recontamination of SA-3. The rate of degradation of 1,4-dioxane is uncertain.
Alternative No. 2 - Enhanced reductive dechlorination and monitored attenuation.	Consists of the implementation of enhanced in-situ anaerobic bioremediation for areas where concentrations of COCs exceed a remediation level protective of indoor air under a commercial exposure scenario and monitored natural attenuation of the concentrations of COCs in groundwater below the remediation level but above the proposed FS Cleanup Levels.	COC concentrations in groundwater are decreasing and will likely continue to occur until contaminants are completely degraded. Enhanced bioremediation is likely to speed up the process of degradation.	The aggressive remediation activities proposed for concentrations of PCE in SA-1 are intended to remediate the source area beneath the SCC Building and would minimize the potential for recontamination of SA-3. The rate of degradation of 1,4-dioxane is uncertain.
Alternative No. 3 - Targeted In-situ chemical oxidation (ISCO).	Consists of the implementation of ISCO for areas where concentrations of PCE, TCE and 1,4-dioxane exceed the proposed FS Cleanup Levels.	CVOCs and 1,4-dioxane can be degraded by ISCO, but subsurface conditions and recalcitrant nature of 1,4-dioxane may limit effectiveness.	ISCO materials are antiseptics and can inhibit or kill microorganisms at concentrations used in ISCO applications. Use of ISCO can have the unintended consequence of eliminating the naturally occurring bacteria populations that was previously degrading the COCs.
Alternative No. 4 - Pump and Treat (Groundwater Extraction and Above-Grade Oxidation Treatment)	Consists of a network of groundwater extraction wells connected to a centralized treatment system with above-grade oxidation (e.g. ultraviolet light, ozone) equipment. Treatment system would be connected to the sanitary sewer system.	Pump and treat is effective for hydraulic control but achieving cleanup levels often requires an extended timeframe.	Long term operation of the system could delay redevelopment of the affected properties. Vandalism and theft of capital equipment has historically been a problem at this site.

Table 20  
Remediation Alternative MTCA Screening Matrix - Compliance with MTCA Threshold Criteria - Site Area 3  
Penthouse Drapery and Belshaw Site  
Seattle, Washington  
Pacific Crest No: 105-003

Cleanup Action Alternative	Protection of Human Health and the Environment	Compliance with Cleanup Standards	Compliance with Applicable State and Federal Laws	Provisions for Compliance Monitoring	Management of Short Term Risk	Implementability	Public Concern	Reasonable Time Frame	Selection Rationale	Screening Result
Alternative No. 1 - Monitored Natural Attenuation	Yes - Permanent mass and risk reduction through groundwater remediation.	Yes - Likely to achieve cleanup standards based on monitoring data collected to date.	Yes - Alternative complies with applicable laws	Yes - Alternative includes provisions for compliance monitoring (i.e., groundwater monitoring)	Yes - Effective in managing short term risks.	Yes - Easily implemented.	Yes - Likely to address public concerns.	Likely to achieve cleanup standards in groundwater 5 - 10 years.	Meets MTCA threshold criteria.	Retained
Alternative No. 2 - Enhanced reductive dechlorination and monitored attenuation.	Yes - Permanent mass and risk reduction through groundwater remediation.	Yes - The combination of remediation technologies are proven to achieve cleanup standards.	Yes - Alternative complies with applicable laws	Yes - Alternative includes provisions for compliance monitoring (i.e., groundwater monitoring)	Yes - Effective in managing short term risks.	Yes - Easily implemented with minimal disruption to Site activities.	Yes - Likely to address public concerns.	Likely to achieve cleanup standards in for groundwater in 5-7 years.	Meets MTCA threshold criteria.	Retained
Alternative No. 3 - Targeted In-situ chemical oxidation (ISCO).	Yes - Permanent mass and risk reduction through groundwater remediation.	Yes - The remediation technologies may achieve cleanup standards over time.	Yes - Alternative complies with applicable laws	Yes - Alternative includes provisions for compliance monitoring (i.e., groundwater monitoring)	Yes - Effective in managing short term risks.	Yes - Easily implemented with minimal disruption to Site activities.	Yes - Likely to address public concerns.	Likely to achieve some cleanup standards in 5-10 years.	Meets MTCA threshold criteria.	Retained
Alternative No. 4 - Pump and Treat (Groundwater Extraction and Above-Grade Oxidation Treatment)	Yes - Permanent mass and risk reduction through groundwater remediation.	Yes - The remediation technologies may achieve cleanup standards over time.	Yes - Alternative complies with applicable laws	Yes - Alternative includes provisions for compliance monitoring (i.e., groundwater monitoring)	Yes - Effective in managing short term risks.	Yes - Easily implemented with minimal disruption to Site activities.	Yes - Likely to address public concerns.	Likely to achieve some cleanup standards in 5-10 years.	Meets MTCA threshold criteria.	Retained

**Table 21**  
**Remediation Alternative MTCA Screening Matrix - Weighted Ranking - Site Area 3**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Cleanup Action Alternative	Protectiveness (30%)	Permanence (20%)	Long Term Effectiveness (20%)	Management of Short Term Risk (10%)	Implementability (10%)	Public Concern (10%)	Screening Result
Alternative No. 1 (A1) - MNA	0	0	0	2	2	1	0.5
Alternative No. 2 (A2) - ERD and MNA	1	2	2	1	1	2	1.5
Alternative No. 3 (A3) - ISCO	2	1	1	0	0	0	1
Alternative No. 4 (A4) - Pump-And-Treat	2	2	2	0	0	0	1.4
Explanation	A3 and A4 are more protective because they address CVOCs and 1,4-dioxane and do not generate additional degradation compounds.	A2 and A4 are more permanent because they will be less likely to suffer from rebound than A3.	A2 and A4 are more effective in the long term because they are less susceptible to rebound than A3.	Short term risks associated with A3 and A4 are higher than the risks associated with A1 and A2.	Implementability of MNA is easier than ERD, ISCO, or pump-and-treat.	Public concerns regarding ISCO chemicals and sewer discharge are higher than ERD or MNA.	The screening results indicate A2 is the preferred alternative

Note: Higher number indicates a better ranking (e.g. a rank of "2" for Permanence for A4 indicates that in a paired comparison A4 was a more permanent solution than both A2 and A3)

**APPENDIX A  
PROPERTY LEGAL DESCRIPTION**

**DRAFT FOR ECOLOGY REVIEW  
REMEDIAL INVESTIGATION-FEASIBILITY STUDY REPORT**

**FORMER PENTHOUSE DRAPERY AND BELSHAW SITE  
1752 RAINIER AVENUE SOUTH  
SEATTLE, WASHINGTON**

**PACIFIC CREST PN: 105-003**

**Table A-1**  
**Legal Description of Affected Parcels**  
**Penthouse Drapery and Belshaw Site**  
**Seattle, Washington**  
**Pacific Crest No: 105-003**

Property Name	Current Property Owner Name	Former Property Owner Name	Property Address	Property City	Property Zip Code	Township	Range	Section	Quarter-Quarter	Parcel ID	Legal Description
Former Penthouse Drapery Property	Todd Sullivan	Colin Tsuchikawa	1752 Rainier Avenue South	Seattle	98144	24	4	9	NW	754830-1155	SANDERS SUPL PLAT LESS ST
Belshaw - Parking lot	Brunzer, LLC	Belshaw Brothers, Inc.	Rainier Avenue South	Seattle	98144	24	4	9	NW	754830-1150	SANDERS SUPL PLAT LESS ST
Vacant Lot - East of Former Penthouse Drapery Property	CENTIOLI IMPROVEMENT LLC	Adulkarim Nagi	2113 South State Street	Seattle	98144	24	4	9	NW	754830-1100	SANDERS SUPL PLAT W 1/2
Belshaw - Paint Building	Brunzer, LLC	Belshaw Brothers, Inc.	1762 Rainier Avenue South	Seattle	98144	24	4	9	NW	754830-1115	SANDERS SUPL PLAT 3 & 8 LESS ST & LOT 3 BLK 1 CREEDMOOR ADD
Belshaw - Welding Bldg. Parking	Brunzer, LLC	Belshaw Brothers, Inc.	Rainier Avenue South	Seattle	98144	24	4	9	NW	754830-1120	SANDERS SUPL PLAT 4 & POR E OF RAINIER LESS FOR ST LOT 7
Belshaw - Welding Bldg.	Brunzer, LLC	Belshaw Brothers, Inc.	1765 22nd Ave. South	Seattle	98144	24	4	9	NW	182230-0020	CREEDMOOR ADD. Plat Block:1, Plat Lot 4
Check Cashing Business	CENTIOLI IMPROVEMENT LLC	MCDONALD MARK+BROOKE	2100 South Grand Street	Seattle	98144	24	4	9	NW	754830-1125	SANDERS SUPL PLAT 5 & POR E OF RAINIER AVE OF 6 LESS ST
Vacant Lot - Former Office	CENTIOLI IMPROVEMENT LLC	MAGNELLI MARTIN	2110 South Grand Street	Seattle	98144	24	4	9	NW	182230-0025	CREEDMOOR ADD
Vacant Lot	SLEEPY KOALA LLC	Belshaw Brothers, Inc.	Rainier Avenue South	Seattle	98144	24	4	9	NW	388190-0515	KINNEARS JOS C ADD N 15 FT OF 1 ALL 2 & 3 LESS ST

**APPENDIX B  
DPE SYSTEM INFORMATION**

**DRAFT FOR ECOLOGY REVIEW  
REMEDIAL INVESTIGATION-FEASIBILITY STUDY REPORT**

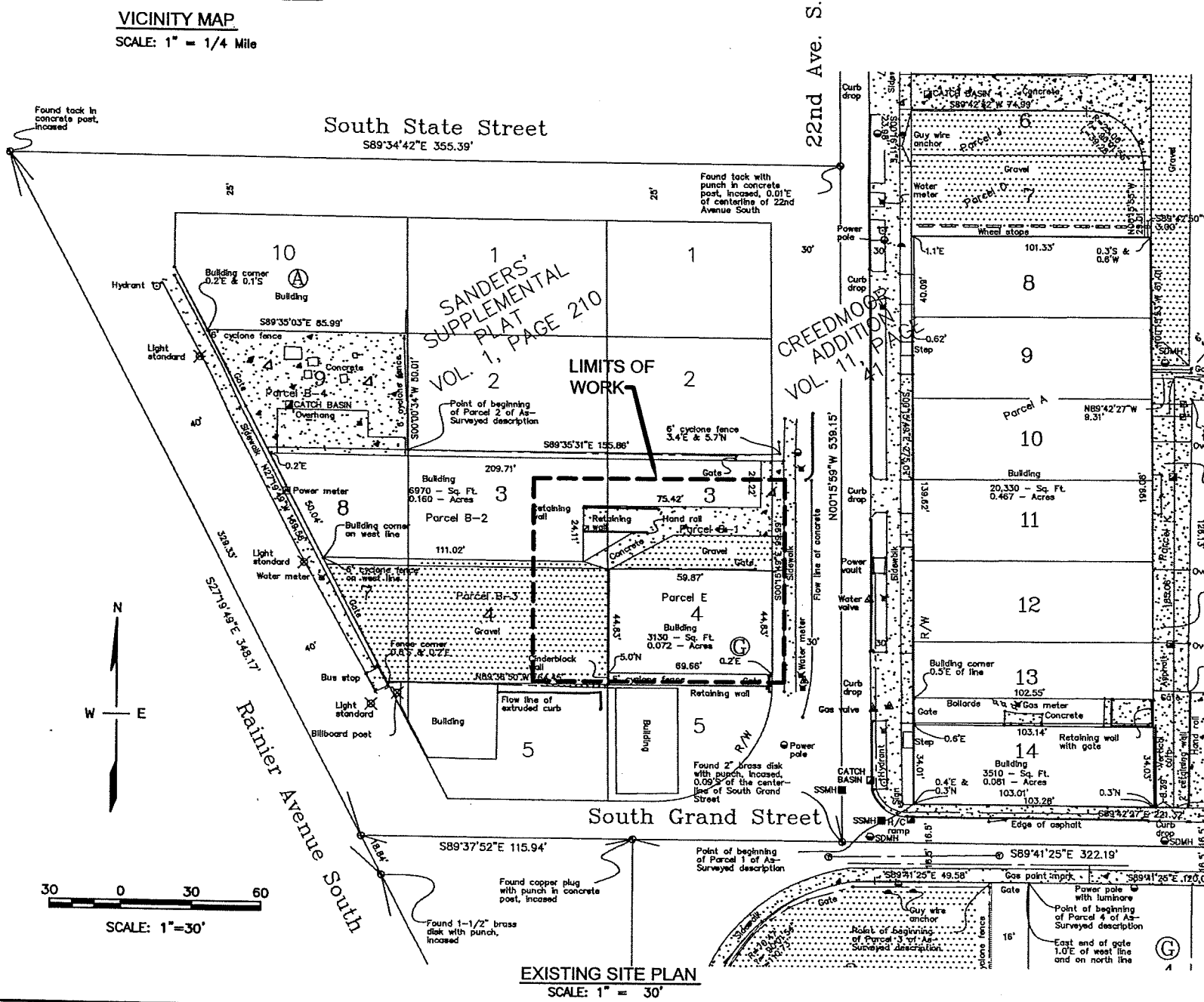
**FORMER PENTHOUSE DRAPERY AND BELSHAW SITE  
1752 RAINIER AVENUE SOUTH  
SEATTLE, WASHINGTON**

**PACIFIC CREST PN: 105-003**

BELSHAW/ENODIS DUAL PHASE EXTRACTION  
GROUNDWATER TREATMENT SYSTEM



VICINITY MAP  
SCALE: 1" = 1/4 Mile



GENERAL NOTES

- PROJECT TEAM:  
A. PROJECT OWNER - ENODIS CORPORATION  
B. PROPERTY OWNER - BELSHAW BROS., INC.  
C. ENGINEER - URS CORPORATION, SEATTLE, WA  
D. CONTRACTOR - URS CONSTRUCTION SERVICES, LAKEWOOD, WA
- SURVEY/EXISTING SITE PLAN - FROM ALTA/ACSM LAND TITLE SURVEY (AUGUST 13, 2001; LAST REVISION, SEPTEMBER 10, 2001) FOR FATCO-BELSHAW B&C SITE NO. 20010518-1, PREPARED FOR ENODIS CORPORATION BY CENTRE POINTE SURVEYING, FEDERAL WAY, WA, JOB 1840.
- LEGAL DESCRIPTION - FROM ALTA/ACSM LAND TITLE SURVEY; A PORTION OF NE1/4 OF NW1/4 OF SECTION 9, TOWNSHIP 24N, RANGE 4E, WILLAMETTE MERIDIAN, CITY OF SEATTLE, KING COUNTY: PARCEL B: NO. 1 - LOT 3, BLOCK 1, CREEDMOOR ADDITION (VOL. 11 OF PLATS, PAGE 41); NO. 2 - LOT 3 AND PORTION OF LOT 8 EAST OF RAINIER AVENUE, BLOCK 26, SANDERS SUPPLEMENTAL PLAT (VOL. 1, PAGE 210); NO. 3 - LOT 4 AND PORTION OF LOT 7 EAST OF RAINIER AVENUE, BLOCK 26, SANDERS SUPPLEMENTAL PLAT (VOL. 1, PAGE 210); NO. 4 - LOT 9, BLOCK 26, SANDERS SUPPLEMENTAL PLAT (VOL. 1, PAGE 210), EXCEPT PORTION CONDEMNED IN KING COUNTY SUPERIOR COURT CAUSE NO. 29945 FOR RAINIER AVENUE, ORDINANCE NO. 6047 OF CITY OF SEATTLE.
- USE FOR CONSTRUCTION - DESIGN/BUILD, 60 PERCENT DESIGN DEVELOPMENT, AND FIELD ENGINEERING WITH KNOWLEDGE AND APPROVAL BY THE ENGINEER.
- DIMENSIONS - VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS. SCALE SHOWN ON THE DRAWINGS IS FOR GUIDANCE ONLY.
- EXISTING UTILITIES - LOCATIONS SHOWN ARE APPROXIMATE; FIELD LOCATE UTILITIES PRIOR TO SITE WORK.  
A. ONE-CALL LOCATES, 1-800-424-5555, CALL TWO BUSINESS DAYS BEFORE YOU DIG  
B. WATER, SEWER, POWER: SEATTLE PUBLIC WORKS, 206-684-3000  
C. TELEPHONE: QWEST COMMUNICATIONS, 1-800-244-1111  
D. NATURAL GAS: PUGET SOUND ENERGY, 1-888-225-5773
- COORDINATE ACCESS WITH PROPERTY OWNER PRIOR TO START OF CONSTRUCTION, ALL WORK AND MATERIALS PROVIDED BY OTHERS.
- CONVENTIONAL INDUSTRY STANDARD DETAILS APPLY WHERE NO SPECIAL DETAIL IS SHOWN. IDENTIFY (SIGNS AND/OR LABELS) PIPING, EQUIPMENT, AND WELLS.
- SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR; COMPLY WITH REGULATORY REQUIREMENTS.

LEGEND

- |                              |                 |                        |                   |
|------------------------------|-----------------|------------------------|-------------------|
| MONUMENT                     | GAS METER       | STORM DRAINAGE MANHOLE | WEST              |
| CALCULATED MONUMENT POSITION | POWER METER     | CATCH BASIN            | DEGREES           |
| BILLBOARD POST               | POWER POLE      | SANITARY SEWER MANHOLE | FEET OR MINUTES   |
| SIGN                         | GUY POLE        | POWER OVERHEAD         | INCHES OR SECONDS |
| BOLLARD                      | GUY WIRE ANCHOR | CONCRETE SURFACE       | NO. NUMBER        |
| TELEPHONE MANHOLE            | LIGHT STANDARD  | ASPHALT SURFACE        | ST. STREET        |
| GAS CONNECTION               | WATER METER     | NORTH                  |                   |
| GAS VALVE                    | HYDRANT         | SOUTH                  |                   |
| GAS METER                    | WATER VALVE     | EAST                   |                   |

DRAWING INDEX

DRAWING NO.	TITLE
G-1	COVER SHEET
C-1	DUAL PHASE EXTRACTION (DPE) SYSTEM SITE PLAN
C-2	DPE SECTIONS AND DETAILS
C-3	DPE DETAILS
E-1	DPE ELECTRICAL

REFERENCES

TITLE

REVISIONS

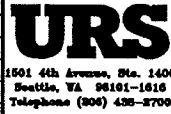
DESCRIPTION

REVISIONS

DESCRIPTION

DRAWING INFORMATION

DRAWING SCALE: AS NOTED  
DESIGNED BY: B. MILLER/H. EHLERS  
DRAWN BY: C. VAN SLIKE  
CHECKED BY: P. KALINA  
APPROVED BY: H. EHLERS  
FILE: \\Enodis Corp\Belshaw\RO1\33756604001R01.dwg



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ENODIS CORPORATION  
1761 & 1765 22ND AVENUE SOUTH  
SEATTLE, WA

COVER SHEET

DATE:  
JOB NO. 33756604  
REVISION:  
DRAWING NO. G-1

# PROPOSED SITE PLAN KEY NOTES

- ① PROPANE TANK, 500 GAL
- ② PROPANE LINE - 1" FLEXHOSE
- ③ DPE WELL IN BUILDING INTERIOR - NEAT CUT CONCRETE FOR WELL CONSTRUCTION, FLUSH-MOUNT WELL HEAD, AND VAPOR/GROUNDWATER PIPE TO ADJACENT WALL, DETAIL  $\frac{1}{C-3}$
- ④ DPE PIPE IN BUILDING INTERIOR - SECURE WITH PIPE CLAMPS AND ANCHORS TO STRUCTURAL ELEMENTS OF INTERIOR WALL AND CEILING (NOM. 9'-0"), ATTACH MIN. 6"-D" O.C.; COORDINATE ALIGNMENT WITH EXISTING BUILDING UTILITIES.
- ⑤ DPE WELL IN CONCRETE SIDEWALK - NEAT CUT CONCRETE FOR FLUSH-MOUNT WELL HEAD AND VAPOR/GROUNDWATER PIPE TO ADJACENT WALL, DETAIL  $\frac{3}{C-3}$
- ⑥ DPE PIPE FOR BUILDING EXTERIOR - SECURE 2'-0" ABOVE SIDEWALK WITH PIPE CLAMPS AND EXPANSION-TYPE ANCHORS TO EXTERIOR WALL (CONCRETE, BRICK), ATTACH MIN. 6'-0" O.C., COORDINATE ALIGNMENT WITH EXISTING BUILDING UTILITIES.
- ⑦ VAPOR-TO-OXIDIZER PIPE - PLACE ON GROUND SURFACE SUPPORT ON CINDER BLOCKS.
- ⑧ EQUIPMENT ENCLOSURE PRE-FABRICATED MODULAR UNIT, NOMINAL 8' BY 24' (H2 OIL RECOVERY EQUIPMENT, INC.) FOR VAPOR/GROUNDWATER TREATMENT EQUIPMENT, SEE P&ID, DETAIL  $\frac{1}{C-2}$
- ⑨ MANIFOLD - VAPOR/GROUNDWATER EXTRACTION FROM 6 DPE WELLS, EXPANSION CAPACITY FOR FUTURE DPE WELLS, SEE DETAIL  $\frac{2}{C-2}$  AND
- ⑩ THERMAL OXIDIZER - NOMINAL 150 SCFM, GAS-FIRED OXIDIZER, SKID-MOUNTED UNIT (LEASED); FUTURE REMOVAL AND REPLACEMENT BY VAPOR-PHASE GRANULAR ACTIVATED CARBON VESSELS.
- ⑪ DPE WELL IN GRAVEL AREA - FLUSH-MOUNT WELL HEAD IN MINIMUM 4' BY 4', 6"-THICK CONCRETE PAD.
- ⑫ DPE PIPE IN GRAVEL AREA - DIRECT BURY, SEE DETAIL  $\frac{4}{C-1}$
- ⑬ TREATED GROUNDWATER DISCHARGE TO SIDE SEWER
  - A. QUANTITY - 3 GPM (MIN) TO 10 GPM (MAXIMUM)
  - B. AUTHORITY - KING COUNTY INDUSTRIAL WASTEWATER DISCHARGE PERMIT (NIC - PROVIDED BY ENGINEER)
  - C. DISCHARGE PIPE TO SIDE SEWER - SEE DETAIL  $\frac{1}{C-2}$
- ⑭ EXISTING SIDE SEWER - LOCATE EXISTING SIDE SEWER, INSTALL SANITARY WYE IN EXISTING 4-INCH CONCRETE PIPE FROM PAINT BUILDING.

## PROPOSED PIPING SCHEDULE

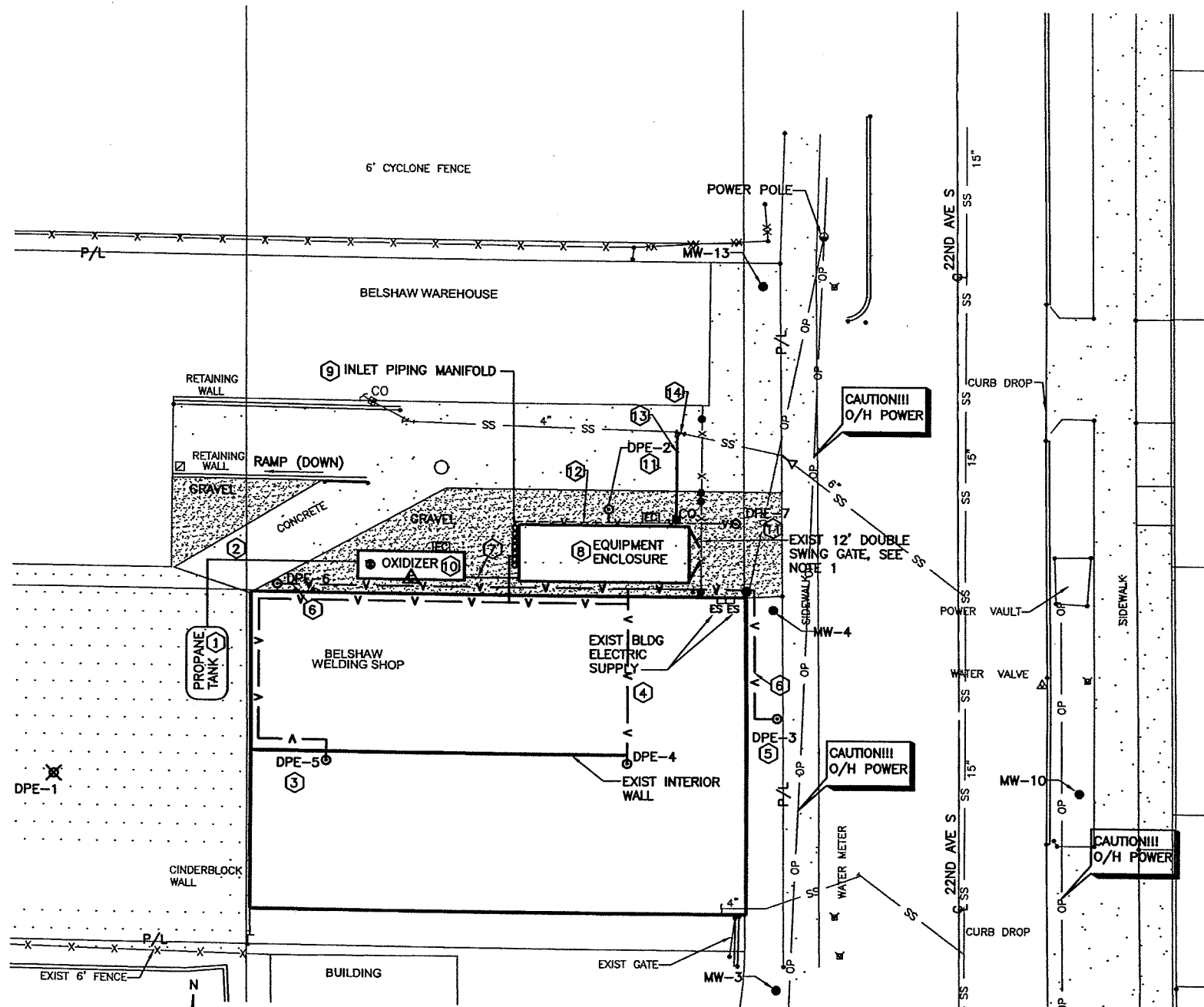
TYPE	DIAM (INCHES)	MATERIAL
GAS	1"	FLEXHOSE
VAPOR/GW EXTRACTION	2"	PVC, SCH 80
VAPOR/GW MANIFOLD	SEE $\frac{2}{C-3}$	PVC, SCH 80
DISCHARGE TO SIDE SEWER	4"	PVC, SCH 40
VAPOR TO OXIDIZER PIPE	3"	FLEXHOSE

## SITE PLAN NOTES

1. PROTECT EXISTING FENCE AND GATE; PROVIDE PRIVACY SLATS FOR CHAIN-LINK GATE, SOUTH END ONLY.
2. LEVEL AND COMPACT EXISTING GRAVEL GROUND SURFACE PRIOR TO PLACING EQUIPMENT ENCLOSURE ON PROPERTY.
3. TEMPORARY EROSION AND SEDIMENTATION CONTROL PLAN:
  - A. COMPLY WITH SMALL PROJECT CONSTRUCTION CONTROL PLAN REQUIREMENTS (< 5,000 SF OF NEW OR REPLACED IMPERVIOUS SURFACE, LESS THAN 1 ACRE DISTURBANCE).
  - B. RUNOFF CONTROL - FILTER FENCE, PLASTIC COVERS FOR STOCKPILES.
  - C. STORM DRAINS - INSTALL PRE-MANUFACTURED INLET INSERT, MAINTAIN FOR DURATION OF CONSTRUCTION.
  - D. SITE GRADING/DRAINAGE - PREVENT SURFACE WATER FROM WORK AREA TO LEAVE PROPERTY BOUNDARY.
  - E. CONSTRUCTION ENTRANCE - MAINTAIN EXISTING CONCRETE ACCESS, CLEAN VEHICLE TIRES BEFORE EXITING SITE.
4. GROUNDWATER EXTRACTION AND TRANSFER PIPING - SLOPE 0.5 PERCENT (MIN) TOWARD THE EQUIPMENT ENCLOSURE; AVOID SAGS AND DEFLECTIONS IN LINES; INSTALL DRAIN VALVE AT LOW POINTS.
5. TRENCHING
  - A. NEAT SAW-CUT CONCRETE SURFACES; REPAIR TO EXISTING CONDITION.
  - B. SEE TYPICAL TRENCH, SECTION  $\frac{4}{C-3}$
  - C. COMPACT TRENCH BACKFILL TO 95 PERCENT OF MAXIMUM DRY DENSITY.
6. OUTSIDE PIPING - COVER WITH 1" PREFORMED FIBERGLASS INSULATION AND ALUMINUM JACKET.

## LEGEND

EXISTING	PROPOSED	
		GAS VALVE
		GAS METER
		GAS SUPPLY PIPE
		POWER POLE
		ELECTRICAL SUPPLY PANEL
		ELECTRICAL CONTROL PANEL
		CLEAN OUT
		OXIDIZER EXHAUST STACK
		DUAL PHASE EXTRACTION WELL
		GROUNDWATER MONITOR WELL
		CHAINLINK FENCE
		GATE
		STREET CENTERLINE
		SANITARY SEWER
		SANITARY WYE
		WATER METER
		WATER VALVE
		VAPOR AND GROUNDWATER EXTRACTION PIPE (ABOVEGROUND)
		VAPOR AND GROUNDWATER EXTRACTION PIPE (UNDERGROUND)
		PIPE DIAMETER CHANGE
		MODULAR ENCLOSURE



PROPOSED SITE PLAN  
PLAN  
SCALE: 1" = 10'

10 5 0 10  
SCALE: 1"=10'

### REFERENCES

TITLE

NO. BY. DATE

1 BAM 6.21.04 AS-BUILTS

### REVISIONS

DESCRIPTION

### REVISIONS

DESCRIPTION

### DRAWING INFORMATION

DRAWING SCALE: AS NOTED

DESIGNED BY: H EHLERS

DRAWN BY: C VAN SLYKE

CHECKED BY: P KALINA

APPROVED BY: H EHLERS

FILE: ...Enodis Corp\Belshaw\RO1\33756604005R01.dwg

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ENODIS CORPORATION  
1761 & 1765 22ND AVENUE SOUTH  
SEATTLE, WA

DUAL PHASE EXTRACTION (DPE)  
SYSTEM SITE PLAN

DATE: 6.21.04

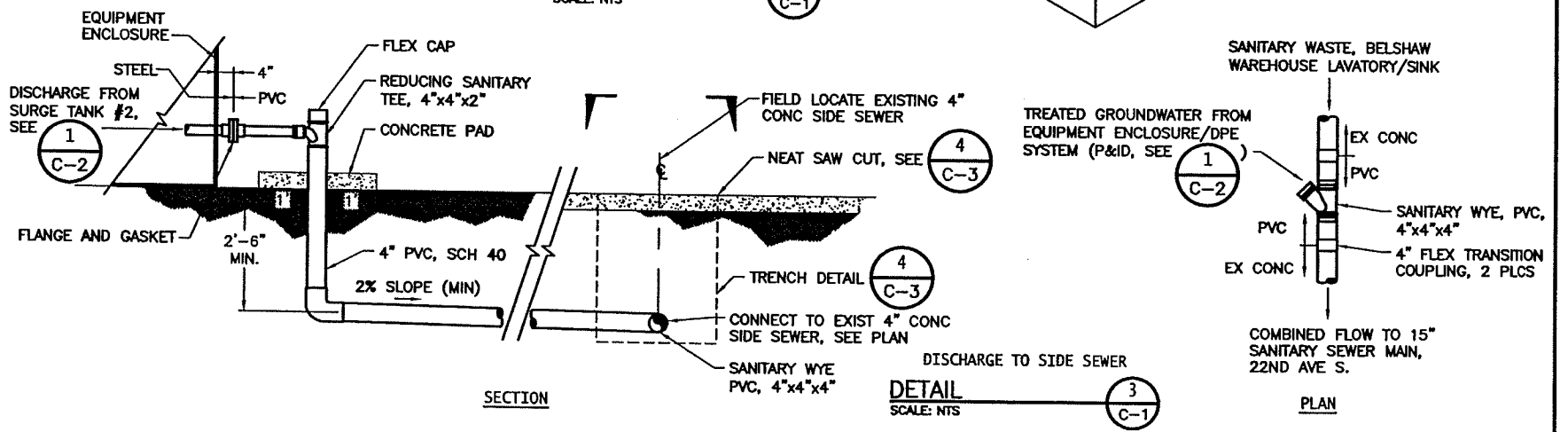
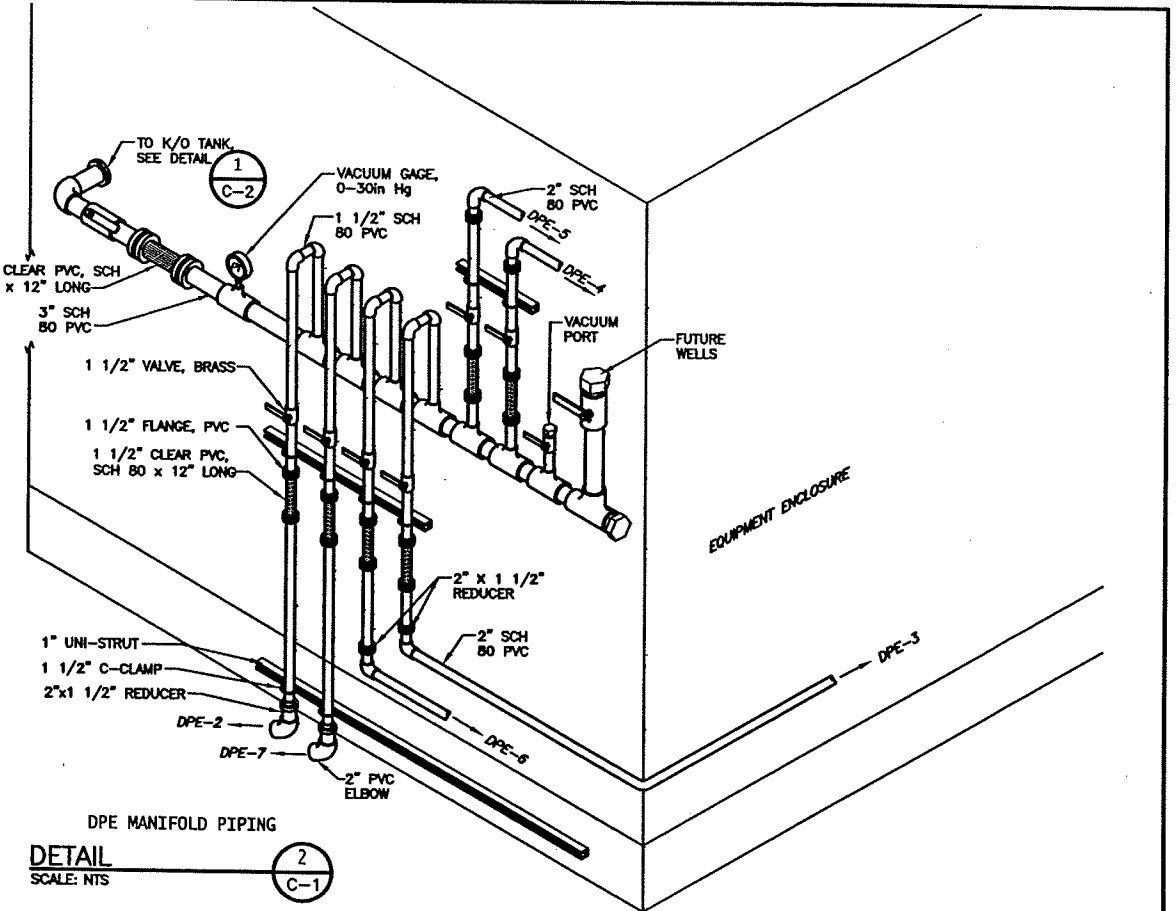
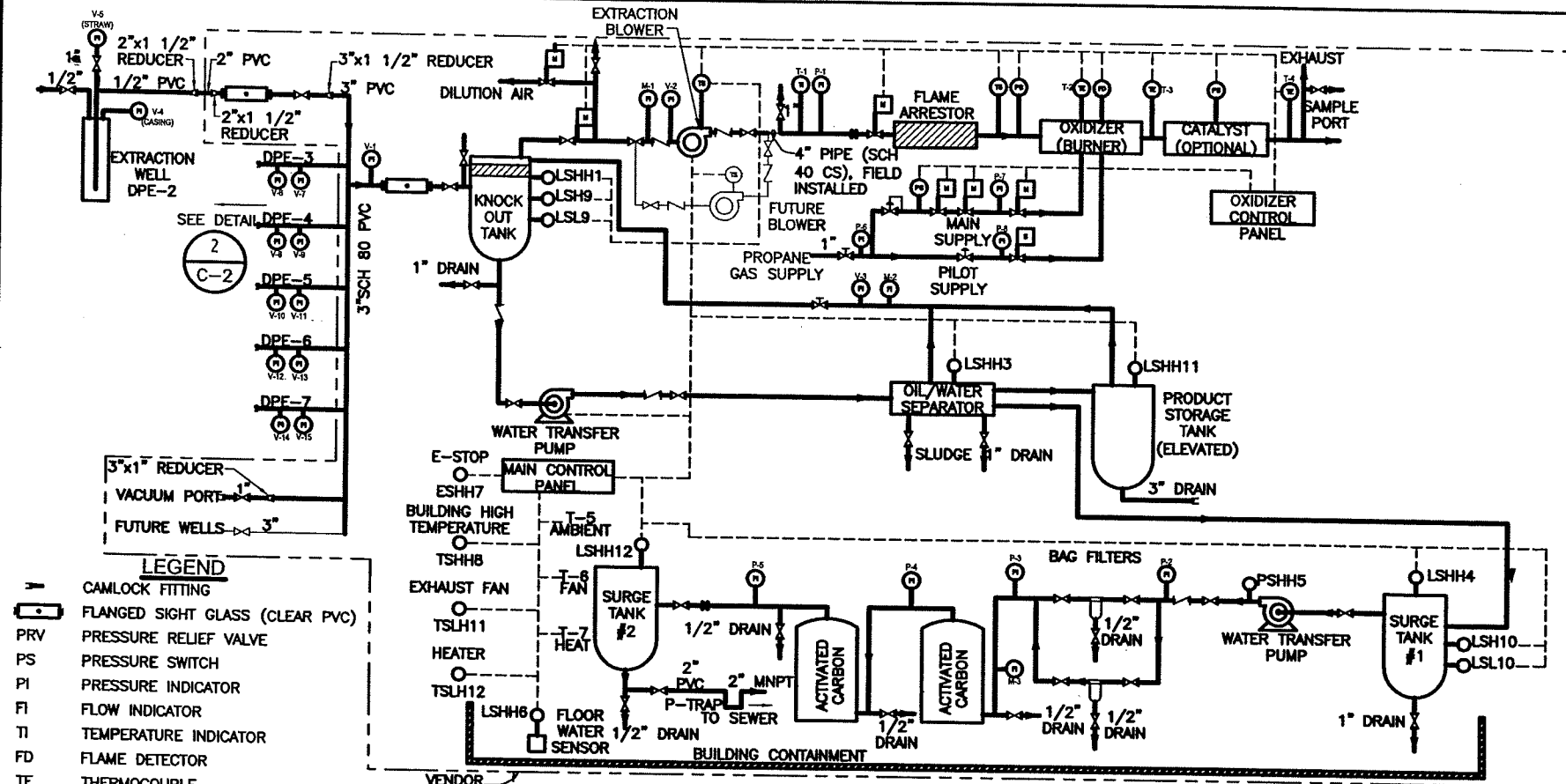
JOB NO. 33756604

REVISION 1

DRAWING NO. C-1



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ESTIMATED SIDE SEWER FLOW AND CAPACITY

SOURCE OF DISCHARGE	DFUs*, MIN.	DFUs, MAX.
WATER CLOSET, TANK OPERATED (1)	4	4
LAVATORY SINK (1)	1	2
EXPECTED GROUNDWATER (GW) TREATMENT DISCHARGE (7.5 GPM, 2 DFUs PER GPM)	15	---
MAX. GW TREATMENT DISCHARGE (10 GPM, 2 DFUs PER GPM)	---	20
TOTAL DFUs	20	26

FLOW CAPACITY OF 4-INCH DRAIN PIPE, IN DFUs

VERTICAL PIPING	DFUs, MIN.	DFUs, MAX.
---	---	256
HORIZONTAL PIPING	---	216

FLOW TO SIDE SEWER

EST. DISCHARGE RANGE (GPM) FOR COMBINED SANITARY AND GW TREATMENT SYSTEM DISCHARGE**	GPM, MIN	GPM, MAX
---	12	22

\*DFUS = DRAINAGE FIXTURE UNITS, FROM UNIFORM PLUMBING CODE 2000, TABLE 7-3.

\*\*INCLUDES PEAKING FACTOR FOR WORKER USE OF WAREHOUSE SANITARY FACILITIES, 2 TIMES PUMPING RATE FOR GW TREATMENT SYSTEM AS MAX DISCHARGE (GRAVITY DRAINAGE OF SURGE TANK #2).

EQUIPMENT SCHEDULE\*

QUANTITY	DESCRIPTION	SIZE	MANUFACTURER
1	KNOCKOUT (K/O) TANK	50 GALLON	H 2 OIL RECOVERY
1	K/O TANK WATER TRANSFER PUMP	1 HP, 10 GPM	MOYNO
1	EXTRACTION BLOWER	15 HP, 150 SCFM @ 17 IN HG	RIETSCHLE
1 (FUTURE)	EXTRACTION BLOWER**	15 HP, 150 SCFM @ 17 IN HG	RIETSCHLE
2	BAG FILTERS	50 MICRON	H 2 OIL RECOVERY
1	OIL WATER SEPARATOR	10 GPM	PAN AMERICA
1	PRODUCT STORAGE TANK	55 GALLON	H 2 OIL RECOVERY
1	O/W SEPARATOR AND SURGE TANK	200 GALLONS	H 2 OIL RECOVERY
1	SURGE TANK TRANSFER PUMP	0.5 HP, 10 GPM	H 2 OIL RECOVERY
2	LIQUID GAC VESSELS	10 GPM, 450 POUNDS CARBON	CLEAN ENVIRONMENTAL CONCEPTS
1	DISCHARGE SURGE TANK	200 GALLONS	H 2 OIL RECOVERY
1	THERMAL/CATALYTIC OXIDIZER	150 SCFM, 20' DISCHARGE STACK	H 2 OIL RECOVERY (LEASE)
2 (FUTURE)	VAPOR GAC VESSELS**	300 SCFM, 1000 POUNDS CARBON	CLEAN ENVIRONMENTAL CONCEPTS
1	EQUIPMENT ENCLOSURE	8' BY 24'	H 2 OIL RECOVERY

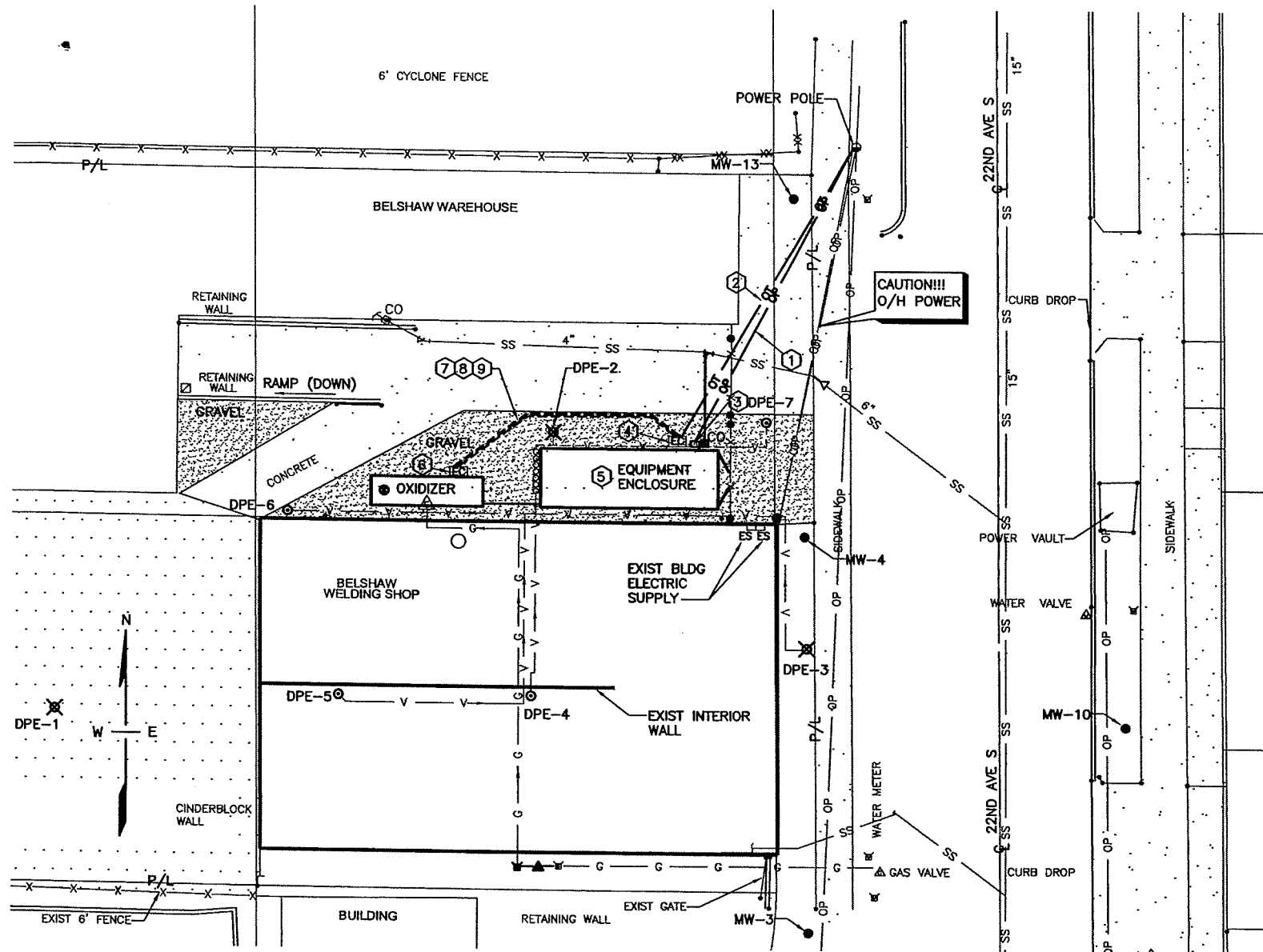
\*EQUIPMENT TO BE DELIVERED TO SITE BY VENDOR IN MODULAR EQUIPMENT ENCLOSURE FOR CONNECTION TO FIELD CONSTRUCTED PORTIONS OF THE DPE TREATMENT SYSTEM.

\*\*FUTURE EQUIPMENT NOTED FOR COORDINATION WITH ELECTRICAL AND PROCESS CONTROL.

REFERENCES				REVISIONS				REVISIONS				DRAWING INFORMATION				ENODIS CORPORATION				DATE	
TITLE				DESCRIPTION				DESCRIPTION				DRAWING SCALE: AS NOTED				1761 & 1765 22ND AVENUE SOUTH				6.21.04	
																SEATTLE, WA				JOB NO.	
																				33756604	
																				REVISION	
																				1	
																				DRAWING NO.	
																				C-2	

C-3

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PROPOSED SITE PLAN  
ELECTRICAL PLAN  
SCALE: 1" = 10'

LOAD SUMMARY				VOLTS: 240/120V, 3PH, 4W MAIN. C.B.: 200A	
	CONN. KVA	DEMAND FACTOR	DEMAND KVA		
TYPE "L": LIGHTING LOADS	0.30	125%	0.38	BUS: 200AMP POLES: 42	
TYPE "C": CONTINUOUS LOADS	2.40	125%	3.00		
TYPE "R": RECEPTACLES (FIRST 10KVA)	0.36	100%	0.36	MOUNTING: PANEL AIC RATING: 1BD	
TYPE "R": RECEPTACLES (OVER 10KVA)		50%			
TYPE "M": LARGEST MOTOR LOAD	17.40	125%	21.75	DEMAND AMPS: HIGH LEG CONNECTED AMPS:	
TYPE "M": OTHER MOTOR LOADS	25.02	100%	25.02		
TYPE "N": NON-CONTINUOUS LOADS	3.00	100%	3.00		
TOTAL	48.48	-	53.51		

#### KEY NOTES

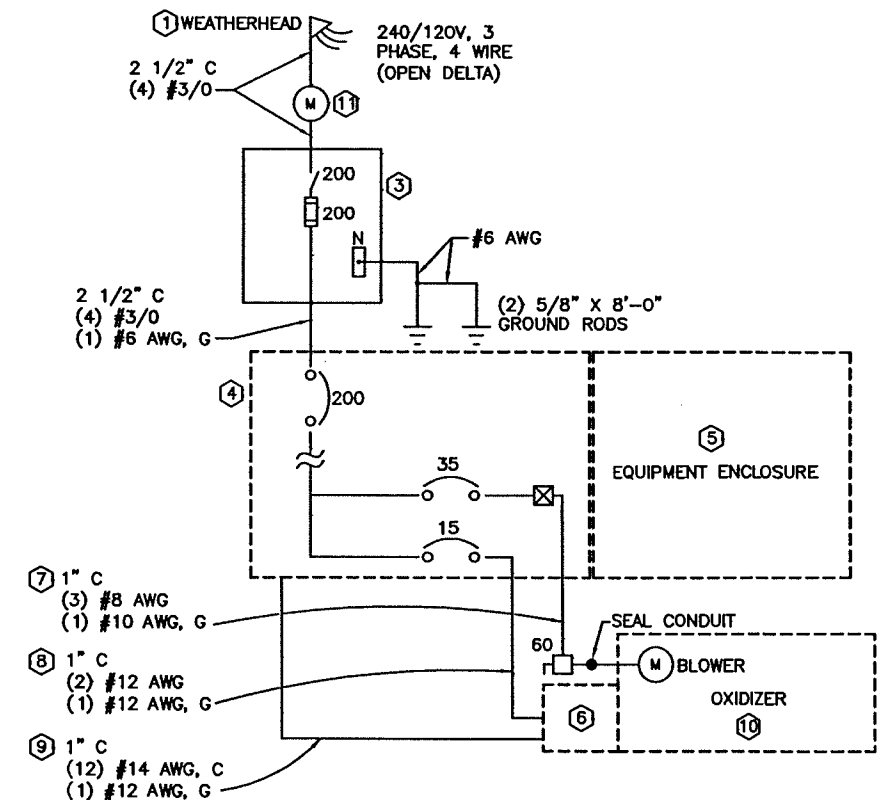
- OVERHEAD SERVICE DROP BY SEATTLE CITY LIGHT (SCL). MAINTAIN 18'-0" MINIMUM CLEARANCE ABOVE DRIVEWAY. COORDINATE WEATHERHEAD ELEVATION AND LOCATION WITH SCL. GUY AS REQUIRED. PROVIDE PIGTAILS PER SCL REQUIREMENTS.
- OVERHEAD PHONE SERVICE: MAINTAIN 18'-0" MINIMUM CLEARANCE ABOVE DRIVEWAY. COORDINATE INSTALLATION WITH PHONE COMPANY.
- SERVICE DISCONNECT SWITCH, NEMA 3R ENCLOSURE.
- ELECTRICAL ENCLOSURE BY EQUIPMENT VENDOR. SEE SHOP DRAWINGS FOR CONNECTIONS. ALL WIRING, CONDUIT AND CONDUIT SEALS BETWEEN ELECTRICAL ENCLOSURE AND EQUIPMENT ENCLOSURE BY VENDOR.
- EQUIPMENT ENCLOSURE BY EQUIPMENT VENDOR. CLASS 1, DIV 1, HAZARDOUS (CLASSIFIED) LOCATION.
- OXIDIZER CONTROL PANEL BY EQUIPMENT VENDOR.
- OXIDIZER BLOWER FEEDER. STARTER BY VENDOR. PROVIDE DISCONNECT SWITCH (NEMA 3R) PER NEC.
- OXIDIZER CONTROL POWER: SEE SHOP DRAWINGS FOR TERMINATIONS.
- CONTROL CONDUCTORS FOR "OXIDIZER TIMED OFF", "OXIDIZER INLET VALVE", AND "OXIDIZER UP TO TEMP" PLUS SIX SPARE. TERMINATE PER VENDOR'S SHOP DRAWINGS.
- OXIDIZER EQUIPMENT BY VENDOR. CLASS 1, DIV 1, HAZARDOUS (CLASSIFIED) LOCATION.
- 200 AMP METER BASE WITH MANUAL BLOCK BYPASS PER SCL REQUIREMENTS. COORDINATE LOCATION AND MOUNTING ARRANGEMENT WITH SCL. METER BY SCL.

#### GENERAL NOTES

- ALL WORK SHALL COMPLY WITH WAC 296-46B (2002 NEC) AND SEATTLE CITY LIGHT REQUIREMENTS.
- ALL WIRING SHALL BE COPPER, THHN - THWN.
- EXPOSED CONDUITS AND CONDUITS IN HAZARDOUS (CLASSIFIED) AREAS SHALL BE RIGID GALVANIZED STEEL. BURIED CONDUITS SHALL BE PVC, SCHEDULE 40.
- TRENCHING:
  - NEAT SAW-CUT CONCRETE SURFACES: REPAIR TO EXISTING CONDITION.
  - SEE TYPICAL TRENCH, SECTION C-3
  - COMPACT TRENCH BACKFILL TO 95 PERCENT OF MAXIMUM DRY DENSITY.

#### LEGEND:

OP ——— OVERHEAD POWER  
OT ——— OVERHEAD TELEPHONE  
----- BURIED ELECTRICAL



ONE-LINE DIAGRAM  
SCALE: NTS

#### REFERENCES

TITLE

NO. BY. DATE

#### REVISIONS

DESCRIPTION

NO. BY. DATE

#### REVISIONS

DESCRIPTION

#### DRAWING INFORMATION

DRAWING SCALE: AS NOTED

DESIGNED BY: J. GIBSON

DRAWN BY: C. VAN SLYKE

CHECKED BY: P. KALINA

APPROVED BY: H. EHLERS

FILE: ...\\Enodis Corp\\Belshaw\\RO1\\33756604003R01.dwg

**URS**

1501 4th Avenue, Ste. 1400  
Seattle, WA 98101-1616  
Telephone (206) 496-8700

ENODIS CORPORATION

1761 & 1765 22ND AVENUE SOUTH

BELSHAW/ENODIS DPE SYSTEM  
SEATTLE, WA

DPE ELECTRICAL

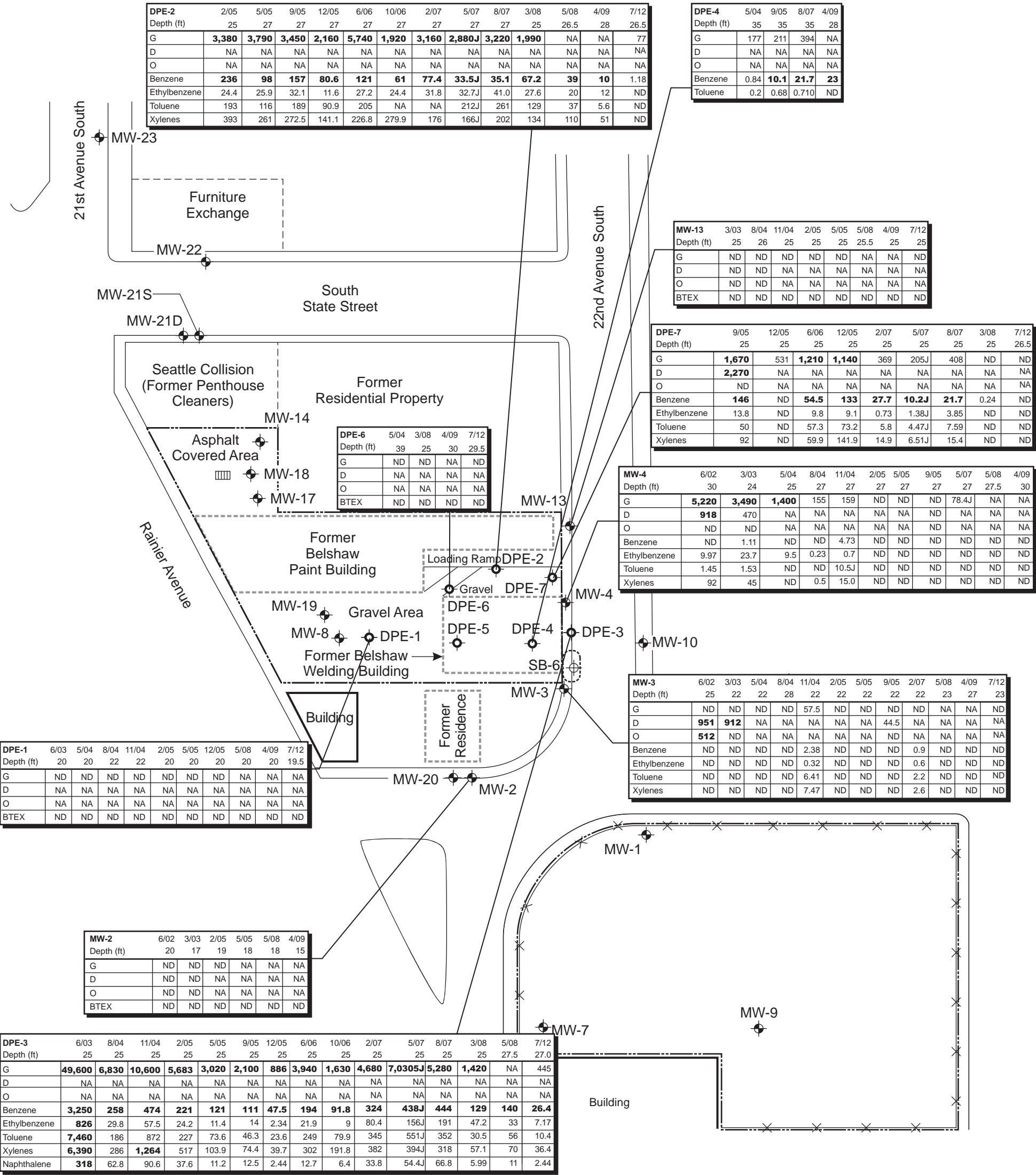
DATE:

JOB NO.  
33756604

REVISION

DRAWING NO.

E-1



LEGEND

- Subject property boundary
- X— Fence
- Approximate former UST excavation location
- Former building
- ⊕ Aaron & Wright, Inc. water sample location
- ⊙ URS monitoring well location
- ⊙ URS dual phase extraction well location
- bold** Exceeds MTCA method A groundwater cleanup levels
- ND Not detected
- NA Not analyzed
- J Estimated value

Concentrations in µg/L:

G	Gasoline-range hydrocarbons
D	Diesel-range hydrocarbons
O	Oil-range hydrocarbons
BTEX	Benzene Toluene Ethylbenzene Total xylenes



<b>MW-1</b>	6/02	3/03	←Date
Depth (ft)	23	21	←Depth of sample (feet below ground surface)

**APPENDIX C  
SEWER UTILITY VIDEO**

**DRAFT FOR ECOLOGY REVIEW  
REMEDIAL INVESTIGATION-FEASIBILITY STUDY REPORT**

**FORMER PENTHOUSE DRAPERY AND BELSHAW SITE  
1752 RAINIER AVENUE SOUTH  
SEATTLE, WASHINGTON**

**PACIFIC CREST PN: 105-003**

**APPENDIX D  
LABORATORY ANALYTICAL REPORTS**

**DRAFT FOR ECOLOGY REVIEW  
REMEDIAL INVESTIGATION-FEASIBILITY STUDY REPORT**

**FORMER PENTHOUSE DRAPERY AND BELSHAW SITE  
1752 RAINIER AVENUE SOUTH  
SEATTLE, WASHINGTON**

**PACIFIC CREST PN: 105-003**



14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

January 9, 2013

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1301-056

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on January 8, 2013.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'DB', with a long horizontal line extending to the right.

David Baumeister  
Project Manager

Enclosures

Date of Report: January 9, 2013  
Samples Submitted: January 8, 2013  
Laboratory Reference: 1301-056  
Project: 105-003

### **Case Narrative**

Samples were collected on January 8, 2013 and received by the laboratory on January 8, 2013. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.



Date of Report: January 9, 2013  
 Samples Submitted: January 8, 2013  
 Laboratory Reference: 1301-056  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB13-100-110RG</b>						
Laboratory ID: 01-056-01						
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloromethane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromomethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloroethane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Iodomethane	ND	1.3	EPA 8260C	1-8-13	1-8-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-8-13	1-8-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloroform	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Trichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Dibromomethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-8-13	1-8-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	

Date of Report: January 9, 2013  
 Samples Submitted: January 8, 2013  
 Laboratory Reference: 1301-056  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-100-110RG</b>					
Laboratory ID:	01-056-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Tetrachloroethene	0.56	0.20	EPA 8260C	1-8-13	1-8-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromoform	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Bromobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	86	66-120				
<i>Toluene-d8</i>	87	70-120				
<i>4-Bromofluorobenzene</i>	98	63-120				

Date of Report: January 9, 2013  
 Samples Submitted: January 8, 2013  
 Laboratory Reference: 1301-056  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260C**

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB13-DUP-100-110RG</b>						
Laboratory ID: 01-056-02						
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloromethane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromomethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloroethane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Iodomethane	ND	1.3	EPA 8260C	1-8-13	1-8-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-8-13	1-8-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloroform	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Trichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Dibromomethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-8-13	1-8-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	

Date of Report: January 9, 2013  
 Samples Submitted: January 8, 2013  
 Laboratory Reference: 1301-056  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-DUP-100-110RG</b>					
Laboratory ID:	01-056-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Tetrachloroethene	0.57	0.20	EPA 8260C	1-8-13	1-8-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromoform	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Bromobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>88</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>108</i>	<i>63-120</i>				

Date of Report: January 9, 2013  
 Samples Submitted: January 8, 2013  
 Laboratory Reference: 1301-056  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0108W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloromethane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromomethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloroethane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Iodomethane	ND	1.3	EPA 8260C	1-8-13	1-8-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-8-13	1-8-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloroform	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Trichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Dibromomethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-8-13	1-8-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	

Date of Report: January 9, 2013  
 Samples Submitted: January 8, 2013  
 Laboratory Reference: 1301-056  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C  
 METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0108W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Tetrachloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromoform	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Bromobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>90</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>107</i>	<i>63-120</i>				

Date of Report: January 9, 2013  
 Samples Submitted: January 8, 2013  
 Laboratory Reference: 1301-056  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**SB/SBD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	Limit	Flags
					Recovery				RPD		
SPIKE BLANKS											
Laboratory ID:	SB0108W1										
	SB	SBD		SB	SBD		SB	SBD			
1,1-Dichloroethene	11.7	11.0		10.0	10.0		117	110	65-141	6	15
Benzene	10.0	9.81		10.0	10.0		100	98	77-125	2	15
Trichloroethene	10.5	10.7		10.0	10.0		105	107	80-125	2	15
Toluene	10.6	10.5		10.0	10.0		106	105	80-125	1	15
Chlorobenzene	10.2	11.1		10.0	10.0		102	111	80-140	8	15
Surrogate:											
Dibromofluoromethane							84	84	66-120		
Toluene-d8							91	89	70-120		
4-Bromofluorobenzene							96	114	63-120		



### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference





Analytical Laboratory Testing Services  
14648 NE 95th Street • Redmond, WA 98052  
Phone: (425) 883-3881 • [www.onsite-env.com](http://www.onsite-env.com)

## Chain of Custody

Page \_\_\_\_\_ of \_\_\_\_\_

[illegible]



14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

January 14, 2013

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-008  
Laboratory Reference No. 1301-051

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on January 7, 2013.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister  
Project Manager

Enclosures

Date of Report: January 14, 2013  
Samples Submitted: January 7, 2013  
Laboratory Reference: 1301-051  
Project: 105-008

### **Case Narrative**

Samples were collected on January 7, 2013 and received by the laboratory on January 7, 2013. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

#### Halogenated Volatiles (soil) EPA 8260C Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-64-66</b>					
<b>Laboratory ID:</b>	<b>01-051-01</b>					
Dichlorodifluoromethane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Chloromethane	ND	0.0049	EPA 8260C	1-10-13	1-10-13	
Vinyl Chloride	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Bromomethane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Chloroethane	ND	0.0049	EPA 8260C	1-10-13	1-10-13	
Trichlorofluoromethane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloroethene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Iodomethane	ND	0.0049	EPA 8260C	1-10-13	1-10-13	
Methylene Chloride	ND	0.0049	EPA 8260C	1-10-13	1-10-13	
(trans) 1,2-Dichloroethene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloroethane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
2,2-Dichloropropane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
(cis) 1,2-Dichloroethene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Bromochloromethane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Chloroform	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,1,1-Trichloroethane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Carbon Tetrachloride	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloropropene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,2-Dichloroethane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Trichloroethene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,2-Dichloropropane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Dibromomethane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Bromodichloromethane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
2-Chloroethyl Vinyl Ether	ND	0.0049	EPA 8260C	1-10-13	1-10-13	
(cis) 1,3-Dichloropropene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
(trans) 1,3-Dichloropropene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-64-66</b>					
Laboratory ID:	01-051-01					
1,1,2-Trichloroethane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Tetrachloroethene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,3-Dichloropropane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Dibromochloromethane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,2-Dibromoethane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Chlorobenzene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,1,1,2-Tetrachloroethane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Bromoform	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Bromobenzene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,1,2,2-Tetrachloroethane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,2,3-Trichloropropane	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
2-Chlorotoluene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
4-Chlorotoluene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,3-Dichlorobenzene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,4-Dichlorobenzene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,2-Dichlorobenzene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
1,2-Dibromo-3-chloropropane	ND	0.0049	EPA 8260C	1-10-13	1-10-13	
1,2,4-Trichlorobenzene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
Hexachlorobutadiene	ND	0.0049	EPA 8260C	1-10-13	1-10-13	
1,2,3-Trichlorobenzene	ND	0.00099	EPA 8260C	1-10-13	1-10-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>114</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>52-125</i>				

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-74-76</b>					
<b>Laboratory ID:</b>	<b>01-051-02</b>					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Chloromethane	ND	0.0051	EPA 8260C	1-10-13	1-10-13	
Vinyl Chloride	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Bromomethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Chloroethane	ND	0.0051	EPA 8260C	1-10-13	1-10-13	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Iodomethane	ND	0.0051	EPA 8260C	1-10-13	1-10-13	
Methylene Chloride	ND	0.0051	EPA 8260C	1-10-13	1-10-13	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Bromochloromethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Chloroform	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Trichloroethene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Dibromomethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Bromodichloromethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
2-Chloroethyl Vinyl Ether	ND	0.0051	EPA 8260C	1-10-13	1-10-13	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-74-76</b>					
Laboratory ID:	01-051-02					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Tetrachloroethene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Dibromochloromethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Chlorobenzene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Bromoform	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Bromobenzene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
2-Chlorotoluene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
4-Chlorotoluene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,2-Dibromo-3-chloropropane	ND	0.0051	EPA 8260C	1-10-13	1-10-13	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Hexachlorobutadiene	ND	0.0051	EPA 8260C	1-10-13	1-10-13	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>117</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>91</i>	<i>52-125</i>				

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-86-88</b>					
<b>Laboratory ID:</b>	<b>01-051-04</b>					
Dichlorodifluoromethane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Chloromethane	ND	0.0046	EPA 8260C	1-10-13	1-10-13	
Vinyl Chloride	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Bromomethane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Chloroethane	ND	0.0046	EPA 8260C	1-10-13	1-10-13	
Trichlorofluoromethane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloroethene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Iodomethane	ND	0.0046	EPA 8260C	1-10-13	1-10-13	
Methylene Chloride	ND	0.0046	EPA 8260C	1-10-13	1-10-13	
(trans) 1,2-Dichloroethene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloroethane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
2,2-Dichloropropane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
(cis) 1,2-Dichloroethene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Bromochloromethane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Chloroform	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,1,1-Trichloroethane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Carbon Tetrachloride	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloropropene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,2-Dichloroethane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Trichloroethene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,2-Dichloropropane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Dibromomethane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Bromodichloromethane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
2-Chloroethyl Vinyl Ether	ND	0.0046	EPA 8260C	1-10-13	1-10-13	
(cis) 1,3-Dichloropropene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
(trans) 1,3-Dichloropropene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	



Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-86-88</b>					
Laboratory ID:	01-051-04					
1,1,2-Trichloroethane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Tetrachloroethene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,3-Dichloropropane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Dibromochloromethane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,2-Dibromoethane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Chlorobenzene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,1,1,2-Tetrachloroethane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Bromoform	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Bromobenzene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,1,2,2-Tetrachloroethane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,2,3-Trichloropropane	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
2-Chlorotoluene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
4-Chlorotoluene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,3-Dichlorobenzene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,4-Dichlorobenzene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,2-Dichlorobenzene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
1,2-Dibromo-3-chloropropane	ND	0.0046	EPA 8260C	1-10-13	1-10-13	
1,2,4-Trichlorobenzene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
Hexachlorobutadiene	ND	0.0046	EPA 8260C	1-10-13	1-10-13	
1,2,3-Trichlorobenzene	ND	0.00092	EPA 8260C	1-10-13	1-10-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>113</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>52-125</i>				

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-94-96</b>					
<b>Laboratory ID:</b>	<b>01-051-06</b>					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Chloromethane	ND	0.0056	EPA 8260C	1-10-13	1-10-13	
Vinyl Chloride	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Bromomethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Chloroethane	ND	0.0056	EPA 8260C	1-10-13	1-10-13	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Iodomethane	ND	0.0056	EPA 8260C	1-10-13	1-10-13	
Methylene Chloride	ND	0.0056	EPA 8260C	1-10-13	1-10-13	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Bromochloromethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Chloroform	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Trichloroethene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Dibromomethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Bromodichloromethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
2-Chloroethyl Vinyl Ether	ND	0.0056	EPA 8260C	1-10-13	1-10-13	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	

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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-94-96</b>					
Laboratory ID:	01-051-06					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Tetrachloroethene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Dibromochloromethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Chlorobenzene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Bromoform	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Bromobenzene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
2-Chlorotoluene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
4-Chlorotoluene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,2-Dibromo-3-chloropropane	ND	0.0056	EPA 8260C	1-10-13	1-10-13	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Hexachlorobutadiene	ND	0.0056	EPA 8260C	1-10-13	1-10-13	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>115</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>52-125</i>				

Date of Report: January 14, 2013  
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 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB13-104-106</b>						
Laboratory ID: 01-051-07						
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Chloromethane	ND	0.0058	EPA 8260C	1-10-13	1-10-13	
Vinyl Chloride	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Bromomethane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Chloroethane	ND	0.0058	EPA 8260C	1-10-13	1-10-13	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Iodomethane	ND	0.0058	EPA 8260C	1-10-13	1-10-13	
Methylene Chloride	ND	0.0058	EPA 8260C	1-10-13	1-10-13	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Bromochloromethane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Chloroform	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Trichloroethene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Dibromomethane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Bromodichloromethane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
2-Chloroethyl Vinyl Ether	ND	0.0058	EPA 8260C	1-10-13	1-10-13	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	

Date of Report: January 14, 2013  
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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-104-106</b>					
Laboratory ID:	01-051-07					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Tetrachloroethene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Dibromochloromethane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Chlorobenzene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Bromoform	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Bromobenzene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
2-Chlorotoluene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
4-Chlorotoluene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
1,2-Dibromo-3-chloropropane	ND	0.0058	EPA 8260C	1-10-13	1-10-13	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
Hexachlorobutadiene	ND	0.0058	EPA 8260C	1-10-13	1-10-13	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	1-10-13	1-10-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>113</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>52-125</i>				

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB13-DUP-104-106</b>						
Laboratory ID: 01-051-08						
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Chloromethane	ND	0.0057	EPA 8260C	1-10-13	1-10-13	
Vinyl Chloride	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Bromomethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Chloroethane	ND	0.0057	EPA 8260C	1-10-13	1-10-13	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Iodomethane	ND	0.0057	EPA 8260C	1-10-13	1-10-13	
Methylene Chloride	ND	0.0057	EPA 8260C	1-10-13	1-10-13	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Bromochloromethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Chloroform	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Trichloroethene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Dibromomethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Bromodichloromethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
2-Chloroethyl Vinyl Ether	ND	0.0057	EPA 8260C	1-10-13	1-10-13	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	

Date of Report: January 14, 2013  
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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-DUP-104-106</b>					
Laboratory ID:	01-051-08					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Tetrachloroethene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Dibromochloromethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Chlorobenzene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Bromoform	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Bromobenzene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
2-Chlorotoluene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
4-Chlorotoluene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
1,2-Dibromo-3-chloropropane	ND	0.0057	EPA 8260C	1-10-13	1-10-13	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
Hexachlorobutadiene	ND	0.0057	EPA 8260C	1-10-13	1-10-13	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	1-10-13	1-10-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>115</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>52-125</i>				

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0110S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Chloromethane	ND	0.0050	EPA 8260C	1-10-13	1-10-13	
Vinyl Chloride	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Bromomethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Chloroethane	ND	0.0050	EPA 8260C	1-10-13	1-10-13	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Iodomethane	ND	0.0050	EPA 8260C	1-10-13	1-10-13	
Methylene Chloride	ND	0.0050	EPA 8260C	1-10-13	1-10-13	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Bromochloromethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Chloroform	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Trichloroethene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Dibromomethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Bromodichloromethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	1-10-13	1-10-13	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	



Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C  
 METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0110S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Tetrachloroethene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Dibromochloromethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Chlorobenzene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Bromoform	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Bromobenzene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
2-Chlorotoluene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
4-Chlorotoluene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	1-10-13	1-10-13	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	1-10-13	1-10-13	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	1-10-13	1-10-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>123</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>52-125</i>				

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
**SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
					Recovery					
SPIKE BLANKS										
Laboratory ID:	SB0110S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0516	0.0547	0.0500	0.0500	103	109	65-141	6	15	
Benzene	0.0517	0.0555	0.0500	0.0500	103	111	69-121	7	15	
Trichloroethene	0.0525	0.0538	0.0500	0.0500	105	108	75-120	2	15	
Toluene	0.0464	0.0486	0.0500	0.0500	93	97	75-120	5	15	
Chlorobenzene	0.0519	0.0545	0.0500	0.0500	104	109	75-120	5	15	
Surrogate:										
Dibromofluoromethane					113	117	63-127			
Toluene-d8					94	97	65-129			
4-Bromofluorobenzene					90	92	52-125			

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB13-70-80RG</b>						
Laboratory ID: 01-051-03						
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloromethane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromomethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloroethane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Iodomethane	ND	1.3	EPA 8260C	1-8-13	1-8-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-8-13	1-8-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloroform	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Trichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Dibromomethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-8-13	1-8-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-70-80RG</b>					
Laboratory ID:	01-051-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Tetrachloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromoform	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Bromobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>87</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>89</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>107</i>	<i>63-120</i>				

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB13-80-90RG</b>						
Laboratory ID: 01-051-05						
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloromethane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromomethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloroethane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Iodomethane	ND	1.3	EPA 8260C	1-8-13	1-8-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-8-13	1-8-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloroform	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Trichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Dibromomethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-8-13	1-8-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-80-90RG</b>					
Laboratory ID:	01-051-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Tetrachloroethene	1.2	0.20	EPA 8260C	1-8-13	1-8-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromoform	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Bromobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>89</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>84</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>63-120</i>				

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0108W1						
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloromethane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromomethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloroethane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Iodomethane	ND	1.3	EPA 8260C	1-8-13	1-8-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-8-13	1-8-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chloroform	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Trichloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Dibromomethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-8-13	1-8-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-13	1-8-13	

Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0108W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Tetrachloroethene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Bromoform	ND	1.0	EPA 8260C	1-8-13	1-8-13	
Bromobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-8-13	1-8-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-8-13	1-8-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-13	1-8-13	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>90</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>107</i>	<i>63-120</i>				



Date of Report: January 14, 2013  
 Samples Submitted: January 7, 2013  
 Laboratory Reference: 1301-051  
 Project: 105-008

**HALOGENATED VOLATILES by EPA 8260C**  
**SB/SBD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	RPD Limit	Flags
					Recovery						
SPIKE BLANKS											
Laboratory ID:	SB0108W1										
	SB	SBD	SB	SBD	SB	SBD					
1,1-Dichloroethene	11.7	11.0	10.0	10.0	117	110	65-141	6		15	
Benzene	10.0	9.81	10.0	10.0	100	98	77-125	2		15	
Trichloroethene	10.5	10.7	10.0	10.0	105	107	80-125	2		15	
Toluene	10.6	10.5	10.0	10.0	106	105	80-125	1		15	
Chlorobenzene	10.2	11.1	10.0	10.0	102	111	80-140	8		15	
Surrogate:											
Dibromofluoromethane					84	84	66-120				
Toluene-d8					91	89	70-120				
4-Bromofluorobenzene					96	114	63-120				

Date of Report: January 14, 2013  
Samples Submitted: January 7, 2013  
Laboratory Reference: 1301-051  
Project: 105-008

**% MOISTURE**

Date Analyzed: 1-9-13

Client ID	Lab ID	% Moisture
SB13-64-66	01-051-01	17
SB13-74-76	01-051-02	13
SB13-86-88	01-051-04	16
SB13-94-96	01-051-06	17
SB13-104-106	01-051-07	19
SB13-DUP-104-106	01-051-08	18



### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



# Chain of Custody

Page 1 of 1

01-051

[illegible]



14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

January 8, 2013

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1301-038

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on January 4, 2013.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", followed by a long horizontal flourish.

David Baumeister  
Project Manager

Enclosures

Date of Report: January 8, 2013  
Samples Submitted: January 4, 2013  
Laboratory Reference: 1301-038  
Project: 105-003

### **Case Narrative**

Samples were collected on January 4, 2013 and received by the laboratory on January 4, 2013. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

#### Halogenated Volatiles EPA 8260C Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: January 8, 2013  
 Samples Submitted: January 4, 2013  
 Laboratory Reference: 1301-038  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB13-34-36</b>					
Laboratory ID:	01-038-01					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Chloromethane	ND	0.0068	EPA 8260C	1-7-13	1-7-13	
Vinyl Chloride	ND	0.0014	EPA 8260C	1-7-13	1-7-13	
Bromomethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Chloroethane	ND	0.0087	EPA 8260C	1-7-13	1-7-13	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	1-7-13	1-7-13	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Iodomethane	ND	0.0051	EPA 8260C	1-7-13	1-7-13	
Methylene Chloride	ND	0.0051	EPA 8260C	1-7-13	1-7-13	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Bromochloromethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Chloroform	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Trichloroethene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Dibromomethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Bromodichloromethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
2-Chloroethyl Vinyl Ether	ND	0.0064	EPA 8260C	1-7-13	1-7-13	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	

Date of Report: January 8, 2013  
 Samples Submitted: January 4, 2013  
 Laboratory Reference: 1301-038  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-34-36</b>					
Laboratory ID:	01-038-01					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Tetrachloroethene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Dibromochloromethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Chlorobenzene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Bromoform	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Bromobenzene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
2-Chlorotoluene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
4-Chlorotoluene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,2-Dibromo-3-chloropropane	ND	0.0051	EPA 8260C	1-7-13	1-7-13	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Hexachlorobutadiene	ND	0.0051	EPA 8260C	1-7-13	1-7-13	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>114</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>118</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>52-125</i>				



Date of Report: January 8, 2013  
 Samples Submitted: January 4, 2013  
 Laboratory Reference: 1301-038  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB13-44-46</b>					
<b>Laboratory ID:</b>	<b>01-038-02</b>					
Dichlorodifluoromethane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Chloromethane	ND	0.0061	EPA 8260C	1-7-13	1-7-13	
Vinyl Chloride	ND	0.0013	EPA 8260C	1-7-13	1-7-13	
Bromomethane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Chloroethane	ND	0.0079	EPA 8260C	1-7-13	1-7-13	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,1-Dichloroethene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Iodomethane	ND	0.0046	EPA 8260C	1-7-13	1-7-13	
Methylene Chloride	ND	0.0046	EPA 8260C	1-7-13	1-7-13	
(trans) 1,2-Dichloroethene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
1,1-Dichloroethane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
2,2-Dichloropropane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
(cis) 1,2-Dichloroethene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Bromochloromethane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Chloroform	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
1,1,1-Trichloroethane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Carbon Tetrachloride	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
1,1-Dichloropropene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
1,2-Dichloroethane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Trichloroethene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
1,2-Dichloropropane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Dibromomethane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Bromodichloromethane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
2-Chloroethyl Vinyl Ether	ND	0.0058	EPA 8260C	1-7-13	1-7-13	
(cis) 1,3-Dichloropropene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
(trans) 1,3-Dichloropropene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	

Date of Report: January 8, 2013  
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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-44-46</b>					
Laboratory ID:	01-038-02					
1,1,2-Trichloroethane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Tetrachloroethene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
1,3-Dichloropropane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Dibromochloromethane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
1,2-Dibromoethane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Chlorobenzene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
1,1,1,2-Tetrachloroethane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Bromoform	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Bromobenzene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
1,1,2,2-Tetrachloroethane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
1,2,3-Trichloropropane	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
2-Chlorotoluene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
4-Chlorotoluene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
1,3-Dichlorobenzene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
1,4-Dichlorobenzene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
1,2-Dichlorobenzene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
1,2-Dibromo-3-chloropropane	ND	0.0046	EPA 8260C	1-7-13	1-7-13	
1,2,4-Trichlorobenzene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
Hexachlorobutadiene	ND	0.0046	EPA 8260C	1-7-13	1-7-13	
1,2,3-Trichlorobenzene	ND	0.00092	EPA 8260C	1-7-13	1-7-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>114</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>109</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>52-125</i>				

Date of Report: January 8, 2013  
 Samples Submitted: January 4, 2013  
 Laboratory Reference: 1301-038  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB13-54-56</b>					
Laboratory ID:	01-038-03					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Chloromethane	ND	0.0079	EPA 8260C	1-7-13	1-7-13	
Vinyl Chloride	ND	0.0017	EPA 8260C	1-7-13	1-7-13	
Bromomethane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Chloroethane	ND	0.010	EPA 8260C	1-7-13	1-7-13	
Trichlorofluoromethane	ND	0.0015	EPA 8260C	1-7-13	1-7-13	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Iodomethane	ND	0.0059	EPA 8260C	1-7-13	1-7-13	
Methylene Chloride	ND	0.0059	EPA 8260C	1-7-13	1-7-13	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Bromochloromethane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Chloroform	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Trichloroethene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Dibromomethane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Bromodichloromethane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
2-Chloroethyl Vinyl Ether	ND	0.0075	EPA 8260C	1-7-13	1-7-13	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	

Date of Report: January 8, 2013  
 Samples Submitted: January 4, 2013  
 Laboratory Reference: 1301-038  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB13-54-56</b>					
Laboratory ID:	01-038-03					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Tetrachloroethene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Dibromochloromethane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Chlorobenzene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Bromoform	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Bromobenzene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
2-Chlorotoluene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
4-Chlorotoluene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
1,2-Dibromo-3-chloropropane	ND	0.0059	EPA 8260C	1-7-13	1-7-13	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
Hexachlorobutadiene	ND	0.0059	EPA 8260C	1-7-13	1-7-13	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	1-7-13	1-7-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>112</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>109</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>52-125</i>				

Date of Report: January 8, 2013  
 Samples Submitted: January 4, 2013  
 Laboratory Reference: 1301-038  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0107S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Chloromethane	ND	0.0067	EPA 8260C	1-7-13	1-7-13	
Vinyl Chloride	ND	0.0014	EPA 8260C	1-7-13	1-7-13	
Bromomethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Chloroethane	ND	0.0086	EPA 8260C	1-7-13	1-7-13	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	1-7-13	1-7-13	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Iodomethane	ND	0.0050	EPA 8260C	1-7-13	1-7-13	
Methylene Chloride	ND	0.0050	EPA 8260C	1-7-13	1-7-13	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Bromochloromethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Chloroform	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Trichloroethene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Dibromomethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Bromodichloromethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
2-Chloroethyl Vinyl Ether	ND	0.0063	EPA 8260C	1-7-13	1-7-13	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	

Date of Report: January 8, 2013  
 Samples Submitted: January 4, 2013  
 Laboratory Reference: 1301-038  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C  
 METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0107S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Tetrachloroethene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Dibromochloromethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Chlorobenzene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Bromoform	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Bromobenzene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
2-Chlorotoluene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
4-Chlorotoluene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	1-7-13	1-7-13	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	1-7-13	1-7-13	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	1-7-13	1-7-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>108</i>	<i>52-125</i>				

Date of Report: January 8, 2013  
 Samples Submitted: January 4, 2013  
 Laboratory Reference: 1301-038  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	Flags
					Recovery				RPD	
SPIKE BLANKS										
Laboratory ID:	SB0107S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0464	0.0469	0.0500	0.0500	93	94	65-141	1	15	
Benzene	0.0471	0.0478	0.0500	0.0500	94	96	69-121	1	15	
Trichloroethene	0.0456	0.0475	0.0500	0.0500	91	95	75-120	4	15	
Toluene	0.0440	0.0450	0.0500	0.0500	88	90	75-120	2	15	
Chlorobenzene	0.0475	0.0475	0.0500	0.0500	95	95	75-120	0	15	
Surrogate:										
Dibromofluoromethane					93	91	63-127			
Toluene-d8					93	93	65-129			
4-Bromofluorobenzene					100	99	52-125			

Date of Report: January 8, 2013  
Samples Submitted: January 4, 2013  
Laboratory Reference: 1301-038  
Project: 105-003

### **% MOISTURE**

Date Analyzed: 1-7-13

Client ID	Lab ID	% Moisture
SB13-34-36	01-038-01	12
SB13-44-46	01-038-02	13
SB13-54-56	01-038-03	23





#### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



# Onsite Environmental Inc.

Analytical Laboratory Testing Services  
14648 NE 95th Street • Redmond, WA 98052  
Phone: (425) 883-3881 • www.onsite-env.com

## Chain of Custody

Page 1 of 1

Company: <b>Pacific Crest</b>		Turnaround Request (in working days)				Laboratory Number: <b>01-038</b>																	
Project Number: <b>105-003</b>		<input type="checkbox"/> Same Day <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input checked="" type="checkbox"/> Standard (7 Days) (TPH analysis 5 Days)																					
Project Name: <b>Penthouse Drapery</b>		<input type="checkbox"/> (other) _____																					
Project Manager: <b>B. Carroll</b>																							
Sampled by: <b>M. DeCaro</b>																							
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	% Moisture	
1	SB13-34-36	1-4-13	1410	Soil	4						X												X
2	SB13-44-46	1-4-13	1505	Soil	4						X												X
3	SB13-54-56	1-4-13	1600	Soil	4						X												X
Signature: <b>Matt DeCaro</b>		Company: <b>Pacific Crest</b>		Date: <b>1-4-13</b>		Time: <b>1650</b>		Comments/Special Instructions															
Received		Relinquished		Received		Relinquished		Received		Relinquished		Received		Relinquished		Received		Relinquished		Received		Relinquished	
Reviewed/Date		Reviewed/Date		Reviewed/Date		Reviewed/Date		Reviewed/Date		Reviewed/Date		Reviewed/Date		Reviewed/Date		Reviewed/Date		Reviewed/Date		Reviewed/Date		Reviewed/Date	



14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

January 8, 2013

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1301-028

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on January 3, 2013.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", followed by a long horizontal flourish.

David Baumeister  
Project Manager

Enclosures

Date of Report: January 8, 2013  
Samples Submitted: January 3, 2013  
Laboratory Reference: 1301-028  
Project: 105-003

### **Case Narrative**

Samples were collected on January 3, 2013 and received by the laboratory on January 3, 2013. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

#### Halogenated Volatiles (soil) EPA 8260C Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: January 8, 2013  
 Samples Submitted: January 3, 2013  
 Laboratory Reference: 1301-028  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB15-94-96</b>					
<b>Laboratory ID:</b>	<b>01-028-01</b>					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Chloromethane	ND	0.0054	EPA 8260C	1-4-13	1-4-13	
Vinyl Chloride	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Bromomethane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Chloroethane	ND	0.0071	EPA 8260C	1-4-13	1-4-13	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Iodomethane	ND	0.0054	EPA 8260C	1-4-13	1-4-13	
Methylene Chloride	ND	0.0054	EPA 8260C	1-4-13	1-4-13	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Bromochloromethane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Chloroform	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Trichloroethene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Dibromomethane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Bromodichloromethane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
2-Chloroethyl Vinyl Ether	ND	0.0054	EPA 8260C	1-4-13	1-4-13	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	

Date of Report: January 8, 2013  
 Samples Submitted: January 3, 2013  
 Laboratory Reference: 1301-028  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB15-94-96</b>					
Laboratory ID:	01-028-01					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Tetrachloroethene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Dibromochloromethane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Chlorobenzene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Bromoform	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Bromobenzene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
2-Chlorotoluene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
4-Chlorotoluene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
1,2-Dibromo-3-chloropropane	ND	0.0054	EPA 8260C	1-4-13	1-4-13	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
Hexachlorobutadiene	ND	0.0054	EPA 8260C	1-4-13	1-4-13	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	1-4-13	1-4-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>52-125</i>				

Date of Report: January 8, 2013  
 Samples Submitted: January 3, 2013  
 Laboratory Reference: 1301-028  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB15-104-106</b>					
<b>Laboratory ID:</b>	<b>01-028-02</b>					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Chloromethane	ND	0.0059	EPA 8260C	1-4-13	1-4-13	
Vinyl Chloride	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Bromomethane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Chloroethane	ND	0.0078	EPA 8260C	1-4-13	1-4-13	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Iodomethane	ND	0.0059	EPA 8260C	1-4-13	1-4-13	
Methylene Chloride	ND	0.0059	EPA 8260C	1-4-13	1-4-13	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Bromochloromethane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Chloroform	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Trichloroethene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Dibromomethane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Bromodichloromethane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
2-Chloroethyl Vinyl Ether	ND	0.0059	EPA 8260C	1-4-13	1-4-13	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	

Date of Report: January 8, 2013  
 Samples Submitted: January 3, 2013  
 Laboratory Reference: 1301-028  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB15-104-106</b>					
Laboratory ID:	01-028-02					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Tetrachloroethene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Dibromochloromethane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Chlorobenzene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Bromoform	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Bromobenzene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
2-Chlorotoluene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
4-Chlorotoluene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
1,2-Dibromo-3-chloropropane	ND	0.0059	EPA 8260C	1-4-13	1-4-13	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
Hexachlorobutadiene	ND	0.0059	EPA 8260C	1-4-13	1-4-13	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	1-4-13	1-4-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>52-125</i>				



Date of Report: January 8, 2013  
 Samples Submitted: January 3, 2013  
 Laboratory Reference: 1301-028  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0104S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Chloromethane	ND	0.0050	EPA 8260C	1-4-13	1-4-13	
Vinyl Chloride	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Bromomethane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Chloroethane	ND	0.0066	EPA 8260C	1-4-13	1-4-13	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Iodomethane	ND	0.0050	EPA 8260C	1-4-13	1-4-13	
Methylene Chloride	ND	0.0050	EPA 8260C	1-4-13	1-4-13	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Bromochloromethane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Chloroform	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Trichloroethene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Dibromomethane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Bromodichloromethane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	1-4-13	1-4-13	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	

Date of Report: January 8, 2013  
 Samples Submitted: January 3, 2013  
 Laboratory Reference: 1301-028  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C  
 METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0104S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Tetrachloroethene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Dibromochloromethane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Chlorobenzene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Bromoform	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Bromobenzene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
2-Chlorotoluene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
4-Chlorotoluene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	1-4-13	1-4-13	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	1-4-13	1-4-13	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	1-4-13	1-4-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>52-125</i>				

Date of Report: January 8, 2013  
 Samples Submitted: January 3, 2013  
 Laboratory Reference: 1301-028  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C  
 SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	Flags
					Recovery				RPD	
SPIKE BLANKS										
Laboratory ID:	SB0104S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0546	0.0572	0.0500	0.0500	109	114	65-141	5	15	
Benzene	0.0539	0.0570	0.0500	0.0500	108	114	69-121	6	15	
Trichloroethene	0.0482	0.0505	0.0500	0.0500	96	101	75-120	5	15	
Toluene	0.0498	0.0531	0.0500	0.0500	100	106	75-120	6	15	
Chlorobenzene	0.0508	0.0526	0.0500	0.0500	102	105	75-120	3	15	
Surrogate:										
Dibromofluoromethane					101	106	63-127			
Toluene-d8					98	104	65-129			
4-Bromofluorobenzene					95	100	52-125			

Date of Report: January 8, 2013  
 Samples Submitted: January 3, 2013  
 Laboratory Reference: 1301-028  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB15-100-106.5RG</b>					
Laboratory ID:	01-028-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Chloromethane	ND	1.0	EPA 8260C	1-4-13	1-4-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Bromomethane	ND	0.29	EPA 8260C	1-4-13	1-4-13	
Chloroethane	ND	1.0	EPA 8260C	1-4-13	1-4-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Iodomethane	ND	1.7	EPA 8260C	1-4-13	1-4-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-4-13	1-4-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Chloroform	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Trichloroethene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Dibromomethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260C	1-4-13	1-4-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-13	1-4-13	

Date of Report: January 8, 2013  
 Samples Submitted: January 3, 2013  
 Laboratory Reference: 1301-028  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB15-100-106.5RG</b>					
Laboratory ID:	01-028-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Tetrachloroethene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Bromoform	ND	1.0	EPA 8260C	1-4-13	1-4-13	
Bromobenzene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260C	1-4-13	1-4-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	1-4-13	1-4-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	96	66-120				
<i>Toluene-d8</i>	95	70-120				
<i>4-Bromofluorobenzene</i>	102	63-120				

Date of Report: January 8, 2013  
 Samples Submitted: January 3, 2013  
 Laboratory Reference: 1301-028  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0104W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Chloromethane	ND	1.0	EPA 8260C	1-4-13	1-4-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Bromomethane	ND	0.29	EPA 8260C	1-4-13	1-4-13	
Chloroethane	ND	1.0	EPA 8260C	1-4-13	1-4-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Iodomethane	ND	1.7	EPA 8260C	1-4-13	1-4-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-4-13	1-4-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Chloroform	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Trichloroethene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Dibromomethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
2-Chloroethyl Vinyl Ether	ND	1.3	EPA 8260C	1-4-13	1-4-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-13	1-4-13	

Date of Report: January 8, 2013  
 Samples Submitted: January 3, 2013  
 Laboratory Reference: 1301-028  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0104W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Tetrachloroethene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Bromoform	ND	1.0	EPA 8260C	1-4-13	1-4-13	
Bromobenzene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-4-13	1-4-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260C	1-4-13	1-4-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-4-13	1-4-13	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	1-4-13	1-4-13	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	92	66-120				
<i>Toluene-d8</i>	93	70-120				
<i>4-Bromofluorobenzene</i>	96	63-120				

Date of Report: January 8, 2013  
 Samples Submitted: January 3, 2013  
 Laboratory Reference: 1301-028  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**MS/MSD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Source	Percent	Recovery	RPD		
					Result	Recovery	Limits	RPD	Limit	Flags
MATRIX SPIKES										
Laboratory ID:	01-028-03									
	MS	MSD	MS	MSD		MS	MSD			
1,1-Dichloroethene	11.3	11.6	10.0	10.0	ND	113	116	62-141	3	15
Benzene	10.3	10.5	10.0	10.0	ND	103	105	78-118	2	15
Trichloroethene	10.0	10.3	10.0	10.0	ND	100	103	80-115	3	15
Toluene	13.2	13.4	10.0	10.0	2.83	104	106	80-116	2	15
Chlorobenzene	9.87	10.1	10.0	10.0	ND	99	101	80-118	2	15
Surrogate:										
Dibromofluoromethane						93	99	66-120		
Toluene-d8						95	96	70-120		
4-Bromofluorobenzene						101	104	63-120		



Date of Report: January 8, 2013  
Samples Submitted: January 3, 2013  
Laboratory Reference: 1301-028  
Project: 105-003

### **% MOISTURE**

Date Analyzed: 1-4-13

Client ID	Lab ID	% Moisture
SB15-94-96	01-028-01	18
SB15-104-106	01-028-02	21



### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



**Monsite Environmental Inc.**  
14648 NE 95th Street • Redmond, WA 98052  
Phone: (425) 883-3881 • www.monsite-env.com

# Chain of Custody

Page

of

01-028

Turnaround Request  
(in working days)

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Days ☐ 3 Days

☒ Standard (7 Days)  
(TPH analysis 5 Days)

☐ (other)

Laboratory Number:

## Number of Containers

NWTPH-HCID

NWTPH-Gx/BTEX

NWTPH-Gx

NWTPH-Dx

Volatiles 8260B

Halogenated Volatiles 8260B

Semivolatiles 8270D/SIM  
(with low-level PAHs)

PAHs 8270D/SIM (low-level)

PCBs 8082

Organochlorine Pesticides 8081A

Organophosphorus Pesticides 8270D/SIM

Chlorinated Acid Herbicides 8151A

Total RCRA / MTCA Metals (circle one)

TCLP Metals

HEM (oil and grease) 1664

% Moisture

Company: **Pacific Crest**  
Project Number: **105-003**  
Project Name: **Penthouse Drapery**  
Project Manager: **B. Carroll**  
Sampled by: **M. DeCario**

Lab ID

Sample Identification

Date Sampled Time Sampled Matrix

1 SB15-94-96

1-3-13 1135 Soil Y

2 SB15-104-106

1-3-13 1420 Soil Y

3 SB15-100-106.5 RG

1-3-13 1610 GW 8-6

X

X

X

Signature

Company

Date

Time

Comments/Special Instructions

Relinquished

*M. DeCario*

Pacific Crest

1-3-13 1715

Received

*M. DeCario*

ORE

11/3/13 1718

Relinquished

Received

Relinquished

Received

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐



14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

January 4, 2013

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1301-018

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on January 2, 2013.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister  
Project Manager

Enclosures

Date of Report: January 4, 2013  
Samples Submitted: January 2, 2013  
Laboratory Reference: 1301-018  
Project: 105-003

### **Case Narrative**

Samples were collected on January 2, 2013 and received by the laboratory on January 2, 2013. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

#### Halogenated Volatiles EPA 8260C (soil) Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB15-64-66</b>					
<b>Laboratory ID:</b>	<b>01-018-01</b>					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Chloromethane	ND	0.0057	EPA 8260C	1-3-13	1-3-13	
Vinyl Chloride	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Bromomethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Chloroethane	ND	0.0075	EPA 8260C	1-3-13	1-3-13	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Iodomethane	ND	0.0057	EPA 8260C	1-3-13	1-3-13	
Methylene Chloride	ND	0.0057	EPA 8260C	1-3-13	1-3-13	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Bromochloromethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Chloroform	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Trichloroethene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Dibromomethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Bromodichloromethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
2-Chloroethyl Vinyl Ether	ND	0.0057	EPA 8260C	1-3-13	1-3-13	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	

Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB15-64-66</b>					
Laboratory ID:	01-018-01					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Tetrachloroethene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Dibromochloromethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Chlorobenzene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Bromoform	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Bromobenzene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
2-Chlorotoluene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
4-Chlorotoluene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromo-3-chloropropane	ND	0.0057	EPA 8260C	1-3-13	1-3-13	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Hexachlorobutadiene	ND	0.0057	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>110</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>109</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>52-125</i>				

Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB15-74-76</b>					
<b>Laboratory ID:</b>	<b>01-018-02</b>					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Chloromethane	ND	0.0066	EPA 8260C	1-3-13	1-3-13	
Vinyl Chloride	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Bromomethane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Chloroethane	ND	0.0087	EPA 8260C	1-3-13	1-3-13	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Iodomethane	ND	0.0066	EPA 8260C	1-3-13	1-3-13	
Methylene Chloride	ND	0.0066	EPA 8260C	1-3-13	1-3-13	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Bromochloromethane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Chloroform	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Trichloroethene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Dibromomethane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Bromodichloromethane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
2-Chloroethyl Vinyl Ether	ND	0.0066	EPA 8260C	1-3-13	1-3-13	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	



Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB15-74-76</b>					
Laboratory ID:	01-018-02					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Tetrachloroethene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Dibromochloromethane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Chlorobenzene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Bromoform	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Bromobenzene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
2-Chlorotoluene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
4-Chlorotoluene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromo-3-chloropropane	ND	0.0066	EPA 8260C	1-3-13	1-3-13	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
Hexachlorobutadiene	ND	0.0066	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	1-3-13	1-3-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>109</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>110</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>52-125</i>				

Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB15-84-86</b>					
<b>Laboratory ID:</b>	<b>01-018-04</b>					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Chloromethane	ND	0.0054	EPA 8260C	1-3-13	1-3-13	
Vinyl Chloride	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Bromomethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Chloroethane	ND	0.0071	EPA 8260C	1-3-13	1-3-13	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Iodomethane	ND	0.0054	EPA 8260C	1-3-13	1-3-13	
Methylene Chloride	ND	0.0054	EPA 8260C	1-3-13	1-3-13	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Bromochloromethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Chloroform	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Trichloroethene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Dibromomethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Bromodichloromethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
2-Chloroethyl Vinyl Ether	ND	0.0054	EPA 8260C	1-3-13	1-3-13	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	

Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB15-84-86</b>					
Laboratory ID:	01-018-04					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Tetrachloroethene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Dibromochloromethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Chlorobenzene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Bromoform	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Bromobenzene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
2-Chlorotoluene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
4-Chlorotoluene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromo-3-chloropropane	ND	0.0054	EPA 8260C	1-3-13	1-3-13	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
Hexachlorobutadiene	ND	0.0054	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	1-3-13	1-3-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>107</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>52-125</i>				

Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0103S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Chloromethane	ND	0.0050	EPA 8260C	1-3-13	1-3-13	
Vinyl Chloride	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Bromomethane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Chloroethane	ND	0.0066	EPA 8260C	1-3-13	1-3-13	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Iodomethane	ND	0.0050	EPA 8260C	1-3-13	1-3-13	
Methylene Chloride	ND	0.0050	EPA 8260C	1-3-13	1-3-13	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Bromochloromethane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Chloroform	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Trichloroethene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Dibromomethane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Bromodichloromethane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	1-3-13	1-3-13	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	

Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C  
 METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
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Laboratory ID:	MB0103S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Tetrachloroethene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Dibromochloromethane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Chlorobenzene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Bromoform	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Bromobenzene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
2-Chlorotoluene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
4-Chlorotoluene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	1-3-13	1-3-13	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	1-3-13	1-3-13	
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<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>107</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>52-125</i>				

Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
					Recovery					
SPIKE BLANKS										
Laboratory ID:	SB0103S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0554	0.0585	0.0500	0.0500	111	117	65-141	5	15	
Benzene	0.0533	0.0563	0.0500	0.0500	107	113	69-121	5	15	
Trichloroethene	0.0479	0.0504	0.0500	0.0500	96	101	75-120	5	15	
Toluene	0.0515	0.0542	0.0500	0.0500	103	108	75-120	5	15	
Chlorobenzene	0.0522	0.0536	0.0500	0.0500	104	107	75-120	3	15	
Surrogate:										
Dibromofluoromethane					100	105	63-127			
Toluene-d8					100	104	65-129			
4-Bromofluorobenzene					96	100	52-125			

Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB15-70-80RG</b>						
Laboratory ID: 01-018-03						
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chloromethane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromomethane	ND	0.33	EPA 8260C	1-3-13	1-3-13	
Chloroethane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Iodomethane	ND	2.1	EPA 8260C	1-3-13	1-3-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-3-13	1-3-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chloroform	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Trichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Dibromomethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-3-13	1-3-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	

Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB15-70-80RG</b>					
Laboratory ID:	01-018-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Tetrachloroethene	6.2	0.20	EPA 8260C	1-3-13	1-3-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromoform	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Bromobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	1-3-13	1-3-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>108</i>	<i>63-120</i>				



Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB15-80-90RG</b>					
Laboratory ID:	01-018-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chloromethane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromomethane	ND	0.33	EPA 8260C	1-3-13	1-3-13	
Chloroethane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Iodomethane	ND	2.1	EPA 8260C	1-3-13	1-3-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-3-13	1-3-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chloroform	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Trichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Dibromomethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-3-13	1-3-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	

Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB15-80-90RG</b>					
Laboratory ID:	01-018-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Tetrachloroethene	1.0	0.20	EPA 8260C	1-3-13	1-3-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromoform	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Bromobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	1-3-13	1-3-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	96	66-120				
<i>Toluene-d8</i>	97	70-120				
<i>4-Bromofluorobenzene</i>	107	63-120				

Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0103W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chloromethane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromomethane	ND	0.33	EPA 8260C	1-3-13	1-3-13	
Chloroethane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Iodomethane	ND	2.1	EPA 8260C	1-3-13	1-3-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-3-13	1-3-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chloroform	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Trichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Dibromomethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-3-13	1-3-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	

Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C  
 METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0103W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Tetrachloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromoform	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Bromobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	1-3-13	1-3-13	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>63-120</i>				

Date of Report: January 4, 2013  
 Samples Submitted: January 2, 2013  
 Laboratory Reference: 1301-018  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**MS/MSD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Source	Percent	Recovery	RPD		Flags
					Result	Recovery	Limits	RPD	Limit	
MATRIX SPIKES										
Laboratory ID:	12-173-06									
	MS	MSD	MS	MSD		MS	MSD			
1,1-Dichloroethene	11.3	11.4	10.0	10.0	ND	113	114	62-141	1	15
Benzene	10.1	10.5	10.0	10.0	ND	101	105	78-118	4	15
Trichloroethene	10.3	10.5	10.0	10.0	ND	103	105	80-115	2	15
Toluene	14.2	13.8	10.0	10.0	3.79	104	100	80-116	3	15
Chlorobenzene	11.0	10.3	10.0	10.0	ND	110	103	80-118	7	15
Surrogate:										
Dibromofluoromethane						89	102	66-120		
Toluene-d8						93	95	70-120		
4-Bromofluorobenzene						98	104	63-120		

Date of Report: January 4, 2013  
Samples Submitted: January 2, 2013  
Laboratory Reference: 1301-018  
Project: 105-003

### **% MOISTURE**

Date Analyzed: 1-3-13

Client ID	Lab ID	% Moisture
SB15-64-66	01-018-01	21
SB15-74-76	01-018-02	24
SB15-84-86	01-018-04	15



### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



Analytical Laboratory Testing Services  
14648 NE 95th Street • Redmond, WA 98052  
Phone: (425) 883-3881 • [www.on-site-env.com](http://www.on-site-env.com)

# Chain of Custody

Page 1 of 1

[illegible]





14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

January 4, 2013

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1212-173

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on December 28, 2012.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal flourish extending to the right.

David Baumeister  
Project Manager

Enclosures

Date of Report: January 4, 2013  
Samples Submitted: December 28, 2012  
Laboratory Reference: 1212-173  
Project: 105-003

### **Case Narrative**

Samples were collected on December 27 and 28, 2012 and received by the laboratory on December 28, 2012. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

#### Halogenated Volatiles EPA 8260C (soil) Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: January 4, 2013  
 Samples Submitted: December 28, 2012  
 Laboratory Reference: 1212-173  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-70-80RG</b>					
Laboratory ID:	12-173-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chloromethane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromomethane	ND	0.33	EPA 8260C	1-3-13	1-3-13	
Chloroethane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Iodomethane	ND	2.1	EPA 8260C	1-3-13	1-3-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-3-13	1-3-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chloroform	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Trichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Dibromomethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-3-13	1-3-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	

Date of Report: January 4, 2013  
 Samples Submitted: December 28, 2012  
 Laboratory Reference: 1212-173  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-70-80RG</b>					
<b>Laboratory ID:</b>	<b>12-173-01</b>					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Tetrachloroethene	2.7	0.20	EPA 8260C	1-3-13	1-3-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromoform	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Bromobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	1-3-13	1-3-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	95	66-120				
<i>Toluene-d8</i>	99	70-120				
<i>4-Bromofluorobenzene</i>	106	63-120				

Date of Report: January 4, 2013  
 Samples Submitted: December 28, 2012  
 Laboratory Reference: 1212-173  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB14-80-90RG</b>						
Laboratory ID: 12-173-03						
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chloromethane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromomethane	ND	0.33	EPA 8260C	1-3-13	1-3-13	
Chloroethane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Iodomethane	ND	2.1	EPA 8260C	1-3-13	1-3-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-3-13	1-3-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chloroform	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloroethane	0.42	0.20	EPA 8260C	1-3-13	1-3-13	
Trichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Dibromomethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-3-13	1-3-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	

Date of Report: January 4, 2013  
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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-80-90RG</b>					
Laboratory ID:	12-173-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Tetrachloroethene	0.41	0.20	EPA 8260C	1-3-13	1-3-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromoform	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Bromobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	1-3-13	1-3-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>95</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>63-120</i>				

Date of Report: January 4, 2013  
 Samples Submitted: December 28, 2012  
 Laboratory Reference: 1212-173  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB14-100-110RG</b>						
Laboratory ID: 12-173-06						
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chloromethane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromomethane	ND	0.33	EPA 8260C	1-3-13	1-3-13	
Chloroethane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Iodomethane	ND	2.1	EPA 8260C	1-3-13	1-3-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-3-13	1-3-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chloroform	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Trichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Dibromomethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-3-13	1-3-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	

Date of Report: January 4, 2013  
 Samples Submitted: December 28, 2012  
 Laboratory Reference: 1212-173  
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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-100-110RG</b>					
<b>Laboratory ID:</b>	12-173-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Tetrachloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromoform	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Bromobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	1-3-13	1-3-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>92</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>63-120</i>				



Date of Report: January 4, 2013  
 Samples Submitted: December 28, 2012  
 Laboratory Reference: 1212-173  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0103W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chloromethane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Vinyl Chloride	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromomethane	ND	0.33	EPA 8260C	1-3-13	1-3-13	
Chloroethane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Iodomethane	ND	2.1	EPA 8260C	1-3-13	1-3-13	
Methylene Chloride	ND	1.0	EPA 8260C	1-3-13	1-3-13	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromochloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chloroform	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Trichloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Dibromomethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromodichloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-3-13	1-3-13	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-3-13	1-3-13	

Date of Report: January 4, 2013  
 Samples Submitted: December 28, 2012  
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**HALOGENATED VOLATILES by EPA 8260C  
 METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
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Laboratory ID:	MB0103W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Tetrachloroethene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Dibromochloromethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Chlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Bromoform	ND	1.0	EPA 8260C	1-3-13	1-3-13	
Bromobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-3-13	1-3-13	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-3-13	1-3-13	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-3-13	1-3-13	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	1-3-13	1-3-13	
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<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>63-120</i>				

Date of Report: January 4, 2013  
 Samples Submitted: December 28, 2012  
 Laboratory Reference: 1212-173  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**MS/MSD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Source	Percent	Recovery	RPD		Flags
					Result	Recovery	Limits			
MATRIX SPIKES										
Laboratory ID:	12-173-06									
	MS	MSD	MS	MSD		MS	MSD			
1,1-Dichloroethene	11.3	11.4	10.0	10.0	ND	113	114	62-141	1	15
Benzene	10.1	10.5	10.0	10.0	ND	101	105	78-118	4	15
Trichloroethene	10.3	10.5	10.0	10.0	ND	103	105	80-115	2	15
Toluene	14.2	13.8	10.0	10.0	3.79	104	100	80-116	3	15
Chlorobenzene	11.0	10.3	10.0	10.0	ND	110	103	80-118	7	15
Surrogate:										
Dibromofluoromethane						89	102	66-120		
Toluene-d8						93	95	70-120		
4-Bromofluorobenzene						98	104	63-120		

Date of Report: January 4, 2013  
 Samples Submitted: December 28, 2012  
 Laboratory Reference: 1212-173  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-84-86</b>					
<b>Laboratory ID:</b>	<b>12-173-02</b>					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Chloromethane	ND	0.0055	EPA 8260C	1-2-13	1-2-13	
Vinyl Chloride	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromomethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Chloroethane	ND	0.0070	EPA 8260C	1-2-13	1-2-13	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Iodomethane	ND	0.0055	EPA 8260C	1-2-13	1-2-13	
Methylene Chloride	ND	0.0055	EPA 8260C	1-2-13	1-2-13	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromochloromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Chloroform	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Trichloroethene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Dibromomethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromodichloromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
2-Chloroethyl Vinyl Ether	ND	0.0055	EPA 8260C	1-2-13	1-2-13	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	

Date of Report: January 4, 2013  
 Samples Submitted: December 28, 2012  
 Laboratory Reference: 1212-173  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-84-86</b>					
Laboratory ID:	12-173-02					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Tetrachloroethene	0.0037	0.0011	EPA 8260C	1-2-13	1-2-13	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Dibromochloromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Chlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromoform	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
2-Chlorotoluene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
4-Chlorotoluene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dibromo-3-chloropropane	ND	0.0055	EPA 8260C	1-2-13	1-2-13	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Hexachlorobutadiene	ND	0.0055	EPA 8260C	1-2-13	1-2-13	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>52-125</i>				

Date of Report: January 4, 2013  
 Samples Submitted: December 28, 2012  
 Laboratory Reference: 1212-173  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-94-96</b>					
<b>Laboratory ID:</b>	<b>12-173-04</b>					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Chloromethane	ND	0.0058	EPA 8260C	1-2-13	1-2-13	
Vinyl Chloride	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Bromomethane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Chloroethane	ND	0.0074	EPA 8260C	1-2-13	1-2-13	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Iodomethane	ND	0.0058	EPA 8260C	1-2-13	1-2-13	
Methylene Chloride	ND	0.0058	EPA 8260C	1-2-13	1-2-13	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Bromochloromethane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Chloroform	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
1,2-Dichloroethane	0.0026	0.0012	EPA 8260C	1-2-13	1-2-13	
Trichloroethene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Dibromomethane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Bromodichloromethane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
2-Chloroethyl Vinyl Ether	ND	0.0058	EPA 8260C	1-2-13	1-2-13	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	

Date of Report: January 4, 2013  
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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-94-96</b>					
<b>Laboratory ID:</b>	<b>12-173-04</b>					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Tetrachloroethene	0.0016	0.0012	EPA 8260C	1-2-13	1-2-13	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Dibromochloromethane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Chlorobenzene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Bromoform	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Bromobenzene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
2-Chlorotoluene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
4-Chlorotoluene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
1,2-Dibromo-3-chloropropane	ND	0.0058	EPA 8260C	1-2-13	1-2-13	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
Hexachlorobutadiene	ND	0.0058	EPA 8260C	1-2-13	1-2-13	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	1-2-13	1-2-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>110</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>104</i>	<i>52-125</i>				

Date of Report: January 4, 2013  
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 Laboratory Reference: 1212-173  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-104-106</b>					
<b>Laboratory ID:</b>	<b>12-173-05</b>					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Chloromethane	ND	0.0056	EPA 8260C	1-2-13	1-2-13	
Vinyl Chloride	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromomethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Chloroethane	ND	0.0072	EPA 8260C	1-2-13	1-2-13	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Iodomethane	ND	0.0056	EPA 8260C	1-2-13	1-2-13	
Methylene Chloride	ND	0.0056	EPA 8260C	1-2-13	1-2-13	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromochloromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Chloroform	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Trichloroethene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Dibromomethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromodichloromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
2-Chloroethyl Vinyl Ether	ND	0.0056	EPA 8260C	1-2-13	1-2-13	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	



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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-104-106</b>					
<b>Laboratory ID:</b>	<b>12-173-05</b>					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Tetrachloroethene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Dibromochloromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Chlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromoform	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
2-Chlorotoluene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
4-Chlorotoluene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dibromo-3-chloropropane	ND	0.0056	EPA 8260C	1-2-13	1-2-13	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Hexachlorobutadiene	ND	0.0056	EPA 8260C	1-2-13	1-2-13	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>106</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>52-125</i>				

Date of Report: January 4, 2013  
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 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-74-76</b>					
<b>Laboratory ID:</b>	<b>12-173-07</b>					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Chloromethane	ND	0.0053	EPA 8260C	1-2-13	1-2-13	
Vinyl Chloride	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromomethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Chloroethane	ND	0.0068	EPA 8260C	1-2-13	1-2-13	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Iodomethane	ND	0.0053	EPA 8260C	1-2-13	1-2-13	
Methylene Chloride	ND	0.0053	EPA 8260C	1-2-13	1-2-13	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromochloromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Chloroform	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Trichloroethene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Dibromomethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromodichloromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
2-Chloroethyl Vinyl Ether	ND	0.0053	EPA 8260C	1-2-13	1-2-13	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	

Date of Report: January 4, 2013  
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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-74-76</b>					
Laboratory ID:	12-173-07					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Tetrachloroethene	0.0071	0.0011	EPA 8260C	1-2-13	1-2-13	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Dibromochloromethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Chlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromoform	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Bromobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
2-Chlorotoluene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
4-Chlorotoluene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
1,2-Dibromo-3-chloropropane	ND	0.0053	EPA 8260C	1-2-13	1-2-13	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
Hexachlorobutadiene	ND	0.0053	EPA 8260C	1-2-13	1-2-13	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	1-2-13	1-2-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>110</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>52-125</i>				

Date of Report: January 4, 2013  
 Samples Submitted: December 28, 2012  
 Laboratory Reference: 1212-173  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0102S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Chloromethane	ND	0.0050	EPA 8260C	1-2-13	1-2-13	
Vinyl Chloride	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Bromomethane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Chloroethane	ND	0.0064	EPA 8260C	1-2-13	1-2-13	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Iodomethane	ND	0.0050	EPA 8260C	1-2-13	1-2-13	
Methylene Chloride	ND	0.0050	EPA 8260C	1-2-13	1-2-13	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Bromochloromethane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Chloroform	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Trichloroethene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Dibromomethane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Bromodichloromethane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	1-2-13	1-2-13	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	

Date of Report: January 4, 2013  
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 Laboratory Reference: 1212-173  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C  
 METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0102S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Tetrachloroethene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Dibromochloromethane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Chlorobenzene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Bromoform	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Bromobenzene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
2-Chlorotoluene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
4-Chlorotoluene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	1-2-13	1-2-13	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	1-2-13	1-2-13	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	1-2-13	1-2-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>107</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>109</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>52-125</i>				

Date of Report: January 4, 2013  
 Samples Submitted: December 28, 2012  
 Laboratory Reference: 1212-173  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C  
 SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
					Recovery					
SPIKE BLANKS										
Laboratory ID:	SB0102S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0519	0.0558	0.0500	0.0500	104	112	65-141	7	15	
Benzene	0.0481	0.0518	0.0500	0.0500	96	104	69-121	7	15	
Trichloroethene	0.0413	0.0458	0.0500	0.0500	83	92	75-120	10	15	
Toluene	0.0444	0.0489	0.0500	0.0500	89	98	75-120	10	15	
Chlorobenzene	0.0447	0.0496	0.0500	0.0500	89	99	75-120	10	15	
Surrogate:										
Dibromofluoromethane					103	99	63-127			
Toluene-d8					101	98	65-129			
4-Bromofluorobenzene					94	94	52-125			

Date of Report: January 4, 2013  
Samples Submitted: December 28, 2012  
Laboratory Reference: 1212-173  
Project: 105-003

**% MOISTURE**

Date Analyzed: 1-2-13

Client ID	Lab ID	% Moisture
SB14-84-86	12-173-02	16
SB14-94-96	12-173-04	17
SB14-104-106	12-173-05	20
SB14-74-76	12-173-07	14



### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference





14648 NE 95th Street • Redmond, WA 98052  
Phone: (425) 883-3881 • [www.onsite-env.com](http://www.onsite-env.com)

---

Company: Pacific Crest Environmental

Project Number: 105-003

Project Name:

Penthouse Drapery

Project manager:  
B. Carroll

Sampled by:

A. Wieringa

Lab ID

### Sample Identification

Date Sampled

Time sampled	Matrix
-----------------	--------

Number of Containers

NWTPH-HCID

NWTPH-Gx/BTEX

NWTPH-Gx

NWTPH-Dx

Volatiles 8260B

Halogenated Volatiles 8260B

Semivolatiles 8270D/SIM  
(with low-level PAHs)

PAHs 8270D/SIM (low-level)

PCBs 8082

Organochlorine Pesticides 8081A

Organophosphorus Pesticides 8270D/SIM

Chlorinated Acid Herbicides 8151A

Total RCRA / MTCA Metals (circle one)

TCLP Metals

HEM (oil and grease) 1664
---------------------------

% Moisture	
------------	--

Turnaround Request  
(in working days)

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Days ☐ 3 Days

☒ Standard (7 Days)

(TPH analysis 5 Days)



☐ (other) \_\_\_\_\_

Laboratory Number:

12-173

# Chain of Custody

Page 1 of 1

Signature	Company	Date	Time	Comments/Special Instructions
	Pacific Crest Environmental	12/28/17	1655	
	QSE	12/28/17	1655	
Relinquished				
Received				
Relinquished				
Received				
Relinquished				
Received				
Relinquished				
Received				

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☐



14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

January 2, 2013

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1212-164

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on December 27, 2012.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister  
Project Manager

Enclosures

Date of Report: January 2, 2013  
Samples Submitted: December 27, 2012  
Laboratory Reference: 1212-164  
Project: 105-003

### **Case Narrative**

Samples were collected on December 26 and 27, 2012 and received by the laboratory on December 27, 2012. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

#### Halogenated Volatiles EPA 8260C Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-34-36</b>					
<b>Laboratory ID:</b>	<b>12-164-01</b>					
Dichlorodifluoromethane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	0.0042	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	0.0042	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	0.0042	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	0.0042	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	0.0042	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	

Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-34-36</b>					
Laboratory ID:	12-164-01					
1,1,2-Trichloroethane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	0.0042	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.0042	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.00083	EPA 8260C	12-28-12	12-28-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>111</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>52-125</i>				

Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-44-46</b>					
<b>Laboratory ID:</b>	<b>12-164-03</b>					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	0.0051	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	0.0051	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	0.0051	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	0.0051	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	0.0051	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	

Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-44-46</b>					
Laboratory ID:	12-164-03					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	0.0051	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.0051	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>52-125</i>				

Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-54-56</b>					
<b>Laboratory ID:</b>	<b>12-164-05</b>					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	0.0056	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	0.0056	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	0.0056	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	0.0056	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	0.0056	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	



Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-54-56</b>					
Laboratory ID:	12-164-05					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	0.0056	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.0056	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	12-28-12	12-28-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>52-125</i>				

Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-64-66</b>					
<b>Laboratory ID:</b>	<b>12-164-06</b>					
Dichlorodifluoromethane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	0.0047	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	0.0047	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	0.0047	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	0.0047	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	0.0047	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	

Date of Report: January 2, 2013  
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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-64-66</b>					
<b>Laboratory ID:</b>	<b>12-164-06</b>					
1,1,2-Trichloroethane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	0.0082	0.00093	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	0.0047	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.0047	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.00093	EPA 8260C	12-28-12	12-28-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>107</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>52-125</i>				

Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C  
 METHOD BLANK QUALITY CONTROL**

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1228S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	0.0050	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	0.0050	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	0.0050	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	0.0050	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	

Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB1228S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	12-28-12	12-28-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>107</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>106</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>52-125</i>				

Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
					Recovery					
SPIKE BLANKS										
Laboratory ID:	SB1228S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0615	0.0623	0.0500	0.0500	123	125	65-141	1	15	
Benzene	0.0568	0.0580	0.0500	0.0500	114	116	69-121	2	15	
Trichloroethene	0.0492	0.0506	0.0500	0.0500	98	101	75-120	3	15	
Toluene	0.0537	0.0550	0.0500	0.0500	107	110	75-120	2	15	
Chlorobenzene	0.0538	0.0549	0.0500	0.0500	108	110	75-120	2	15	
Surrogate:										
Dibromofluoromethane					104	107	63-127			
Toluene-d8					101	103	65-129			
4-Bromofluorobenzene					91	96	52-125			

Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB14-30-40 RG</b>						
Laboratory ID: 12-164-02						
Dichlorodifluoromethane	ND	0.30	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	

Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-30-40 RG</b>					
Laboratory ID:	12-164-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.26	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.27	EPA 8260C	12-28-12	12-28-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>90</i>	<i>63-120</i>				



Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB14-40-50 RG</b>						
Laboratory ID: 12-164-04						
Dichlorodifluoromethane	ND	0.30	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	

Date of Report: January 2, 2013  
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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB14-40-50 RG</b>					
<b>Laboratory ID:</b>	<b>12-164-04</b>					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	8.6	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.26	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.27	EPA 8260C	12-28-12	12-28-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>109</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>63-120</i>				

Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C  
 METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB1228W1					
Dichlorodifluoromethane	ND	0.30	EPA 8260C	12-28-12	12-28-12	
Chloromethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Vinyl Chloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Iodomethane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Methylene Chloride	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chloroform	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Trichloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromomethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromodichloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	12-28-12	12-28-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-28-12	12-28-12	

Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C  
 METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB1228W1						
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Tetrachloroethene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Dibromochloromethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Chlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
Bromoform	ND	1.0	EPA 8260C	12-28-12	12-28-12	
Bromobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,1,2,2-Tetrachloroethane	ND	0.26	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-28-12	12-28-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-28-12	12-28-12	
1,2,4-Trichlorobenzene	ND	0.25	EPA 8260C	12-28-12	12-28-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-28-12	12-28-12	
1,2,3-Trichlorobenzene	ND	0.27	EPA 8260C	12-28-12	12-28-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>88</i>	<i>63-120</i>				

Date of Report: January 2, 2013  
 Samples Submitted: December 27, 2012  
 Laboratory Reference: 1212-164  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**MS/MSD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Source	Percent	Recovery	RPD		Flags
					Result	Recovery	Limits			
MATRIX SPIKES										
Laboratory ID:	12-164-04									
	MS	MSD	MS	MSD		MS	MSD			
1,1-Dichloroethene	11.5	11.0	10.0	10.0	ND	115	110	62-141	4	15
Benzene	9.94	9.80	10.0	10.0	ND	99	98	78-118	1	15
Trichloroethene	10.5	9.63	10.0	10.0	ND	105	96	80-115	9	15
Toluene	10.5	10.1	10.0	10.0	ND	105	101	80-116	4	15
Chlorobenzene	10.6	10.5	10.0	10.0	ND	106	105	80-118	1	15
Surrogate:										
Dibromofluoromethane						100	100	66-120		
Toluene-d8						101	97	70-120		
4-Bromofluorobenzene						95	93	63-120		

Date of Report: January 2, 2013  
Samples Submitted: December 27, 2012  
Laboratory Reference: 1212-164  
Project: 105-003

### **% MOISTURE**

Date Analyzed: 12-28-12

Client ID	Lab ID	% Moisture
SB14-34-36	12-164-01	12
SB14-44-46	12-164-03	22
SB14-54-56	12-164-05	19
SB14-64-66	12-164-06	16



### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



14648 NE 95th Street • Redmond, WA 98052  
Phone: (425) 883-3881 • [www.onste-env.com](http://www.onste-env.com)

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[illegible]





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September 19, 2012

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1209-082

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on September 12, 2012.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister  
Project Manager

Enclosures

Date of Report: September 19, 2012  
Samples Submitted: September 12, 2012  
Laboratory Reference: 1209-082  
Project: 105-003

### **Case Narrative**

Samples were collected on September 11 and 12, 2012 and received by the laboratory on September 12, 2012. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

#### Halogenated Volatiles (soil) EPA 8260B Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

#### Halogenated Volatiles (water) EPA 8260B Analysis

Due to the levels of sediment present in the VOA vials provided for sample SB1-65.0 RG, the aqueous layers from three VOA vials were combined to perform the requested analysis. All three VOA vials contained headspace. Some loss of volatiles may have occurred.

**Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.**

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

page 1 of 2

Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB1-40.0-45.0</b>					
<b>Laboratory ID:</b>	<b>09-082-02</b>					
Dichlorodifluoromethane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	0.0044	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	0.0044	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	0.0044	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	0.0044	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	0.0044	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	0.00088	EPA 8260	9-14-12	9-14-12	

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-40.0-45.0</b>					
Laboratory ID:	09-082-02					
1,1,2-Trichloroethane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	0.00088	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	0.0044	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	0.0044	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	0.00088	EPA 8260	9-14-12	9-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>52-125</i>				

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>SB1-52.5-55.0</b>				
Laboratory ID:		09-082-04				
Dichlorodifluoromethane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	0.0053	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	0.0053	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	0.0053	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	0.0053	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	0.0053	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-14-12	9-14-12	

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-52.5-55.0</b>					
Laboratory ID:	09-082-04					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	0.0053	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	0.0053	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260	9-14-12	9-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>106</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>52-125</i>				

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

page 1 of 2

Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB1-63.5-65.0</b>					
Laboratory ID:	09-082-06					
Dichlorodifluoromethane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	0.0039	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	0.0039	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	0.0039	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	0.0039	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	0.0039	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	0.00077	EPA 8260	9-14-12	9-14-12	

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-63.5-65.0</b>					
Laboratory ID:	09-082-06					
1,1,2-Trichloroethane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	0.00077	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	0.0039	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	0.0039	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	0.00077	EPA 8260	9-14-12	9-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>107</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>52-125</i>				



Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-70.0-75.0</b>					
Laboratory ID:	09-082-07					
Dichlorodifluoromethane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	0.0048	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	0.0048	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	0.0048	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	0.0048	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	0.0048	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	0.00096	EPA 8260	9-14-12	9-14-12	

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-70.0-75.0</b>					
Laboratory ID:	09-082-07					
1,1,2-Trichloroethane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	0.00096	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	0.0048	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	0.0048	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	0.00096	EPA 8260	9-14-12	9-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>52-125</i>				

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0914S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	0.0050	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	0.0050	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	0.0050	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	0.0050	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-14-12	9-14-12	

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0914S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	0.0050	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>109</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>52-125</i>				

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent		Recovery		RPD	
					Recovery		Limits		RPD	Limit
SPIKE BLANKS										
Laboratory ID:		SB0914S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0542	0.0534	0.0500	0.0500	108	107	65-141	1	15	
Benzene	0.0512	0.0534	0.0500	0.0500	102	107	69-121	4	15	
Trichloroethene	0.0490	0.0491	0.0500	0.0500	98	98	75-120	0	15	
Toluene	0.0482	0.0470	0.0500	0.0500	96	94	75-120	3	15	
Chlorobenzene	0.0523	0.0503	0.0500	0.0500	105	101	75-120	4	15	
Surrogate:										
Dibromofluoromethane					100	100	63-127			
Toluene-d8					92	95	65-129			
4-Bromofluorobenzene					98	98	52-125			

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-35.0 RG</b>					
Laboratory ID:	09-082-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Iodomethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Methylene Chloride	ND	1.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroform	0.42	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Trichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-35.0 RG</b>					
Laboratory ID:	09-082-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Tetrachloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromoform	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Hexachlorobutadiene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>110</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>92</i>	<i>63-120</i>				

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB1-45.0 RG</b>					
Laboratory ID:	09-082-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Iodomethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Methylene Chloride	ND	1.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroform	0.63	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Trichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	



Date of Report: September 19, 2012  
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# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-45.0 RG</b>					
Laboratory ID:	09-082-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Tetrachloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromoform	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Hexachlorobutadiene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>92</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>63-120</i>				

Date of Report: September 19, 2012  
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# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-55.0 RG</b>					
Laboratory ID:	09-082-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Iodomethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Methylene Chloride	ND	1.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroform	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Trichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	

Date of Report: September 19, 2012  
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# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-55.0 RG</b>					
Laboratory ID:	09-082-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Tetrachloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromoform	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Hexachlorobutadiene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	95	66-120				
<i>Toluene-d8</i>	96	70-120				
<i>4-Bromofluorobenzene</i>	90	63-120				

Date of Report: September 19, 2012  
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# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-75.0 RG</b>					
Laboratory ID:	09-082-08					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Iodomethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Methylene Chloride	ND	1.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroform	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Trichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	

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# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-75.0 RG</b>					
Laboratory ID:	09-082-08					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Tetrachloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromoform	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Hexachlorobutadiene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>86</i>	<i>63-120</i>				

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# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB1-65.0 RG</b>					
Laboratory ID:	09-082-10					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Iodomethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Methylene Chloride	ND	1.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroform	0.27	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Trichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-65.0 RG</b>					
Laboratory ID:	09-082-10					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Tetrachloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromoform	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Hexachlorobutadiene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>87</i>	<i>63-120</i>				

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0917W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Iodomethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Methylene Chloride	ND	1.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroform	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Trichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	



Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0917W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Tetrachloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromoform	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Hexachlorobutadiene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>80</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>85</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>92</i>	<i>63-120</i>				

Date of Report: September 19, 2012  
 Samples Submitted: September 12, 2012  
 Laboratory Reference: 1209-082  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	Limit	Flags
					Recovery				RPD		
SPIKE BLANKS											
Laboratory ID:	SB0917W1										
	SB	SBD	SB	SBD	SB	SBD					
1,1-Dichloroethene	10.1	10.2	10.0	10.0	101	102	65-141	1		15	
Benzene	9.29	9.55	10.0	10.0	93	96	77-120	3		15	
Trichloroethene	9.39	9.44	10.0	10.0	94	94	80-120	1		15	
Toluene	9.16	9.29	10.0	10.0	92	93	80-120	1		15	
Chlorobenzene	10.7	10.8	10.0	10.0	107	108	80-120	1		15	
Surrogate:											
Dibromofluoromethane					72	77	66-120				
Toluene-d8					82	82	70-120				
4-Bromofluorobenzene					91	91	63-120				

Date of Report: September 19, 2012  
Samples Submitted: September 12, 2012  
Laboratory Reference: 1209-082  
Project: 105-003

**% MOISTURE**

Date Analyzed: 9-14-12

Client ID	Lab ID	% Moisture
SB1-40.0-45.0	09-082-02	10
SB1-52.5-55.0	09-082-04	11
SB1-63.5-65.0	09-082-06	10
SB1-70.0-75.0	09-082-07	20



### Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical \_\_\_\_\_.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

ND - Not Detected at PQL

PQL - Practical Quantitation Limit

RPD - Relative Percent Difference



Analytical Laboratory Testing Services  
14648 NE 95th Street • Redmond, WA 98052  
Phone: (425) 883-3881 • [www.onsite-env.com](http://www.onsite-env.com)

# Chain of Custody

Page 1 of 1

	<b>CIVIL-UNIVERSITY LLC</b>																						
	Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com																						
Company:	Pacific Crest Environmental																						
Project Number:	IOS - 003	Turnaround Request <b>(in working days)</b>																					
Project Name:	Penthouse Drapery	<input type="checkbox"/> Same Day <input type="checkbox"/> 1 Day																					
Project Manager:	Bill Carroll	<input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days																					
Sampled by:	Avin Wiehunga	<input checked="" type="checkbox"/> Standard (7 Days) (TPH analysis 5 Days) <input type="checkbox"/> _____ (other)																					
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	% Moisture	
1	SB1-35.0 Rq	9/11/12	1350	H <sub>2</sub> O	<del>5</del>	X					X												X
2	SB1-40.0 - 45.0		1420	Soil	4	X					X												X
3	SB1-45.0 Rq		1430	H <sub>2</sub> O	<del>4</del>	X					X												X
4	SB1-52.5 - 55.0		1535	Soil	4	X					X												X
5	GB1-55.0 Rq		1600	H <sub>2</sub> O	<del>4</del>	X					X												X
6	SB1-63.5 - 65.0		1645	Soil	4	X					X												X
7	SG1-70.0 - 75.0	9/12/12	0850	Soil	4	X					X												X
8	SR1-75.0 Rq		0940	H <sub>2</sub> O	<del>5</del>	X					X												X
9	SE1-75.0 - 80.0		0930	Soil	4																	X	
10	SB1-65.0 Rq	9/11/12	1720	H <sub>2</sub> O	4	X					X												X
Relinquished		Signature	Company	Date	Time	Comments/Special Instructions																	
Received		[Signature]	Pacific Crest Env.	9-12-12	1320																		
Relinquished		[Signature]	[Signature]	9/12/12	1320																		
Received																							
Relinquished																							
Received																							
Reviewed/Date			Reviewed/Date			Chromatograms with final report <input type="checkbox"/>																	



14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

September 19, 2012

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1209-068

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on September 11, 2012.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", followed by a long horizontal flourish.

David Baumeister  
Project Manager

Enclosures

Date of Report: September 19, 2012  
Samples Submitted: September 11, 2012  
Laboratory Reference: 1209-068  
Project: 105-003

### **Case Narrative**

Samples were collected on September 10 and 11, 2012 and received by the laboratory on September 11, 2012. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

#### Halogenated Volatiles (soil) EPA 8260B Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: September 19, 2012  
 Samples Submitted: September 11, 2012  
 Laboratory Reference: 1209-068  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

page 1 of 2

Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB8-0.5-6.0</b>					
Laboratory ID:	09-068-01					
Dichlorodifluoromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0054	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0054	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0054	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0054	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0054	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-13-12	9-13-12	



Date of Report: September 19, 2012  
 Samples Submitted: September 11, 2012  
 Laboratory Reference: 1209-068  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

page 2 of 2

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB8-0.5-6.0</b>					
Laboratory ID:	09-068-01					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	0.0030	0.0011	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0054	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0054	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>52-125</i>				

Date of Report: September 19, 2012  
 Samples Submitted: September 11, 2012  
 Laboratory Reference: 1209-068  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

page 1 of 2

Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB8-6.0-10.0</b>					
Laboratory ID:	09-068-02					
Dichlorodifluoromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0065	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0065	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0065	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0065	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0065	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260	9-13-12	9-13-12	

Date of Report: September 19, 2012  
 Samples Submitted: September 11, 2012  
 Laboratory Reference: 1209-068  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-6.0-10.0</b>					
Laboratory ID:	09-068-02					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	0.0046	0.0013	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0065	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0065	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>52-125</i>				

Date of Report: September 19, 2012  
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 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-10.0-16.5</b>					
Laboratory ID:	09-068-03					
Dichlorodifluoromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0065	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0065	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0065	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0065	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	0.0060	0.0013	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Trichloroethene	0.016	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0065	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260	9-13-12	9-13-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-10.0-16.5</b>					
Laboratory ID:	09-068-03					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	0.23	0.0013	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0065	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0065	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>52-125</i>				

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# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB8-20.0-26.0</b>					
Laboratory ID:	09-068-05					
Dichlorodifluoromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0050	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0050	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0050	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0050	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-13-12	9-13-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-20.0-26.0</b>					
Laboratory ID:	09-068-05					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	0.43	0.060	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0050	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>52-125</i>				

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# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB8-33.0-35.0</b>					
Laboratory ID:	09-068-06					
Dichlorodifluoromethane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0044	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0044	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0044	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0044	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.00088	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.00088	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0044	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.00088	EPA 8260	9-13-12	9-13-12	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-33.0-35.0</b>					
Laboratory ID:	09-068-06					
1,1,2-Trichloroethane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	0.0020	0.00088	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.00088	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0044	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0044	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.00088	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>52-125</i>				

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# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB8-40.0-46.0</b>					
Laboratory ID:	09-068-09					
Dichlorodifluoromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0055	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0055	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0055	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0055	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0055	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-13-12	9-13-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-40.0-46.0</b>					
Laboratory ID:	09-068-09					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0055	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0055	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>107</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>52-125</i>				

Date of Report: September 19, 2012  
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 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB8-50.0-55.0</b>					
Laboratory ID:	09-068-11					
Dichlorodifluoromethane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0041	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0041	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0041	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0041	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.00082	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.00082	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0041	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.00082	EPA 8260	9-13-12	9-13-12	

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# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-50.0-55.0</b>					
Laboratory ID:	09-068-11					
1,1,2-Trichloroethane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	0.064	0.00082	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.00082	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0041	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0041	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.00082	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>52-125</i>				

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# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB8-64.0-66.0</b>					
Laboratory ID:	09-068-13					
Dichlorodifluoromethane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0042	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0042	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0042	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0042	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0042	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.00084	EPA 8260	9-13-12	9-13-12	

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# **HALOGENATED VOLATILES by EPA 8260B**

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<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB8-64.0-66.0</b>					
Laboratory ID:	09-068-13					
1,1,2-Trichloroethane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.00084	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0042	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0042	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.00084	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>106</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>52-125</i>				

Date of Report: September 19, 2012  
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# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB8-74.0-80.0</b>					
Laboratory ID:	09-068-15					
Dichlorodifluoromethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0046	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0046	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0046	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0046	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0046	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.00093	EPA 8260	9-13-12	9-13-12	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-74.0-80.0</b>					
Laboratory ID:	09-068-15					
1,1,2-Trichloroethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0046	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0046	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>91</i>	<i>52-125</i>				

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# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB1-0.25-5.0</b>					
Laboratory ID:	09-068-16					
Dichlorodifluoromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0055	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0055	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0055	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0055	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0055	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-13-12	9-13-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-0.25-5.0</b>					
Laboratory ID:	09-068-16					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0055	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0055	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>52-125</i>				

Date of Report: September 19, 2012  
 Samples Submitted: September 11, 2012  
 Laboratory Reference: 1209-068  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB1-6.5-10.0</b>					
Laboratory ID:	09-068-17					
Dichlorodifluoromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0057	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0057	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0057	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0057	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0057	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-13-12	9-13-12	

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# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-6.5-10.0</b>					
Laboratory ID:	09-068-17					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0057	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0057	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>52-125</i>				

Date of Report: September 19, 2012  
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# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB1-10.0-16.0</b>					
Laboratory ID:	09-068-18					
Dichlorodifluoromethane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0058	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0058	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0058	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0058	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0058	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260	9-13-12	9-13-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-10.0-16.0</b>					
Laboratory ID:	09-068-18					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0058	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0058	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>52-125</i>				

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# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-25.0-30.0</b>					
Laboratory ID:	09-068-19					
Dichlorodifluoromethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0047	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0047	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0047	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0047	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0047	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.00093	EPA 8260	9-13-12	9-13-12	



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# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-25.0-30.0</b>					
Laboratory ID:	09-068-19					
1,1,2-Trichloroethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.00093	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0047	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0047	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.00093	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>52-125</i>				

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# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>SB1-34.0-35.0</b>					
Laboratory ID:	09-068-21					
Dichlorodifluoromethane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0045	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0045	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0045	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0045	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0045	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.00090	EPA 8260	9-13-12	9-13-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-34.0-35.0</b>					
Laboratory ID:	09-068-21					
1,1,2-Trichloroethane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.00090	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0045	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0045	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.00090	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>52-125</i>				

Date of Report: September 19, 2012  
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 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0913S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0050	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0050	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0050	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0050	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-13-12	9-13-12	

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**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0913S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0050	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>52-125</i>				

Date of Report: September 19, 2012  
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 Laboratory Reference: 1209-068  
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**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0914S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	0.0050	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	0.0050	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	0.0050	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	0.0050	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-14-12	9-14-12	

Date of Report: September 19, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0914S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	0.0050	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260	9-14-12	9-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>109</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>52-125</i>				

Date of Report: September 19, 2012  
 Samples Submitted: September 11, 2012  
 Laboratory Reference: 1209-068  
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**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	Limit	Flags
					Recovery				RPD		
SPIKE BLANKS											
Laboratory ID:		SB0913S1									
	SB	SBD	SB	SBD	SB	SBD					
1,1-Dichloroethene	0.0548	0.0560	0.0500	0.0500	110	112	65-141	2		15	
Benzene	0.0487	0.0489	0.0500	0.0500	97	98	69-121	0		15	
Trichloroethene	0.0488	0.0475	0.0500	0.0500	98	95	75-120	3		15	
Toluene	0.0492	0.0490	0.0500	0.0500	98	98	75-120	0		15	
Chlorobenzene	0.0502	0.0489	0.0500	0.0500	100	98	75-120	3		15	
Surrogate:											
Dibromofluoromethane					99	97	63-127				
Toluene-d8					101	100	65-129				
4-Bromofluorobenzene					97	96	52-125				



Date of Report: September 19, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent		Recovery		RPD	
					Recovery		Limits		RPD	Limit
SPIKE BLANKS										
Laboratory ID:		SB0914S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0542	0.0534	0.0500	0.0500	108	107	65-141	1	15	
Benzene	0.0512	0.0534	0.0500	0.0500	102	107	69-121	4	15	
Trichloroethene	0.0490	0.0491	0.0500	0.0500	98	98	75-120	0	15	
Toluene	0.0482	0.0470	0.0500	0.0500	96	94	75-120	3	15	
Chlorobenzene	0.0523	0.0503	0.0500	0.0500	105	101	75-120	4	15	
Surrogate:										
Dibromofluoromethane					100	100	63-127			
Toluene-d8					92	95	65-129			
4-Bromofluorobenzene					98	98	52-125			

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# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-25.0 RG</b>					
Laboratory ID:	09-068-04					
Dichlorodifluoromethane	ND	4.0	EPA 8260	9-17-12	9-17-12	
Chloromethane	ND	20	EPA 8260	9-17-12	9-17-12	
Vinyl Chloride	ND	4.0	EPA 8260	9-17-12	9-17-12	
Bromomethane	ND	4.0	EPA 8260	9-17-12	9-17-12	
Chloroethane	ND	20	EPA 8260	9-17-12	9-17-12	
Trichlorofluoromethane	ND	4.0	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethene	ND	4.0	EPA 8260	9-17-12	9-17-12	
Iodomethane	ND	20	EPA 8260	9-17-12	9-17-12	
Methylene Chloride	ND	20	EPA 8260	9-17-12	9-17-12	
(trans) 1,2-Dichloroethene	ND	4.0	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethane	ND	4.0	EPA 8260	9-17-12	9-17-12	
2,2-Dichloropropane	ND	4.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,2-Dichloroethene	ND	4.0	EPA 8260	9-17-12	9-17-12	
Bromochloromethane	ND	4.0	EPA 8260	9-17-12	9-17-12	
Chloroform	ND	4.0	EPA 8260	9-17-12	9-17-12	
1,1,1-Trichloroethane	ND	4.0	EPA 8260	9-17-12	9-17-12	
Carbon Tetrachloride	ND	4.0	EPA 8260	9-17-12	9-17-12	
1,1-Dichloropropene	ND	4.0	EPA 8260	9-17-12	9-17-12	
1,2-Dichloroethane	ND	4.0	EPA 8260	9-17-12	9-17-12	
Trichloroethene	ND	4.0	EPA 8260	9-17-12	9-17-12	
1,2-Dichloropropane	ND	4.0	EPA 8260	9-17-12	9-17-12	
Dibromomethane	ND	4.0	EPA 8260	9-17-12	9-17-12	
Bromodichloromethane	ND	4.0	EPA 8260	9-17-12	9-17-12	
2-Chloroethyl Vinyl Ether	ND	20	EPA 8260	9-17-12	9-17-12	
(cis) 1,3-Dichloropropene	ND	4.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,3-Dichloropropene	ND	4.0	EPA 8260	9-17-12	9-17-12	

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# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-25.0 RG</b>					
Laboratory ID:	09-068-04					
1,1,2-Trichloroethane	ND	4.0	EPA 8260	9-17-12	9-17-12	
Tetrachloroethene	740	4.0	EPA 8260	9-17-12	9-17-12	
1,3-Dichloropropane	ND	4.0	EPA 8260	9-17-12	9-17-12	
Dibromochloromethane	ND	4.0	EPA 8260	9-17-12	9-17-12	
1,2-Dibromoethane	ND	4.0	EPA 8260	9-17-12	9-17-12	
Chlorobenzene	ND	4.0	EPA 8260	9-17-12	9-17-12	
1,1,1,2-Tetrachloroethane	ND	4.0	EPA 8260	9-17-12	9-17-12	
Bromoform	ND	20	EPA 8260	9-17-12	9-17-12	
Bromobenzene	ND	4.0	EPA 8260	9-17-12	9-17-12	
1,1,2,2-Tetrachloroethane	ND	4.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichloropropane	ND	4.0	EPA 8260	9-17-12	9-17-12	
2-Chlorotoluene	ND	4.0	EPA 8260	9-17-12	9-17-12	
4-Chlorotoluene	ND	4.0	EPA 8260	9-17-12	9-17-12	
1,3-Dichlorobenzene	ND	4.0	EPA 8260	9-17-12	9-17-12	
1,4-Dichlorobenzene	ND	4.0	EPA 8260	9-17-12	9-17-12	
1,2-Dichlorobenzene	ND	4.0	EPA 8260	9-17-12	9-17-12	
1,2-Dibromo-3-chloropropane	ND	20	EPA 8260	9-17-12	9-17-12	
1,2,4-Trichlorobenzene	ND	4.0	EPA 8260	9-17-12	9-17-12	
Hexachlorobutadiene	ND	20	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichlorobenzene	ND	4.0	EPA 8260	9-17-12	9-17-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>92</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>84</i>	<i>63-120</i>				

Date of Report: September 19, 2012  
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# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB8-35.0 RG</b>						
Laboratory ID: 09-068-08						
Dichlorodifluoromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Chloromethane	ND	5.0	EPA 8260	9-17-12	9-17-12	
Vinyl Chloride	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromomethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Chloroethane	ND	5.0	EPA 8260	9-17-12	9-17-12	
Trichlorofluoromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethene	ND	1.0	EPA 8260	9-17-12	9-17-12	
Iodomethane	ND	5.0	EPA 8260	9-17-12	9-17-12	
Methylene Chloride	ND	5.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
2,2-Dichloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,2-Dichloroethene	1.7	1.0	EPA 8260	9-17-12	9-17-12	
Bromochloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Chloroform	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,1,1-Trichloroethane	1.5	1.0	EPA 8260	9-17-12	9-17-12	
Carbon Tetrachloride	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,1-Dichloropropene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2-Dichloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Trichloroethene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2-Dichloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Dibromomethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromodichloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
2-Chloroethyl Vinyl Ether	ND	5.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260	9-17-12	9-17-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-35.0 RG</b>					
Laboratory ID:	09-068-08					
1,1,2-Trichloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Tetrachloroethene	110	1.0	EPA 8260	9-17-12	9-17-12	
1,3-Dichloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Dibromochloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2-Dibromoethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Chlorobenzene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromoform	ND	5.0	EPA 8260	9-17-12	9-17-12	
Bromobenzene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
2-Chlorotoluene	ND	1.0	EPA 8260	9-17-12	9-17-12	
4-Chlorotoluene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,3-Dichlorobenzene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,4-Dichlorobenzene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2-Dichlorobenzene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260	9-17-12	9-17-12	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260	9-17-12	9-17-12	
Hexachlorobutadiene	ND	5.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260	9-17-12	9-17-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>86</i>	<i>63-120</i>				

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-45.0 RG</b>					
Laboratory ID:	09-068-10					
Dichlorodifluoromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Chloromethane	ND	5.0	EPA 8260	9-17-12	9-17-12	
Vinyl Chloride	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromomethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Chloroethane	ND	5.0	EPA 8260	9-17-12	9-17-12	
Trichlorofluoromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethene	ND	1.0	EPA 8260	9-17-12	9-17-12	
Iodomethane	ND	5.0	EPA 8260	9-17-12	9-17-12	
Methylene Chloride	ND	5.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
2,2-Dichloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,2-Dichloroethene	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromochloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Chloroform	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,1,1-Trichloroethane	1.0	1.0	EPA 8260	9-17-12	9-17-12	
Carbon Tetrachloride	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,1-Dichloropropene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2-Dichloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Trichloroethene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2-Dichloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Dibromomethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromodichloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
2-Chloroethyl Vinyl Ether	ND	5.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260	9-17-12	9-17-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-45.0 RG</b>					
Laboratory ID:	09-068-10					
1,1,2-Trichloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Tetrachloroethene	91	1.0	EPA 8260	9-17-12	9-17-12	
1,3-Dichloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Dibromochloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2-Dibromoethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Chlorobenzene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromoform	ND	5.0	EPA 8260	9-17-12	9-17-12	
Bromobenzene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
2-Chlorotoluene	ND	1.0	EPA 8260	9-17-12	9-17-12	
4-Chlorotoluene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,3-Dichlorobenzene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,4-Dichlorobenzene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2-Dichlorobenzene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260	9-17-12	9-17-12	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260	9-17-12	9-17-12	
Hexachlorobutadiene	ND	5.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260	9-17-12	9-17-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>87</i>	<i>63-120</i>				

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-55.0 RG</b>					
Laboratory ID:	09-068-12					
Dichlorodifluoromethane	ND	0.40	EPA 8260	9-17-12	9-17-12	
Chloromethane	ND	2.0	EPA 8260	9-17-12	9-17-12	
Vinyl Chloride	ND	0.40	EPA 8260	9-17-12	9-17-12	
Bromomethane	ND	0.40	EPA 8260	9-17-12	9-17-12	
Chloroethane	ND	2.0	EPA 8260	9-17-12	9-17-12	
Trichlorofluoromethane	ND	0.40	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethene	ND	0.40	EPA 8260	9-17-12	9-17-12	
Iodomethane	ND	2.0	EPA 8260	9-17-12	9-17-12	
Methylene Chloride	ND	2.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,2-Dichloroethene	ND	0.40	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethane	ND	0.40	EPA 8260	9-17-12	9-17-12	
2,2-Dichloropropane	ND	0.40	EPA 8260	9-17-12	9-17-12	
(cis) 1,2-Dichloroethene	0.41	0.40	EPA 8260	9-17-12	9-17-12	
Bromochloromethane	ND	0.40	EPA 8260	9-17-12	9-17-12	
Chloroform	ND	0.40	EPA 8260	9-17-12	9-17-12	
1,1,1-Trichloroethane	0.80	0.40	EPA 8260	9-17-12	9-17-12	
Carbon Tetrachloride	ND	0.40	EPA 8260	9-17-12	9-17-12	
1,1-Dichloropropene	ND	0.40	EPA 8260	9-17-12	9-17-12	
1,2-Dichloroethane	ND	0.40	EPA 8260	9-17-12	9-17-12	
Trichloroethene	ND	0.40	EPA 8260	9-17-12	9-17-12	
1,2-Dichloropropane	ND	0.40	EPA 8260	9-17-12	9-17-12	
Dibromomethane	ND	0.40	EPA 8260	9-17-12	9-17-12	
Bromodichloromethane	ND	0.40	EPA 8260	9-17-12	9-17-12	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260	9-17-12	9-17-12	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260	9-17-12	9-17-12	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-55.0 RG</b>					
Laboratory ID:	09-068-12					
1,1,2-Trichloroethane	ND	0.40	EPA 8260	9-17-12	9-17-12	
Tetrachloroethene	56	0.40	EPA 8260	9-17-12	9-17-12	
1,3-Dichloropropane	ND	0.40	EPA 8260	9-17-12	9-17-12	
Dibromochloromethane	ND	0.40	EPA 8260	9-17-12	9-17-12	
1,2-Dibromoethane	ND	0.40	EPA 8260	9-17-12	9-17-12	
Chlorobenzene	ND	0.40	EPA 8260	9-17-12	9-17-12	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260	9-17-12	9-17-12	
Bromoform	ND	2.0	EPA 8260	9-17-12	9-17-12	
Bromobenzene	ND	0.40	EPA 8260	9-17-12	9-17-12	
1,1,2,2-Tetrachloroethane	ND	0.40	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichloropropane	ND	0.40	EPA 8260	9-17-12	9-17-12	
2-Chlorotoluene	ND	0.40	EPA 8260	9-17-12	9-17-12	
4-Chlorotoluene	ND	0.40	EPA 8260	9-17-12	9-17-12	
1,3-Dichlorobenzene	ND	0.40	EPA 8260	9-17-12	9-17-12	
1,4-Dichlorobenzene	ND	0.40	EPA 8260	9-17-12	9-17-12	
1,2-Dichlorobenzene	ND	0.40	EPA 8260	9-17-12	9-17-12	
1,2-Dibromo-3-chloropropane	ND	2.0	EPA 8260	9-17-12	9-17-12	
1,2,4-Trichlorobenzene	ND	0.40	EPA 8260	9-17-12	9-17-12	
Hexachlorobutadiene	ND	2.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260	9-17-12	9-17-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>106</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>85</i>	<i>63-120</i>				

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-65.0 RG</b>					
Laboratory ID:	09-068-14					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Iodomethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Methylene Chloride	ND	1.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroform	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1-Trichloroethane	0.28	0.20	EPA 8260	9-17-12	9-17-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Trichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB8-65.0 RG</b>					
Laboratory ID:	09-068-14					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Tetrachloroethene	18	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromoform	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Hexachlorobutadiene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>85</i>	<i>63-120</i>				

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-25.0 RG</b>					
Laboratory ID:	09-068-20					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Iodomethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Methylene Chloride	ND	1.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroform	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Trichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	

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# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB1-25.0 RG</b>					
Laboratory ID:	09-068-20					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Tetrachloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromoform	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Hexachlorobutadiene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>93</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>84</i>	<i>63-120</i>				

Date of Report: September 19, 2012  
 Samples Submitted: September 11, 2012  
 Laboratory Reference: 1209-068  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0917W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloromethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Iodomethane	ND	1.0	EPA 8260	9-17-12	9-17-12	
Methylene Chloride	ND	1.0	EPA 8260	9-17-12	9-17-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chloroform	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Trichloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromomethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-17-12	9-17-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-17-12	9-17-12	

Date of Report: September 19, 2012  
 Samples Submitted: September 11, 2012  
 Laboratory Reference: 1209-068  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0917W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Tetrachloroethene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Chlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
Bromoform	ND	1.0	EPA 8260	9-17-12	9-17-12	
Bromobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-17-12	9-17-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
Hexachlorobutadiene	ND	1.0	EPA 8260	9-17-12	9-17-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-17-12	9-17-12	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>80</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>85</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>92</i>	<i>63-120</i>				

Date of Report: September 19, 2012  
 Samples Submitted: September 11, 2012  
 Laboratory Reference: 1209-068  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	Flags
					Recovery				RPD	
SPIKE BLANKS										
Laboratory ID:	SB0917W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	10.1	10.2	10.0	10.0	101	102	65-141	1	15	
Benzene	9.29	9.55	10.0	10.0	93	96	77-120	3	15	
Trichloroethene	9.39	9.44	10.0	10.0	94	94	80-120	1	15	
Toluene	9.16	9.29	10.0	10.0	92	93	80-120	1	15	
Chlorobenzene	10.7	10.8	10.0	10.0	107	108	80-120	1	15	
Surrogate:										
Dibromofluoromethane					72	77	66-120			
Toluene-d8					82	82	70-120			
4-Bromofluorobenzene					91	91	63-120			



Date of Report: September 19, 2012  
Samples Submitted: September 11, 2012  
Laboratory Reference: 1209-068  
Project: 105-003

**% MOISTURE**

Date Analyzed: 9-13-12

Client ID	Lab ID	% Moisture
SB8-0.5-6.0	09-068-01	10
SB8-6.0-10.0	09-068-02	24
SB8-10.0-16.5	09-068-03	24
SB8-20.0-26.0	09-068-05	15
SB8-33.0-35.0	09-068-06	10
SB8-40.0-46.0	09-068-09	15
SB8-50.0-55.0	09-068-11	11
SB8-64.0-66.0	09-068-13	14
SB8-74.0-80.0	09-068-15	12
SB1-0.25-5.0	09-068-16	9
SB1-6.5-10.0	09-068-17	22
SB1-10.0-16.0	09-068-18	23
SB1-25.0-30.0	09-068-19	11
SB1-34.0-35.0	09-068-21	8



### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - Sample extract treated with an acid/silica gel cleanup procedure.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



Phone: (425) 883-3881 • Fax: (425) 885-4603

# Chain of Custody

890-60

**Environmental Inc.**

Phone: (425) 883-3881 • Fax: (425) 885-4603

**Laboratory Number:**

**09-068**

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Day ☐ 3 Day

☒ Standard (7 working days)

(TPH analysis 5 working days)

☐ (other)

**Requested Analysis**

NWTPH-HCID  
NWTPH-Gx/BTEX  
NWTPH-Dx  
Volatiles by 8260B  
Halogenated Volatiles by 8260B  
Semivolatiles by 8270D  
PAHs by 8270D / SIM  
PCBs by 8082  
Pesticides by 8081A  
Herbicides by 8151A  
Total RCRA Metals (8)  
TCLP Metals  
HEM by 1664

Hold

% Moisture

**Turnaround Request**  
(in working days)

Company: Pacific Crest Environmental

Project Number: 105-003

Project Name: Parthasarathy Drilling

Project Manager: Bill Carroll

Sampled by: April Weisberg

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270D	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	% Moisture
1	SB8-0.5-6.0	9/10/12	1000	S	4					X									X
2	SB8-6.0-10.0		1005	↓	↓					X									↓
3	SB8-10.0-16.5		1020	↓	↓					X									↓
4	SB8-25.0-40.0 Rq		1100	H <sub>2</sub> O	4					X									↓
5	SB8-20.0-26.0		1130	S	4					X									↓
6	SB8-33.0-35.0		1210	↓	↓					X									↓
7	SB8-35.0-40.0		1215	↓	↓													X	
8	SB8-35.0 Rq		1220	H <sub>2</sub> O	3					X									
9	SB8-40.0-46.0		1330	S	4					X									
10	SB8-45.0 Rq		1400	W	↓					X									

Signature

Company

Date

Time

Comments/Special Instructions:

April Weisberg

Pacific Crest Env.

9-11-12

1435

Bill Carroll

SB8

9-11-12

1520

SB8

SB8

9-11-12

1520

SB8

SB8

9-11-12

1520

SB8

SB8

9-11-12

1520

SB8

SB8

9-11-12

1520

SB8

SB8

9-11-12

1520

Chromatograms with final report ☐





**OnSite Environmental Inc.**  
Analytical Laboratory Testing Services  
14648 NE 95th Street • Redmond, WA 98052  
Phone: (425) 883-3881 • www.onsite-env.com

## Chain of Custody

Page 2 of 3

Company: Pacific Crest Environmental		Turnaround Request (in working days)				Laboratory Number: 09-068																	
Project Number: 105-003		<input type="checkbox"/> Same Day <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input checked="" type="checkbox"/> Standard (7 Days) (TPH analysis 5 Days)																					
Project Name: Parthousc Brayway		<input type="checkbox"/> (other) _____																					
Project Manager: Bill Carroll																							
Sampled by: April Wierwanga																							
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	% Moisture	
11	SB8-50.0-55.0	9-10-12	1430	Soil	4																		
12	SB8-55.0 Rq		1500	H <sub>2</sub> O	74					X													
13	SB8-64.0-66.0		1600	Soil	4					X													
14	SB8-65.0 Rq		1615	H <sub>2</sub> O	3					X													
15	SB8-74.0-80.0		1715	Soil	4					X													
16	SB1-0.25-5.0	9-11-12	1100	Soil	4					X													
17	SB1-6.5-10.0		1115	Soil	4					X													
18	SB1-10.0-16.0		1125	Soil	4					X													
19	SB1-25.0-30.0		1200	Soil	4					X													
20	SB1-25.0 Rq		1205	H <sub>2</sub> O	74					X													
Signature		Company		Date	Time	Comments/Special Instructions																	
Relinquished		Pacific Crest Env.		9-11-12	1435																		
Received		JPR		9-11-12	1435																		
Relinquished		JPR		9-11-12	1520																		
Received		JPR		9-11-12	1520																		
Relinquished																							
Received																							
Reviewed/Date		Reviewed/Date		Chromatograms with final report <input type="checkbox"/>																			



Analytical Laboratory Testing Services  
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## Chain of Custody

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[illegible]



14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

September 17, 2012

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1209-053

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on September 7, 2012.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", followed by a long horizontal flourish.

David Baumeister  
Project Manager

Enclosures

Date of Report: September 17, 2012  
Samples Submitted: September 7, 2012  
Laboratory Reference: 1209-053  
Project: 105-003

### **Case Narrative**

Samples were collected on September 7, 2012 and received by the laboratory on September 7, 2012. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

#### Halogenated Volatiles (soil) EPA 8260B Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



Date of Report: September 17, 2012  
 Samples Submitted: September 7, 2012  
 Laboratory Reference: 1209-053  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB9-63.5-70.0</b>					
Laboratory ID:	09-053-01					
Dichlorodifluoromethane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Chloromethane	ND	0.0043	EPA 8260	9-12-12	9-12-12	
Vinyl Chloride	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Bromomethane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Chloroethane	ND	0.0043	EPA 8260	9-12-12	9-12-12	
Trichlorofluoromethane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,1-Dichloroethene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Iodomethane	ND	0.0043	EPA 8260	9-12-12	9-12-12	
Methylene Chloride	ND	0.0043	EPA 8260	9-12-12	9-12-12	
(trans) 1,2-Dichloroethene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,1-Dichloroethane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
2,2-Dichloropropane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
(cis) 1,2-Dichloroethene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Bromochloromethane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Chloroform	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,1,1-Trichloroethane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Carbon Tetrachloride	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,1-Dichloropropene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,2-Dichloroethane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Trichloroethene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,2-Dichloropropane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Dibromomethane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Bromodichloromethane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
2-Chloroethyl Vinyl Ether	ND	0.0043	EPA 8260	9-12-12	9-12-12	
(cis) 1,3-Dichloropropene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
(trans) 1,3-Dichloropropene	ND	0.00087	EPA 8260	9-12-12	9-12-12	



Date of Report: September 17, 2012  
 Samples Submitted: September 7, 2012  
 Laboratory Reference: 1209-053  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB9-63.5-70.0</b>					
Laboratory ID:	09-053-01					
1,1,2-Trichloroethane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Tetrachloroethene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,3-Dichloropropane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Dibromochloromethane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,2-Dibromoethane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Chlorobenzene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,1,1,2-Tetrachloroethane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Bromoform	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Bromobenzene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,1,2,2-Tetrachloroethane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,2,3-Trichloropropane	ND	0.00087	EPA 8260	9-12-12	9-12-12	
2-Chlorotoluene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
4-Chlorotoluene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,3-Dichlorobenzene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,4-Dichlorobenzene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,2-Dichlorobenzene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
1,2-Dibromo-3-chloropropane	ND	0.0043	EPA 8260	9-12-12	9-12-12	
1,2,4-Trichlorobenzene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
Hexachlorobutadiene	ND	0.0043	EPA 8260	9-12-12	9-12-12	
1,2,3-Trichlorobenzene	ND	0.00087	EPA 8260	9-12-12	9-12-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>52-125</i>				

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 Laboratory Reference: 1209-053  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB9-70.0-78.5</b>					
<b>Laboratory ID:</b>	<b>09-053-03</b>					
Dichlorodifluoromethane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Chloromethane	ND	0.0055	EPA 8260	9-12-12	9-12-12	
Vinyl Chloride	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Bromomethane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Chloroethane	ND	0.0055	EPA 8260	9-12-12	9-12-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Iodomethane	ND	0.0055	EPA 8260	9-12-12	9-12-12	
Methylene Chloride	ND	0.0055	EPA 8260	9-12-12	9-12-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Bromochloromethane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Chloroform	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Trichloroethene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Dibromomethane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Bromodichloromethane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
2-Chloroethyl Vinyl Ether	ND	0.0055	EPA 8260	9-12-12	9-12-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-12-12	9-12-12	

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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB9-70.0-78.5</b>					
Laboratory ID:	09-053-03					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Tetrachloroethene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Dibromochloromethane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Chlorobenzene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Bromoform	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Bromobenzene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260	9-12-12	9-12-12	
2-Chlorotoluene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
4-Chlorotoluene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
1,2-Dibromo-3-chloropropane	ND	0.0055	EPA 8260	9-12-12	9-12-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
Hexachlorobutadiene	ND	0.0055	EPA 8260	9-12-12	9-12-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260	9-12-12	9-12-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>91</i>	<i>52-125</i>				

Date of Report: September 17, 2012  
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 Laboratory Reference: 1209-053  
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**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB9-85.0-87.5</b>					
<b>Laboratory ID:</b>	<b>09-053-05</b>					
Dichlorodifluoromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0064	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0064	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0064	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0064	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0064	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260	9-13-12	9-13-12	

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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB9-85.0-87.5</b>					
Laboratory ID:	09-053-05					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0064	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0064	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>91</i>	<i>52-125</i>				

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 Laboratory Reference: 1209-053  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB9-95.0-97.5</b>					
<b>Laboratory ID:</b>	<b>09-053-06</b>					
Dichlorodifluoromethane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Chloromethane	ND	0.0058	EPA 8260	9-12-12	9-12-12	
Vinyl Chloride	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Bromomethane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Chloroethane	ND	0.0058	EPA 8260	9-12-12	9-12-12	
Trichlorofluoromethane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,1-Dichloroethene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Iodomethane	ND	0.0058	EPA 8260	9-12-12	9-12-12	
Methylene Chloride	ND	0.0058	EPA 8260	9-12-12	9-12-12	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,1-Dichloroethane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
2,2-Dichloropropane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Bromochloromethane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Chloroform	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Carbon Tetrachloride	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,1-Dichloropropene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,2-Dichloroethane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Trichloroethene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,2-Dichloropropane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Dibromomethane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Bromodichloromethane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
2-Chloroethyl Vinyl Ether	ND	0.0058	EPA 8260	9-12-12	9-12-12	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260	9-12-12	9-12-12	

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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB9-95.0-97.5</b>					
Laboratory ID:	09-053-06					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Tetrachloroethene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,3-Dichloropropane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Dibromochloromethane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,2-Dibromoethane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Chlorobenzene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Bromoform	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Bromobenzene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260	9-12-12	9-12-12	
2-Chlorotoluene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
4-Chlorotoluene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
1,2-Dibromo-3-chloropropane	ND	0.0058	EPA 8260	9-12-12	9-12-12	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
Hexachlorobutadiene	ND	0.0058	EPA 8260	9-12-12	9-12-12	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260	9-12-12	9-12-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>52-125</i>				

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**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0912S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Chloromethane	ND	0.0050	EPA 8260	9-12-12	9-12-12	
Vinyl Chloride	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Bromomethane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Chloroethane	ND	0.0050	EPA 8260	9-12-12	9-12-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Iodomethane	ND	0.0050	EPA 8260	9-12-12	9-12-12	
Methylene Chloride	ND	0.0050	EPA 8260	9-12-12	9-12-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Bromochloromethane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Chloroform	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Trichloroethene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Dibromomethane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Bromodichloromethane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260	9-12-12	9-12-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-12-12	9-12-12	



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**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0912S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Tetrachloroethene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Dibromochloromethane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Chlorobenzene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Bromoform	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Bromobenzene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260	9-12-12	9-12-12	
2-Chlorotoluene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
4-Chlorotoluene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260	9-12-12	9-12-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
Hexachlorobutadiene	ND	0.0050	EPA 8260	9-12-12	9-12-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260	9-12-12	9-12-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>106</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>52-125</i>				

Date of Report: September 17, 2012  
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 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0913S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Chloromethane	ND	0.0050	EPA 8260	9-13-12	9-13-12	
Vinyl Chloride	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromomethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Chloroethane	ND	0.0050	EPA 8260	9-13-12	9-13-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Iodomethane	ND	0.0050	EPA 8260	9-13-12	9-13-12	
Methylene Chloride	ND	0.0050	EPA 8260	9-13-12	9-13-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromochloromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Chloroform	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Trichloroethene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Dibromomethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromodichloromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260	9-13-12	9-13-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-13-12	9-13-12	

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**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0913S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Tetrachloroethene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Dibromochloromethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Chlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromoform	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Bromobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260	9-13-12	9-13-12	
2-Chlorotoluene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
4-Chlorotoluene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260	9-13-12	9-13-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
Hexachlorobutadiene	ND	0.0050	EPA 8260	9-13-12	9-13-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260	9-13-12	9-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>52-125</i>				

Date of Report: September 17, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent		Recovery		RPD	
					Recovery		Limits		RPD	Limit
SPIKE BLANKS										
Laboratory ID:		SB0912S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0530	0.0533	0.0500	0.0500	106	107	65-141	1	15	
Benzene	0.0507	0.0515	0.0500	0.0500	101	103	69-121	2	15	
Trichloroethene	0.0491	0.0498	0.0500	0.0500	98	100	75-120	1	15	
Toluene	0.0496	0.0507	0.0500	0.0500	99	101	75-120	2	15	
Chlorobenzene	0.0518	0.0509	0.0500	0.0500	104	102	75-120	2	15	
Surrogate:										
Dibromofluoromethane					97	96	63-127			
Toluene-d8					99	99	65-129			
4-Bromofluorobenzene					98	96	52-125			

Date of Report: September 17, 2012  
 Samples Submitted: September 7, 2012  
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 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	
					Recovery				RPD	Limit
SPIKE BLANKS										
Laboratory ID:	SB0913S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0548	0.0560	0.0500	0.0500	110	112	65-141	2	15	
Benzene	0.0487	0.0489	0.0500	0.0500	97	98	69-121	0	15	
Trichloroethene	0.0488	0.0475	0.0500	0.0500	98	95	75-120	3	15	
Toluene	0.0492	0.0490	0.0500	0.0500	98	98	75-120	0	15	
Chlorobenzene	0.0502	0.0489	0.0500	0.0500	100	98	75-120	3	15	
Surrogate:										
Dibromofluoromethane					99	97	63-127			
Toluene-d8					101	100	65-129			
4-Bromofluorobenzene					97	96	52-125			

Date of Report: September 17, 2012  
 Samples Submitted: September 7, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB9-65.0 RG</b>					
<b>Laboratory ID:</b>	<b>09-053-02</b>					
Dichlorodifluoromethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	0.40	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	0.40	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	2.0	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	0.40	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	0.40	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260	9-14-12	9-14-12	

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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB9-65.0 RG</b>					
Laboratory ID:	09-053-02					
1,1,2-Trichloroethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	83	0.40	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	2.0	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	0.40	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	0.40	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	0.40	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260	9-14-12	9-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>84</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>90</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>91</i>	<i>63-120</i>				

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**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB9-75.0 RG</b>					
Laboratory ID:	09-053-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	1.0	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	1.0	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	1.0	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	1.0	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-14-12	9-14-12	



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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB9-75.0 RG</b>					
Laboratory ID:	09-053-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	26	0.20	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	1.0	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>84</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>87</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>88</i>	<i>63-120</i>				

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**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0914W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	1.0	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	1.0	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	1.0	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	1.0	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-14-12	9-14-12	

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**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0914W1						
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	1.0	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>79</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>82</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>82</i>	<i>63-120</i>				

Date of Report: September 17, 2012  
 Samples Submitted: September 7, 2012  
 Laboratory Reference: 1209-053  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		
					Recovery	Limits	RPD	Limit	Flags	
SPIKE BLANKS										
Laboratory ID:	SB0914W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	11.1	10.7	10.0	10.0	111	107	65-141	4	15	
Benzene	10.4	10.1	10.0	10.0	104	101	77-120	3	15	
Trichloroethene	10.5	9.94	10.0	10.0	105	99	80-120	5	15	
Toluene	10.1	10.0	10.0	10.0	101	100	80-120	1	15	
Chlorobenzene	11.0	10.5	10.0	10.0	110	105	80-120	5	15	
Surrogate:										
Dibromofluoromethane					77	84	66-120			
Toluene-d8					84	89	70-120			
4-Bromofluorobenzene					81	89	63-120			

Date of Report: September 17, 2012  
Samples Submitted: September 7, 2012  
Laboratory Reference: 1209-053  
Project: 105-003

**% MOISTURE**

Date Analyzed: 9-12-12

Client ID	Lab ID	% Moisture
SB9-63.5-70.0	09-053-01	14
SB9-70.0-78.5	09-053-03	26
SB9-85.0-87.5	09-053-05	23
SB9-95.0-97.5	09-053-06	24



### Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical \_\_\_\_\_.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

ND - Not Detected at PQL

PQL - Practical Quantitation Limit

RPD - Relative Percent Difference



**Onsite  
Environmental Inc.**

Analytical Laboratory Testing Services  
14648 NE 95th Street • Redmond, WA 98052  
Phone: (425) 883-3881 • www.onsite-env.com

# Chain of Custody

Page 1 of 1

Turnaround Request  
(in working days)

Laboratory Number:

**09-053**

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Days ☐ 3 Days

☒ Standard (7 Days) (TPH analysis 5 Days)

☐ \_\_\_\_\_ (other)

Company: Pacific Crest Environmental  
Project Number: 105-003  
Project Name: Panthouse Drapery  
Project Manager: Bill Carroll  
Sampled by: April Wierenga

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	% Moisture
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1	SB9-63.5-70.0	9/7	0830	Soil	4						X												X
2	SB9-65.0 R6		0845	H <sub>2</sub> O	3						X												X
3	SB9-70.0-78.5		1010	Soil	4						X												X
4	SB9-75.0 R6		1020	H <sub>2</sub> O	4						X												X
5	SB9-85.0-97.5		1200	Soil	4						X												X
6	SB9-95.0-97.5		1605	Soil	4						X												X

Signature	Company	Date	Time	Comments/Special Instructions
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Relinquished APC Pacific Crest Env. 9-7-12 1649

Received Van 9.7.12 1649

Relinquished Van 9.7.12 1715

Received APC 9/7/12 1715

Relinquished

Received

Data Package: Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐

Chromatograms with final report ☐



14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

September 17, 2012

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1209-040

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on September 6, 2012.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister  
Project Manager

Enclosures



Date of Report: September 17, 2012  
Samples Submitted: September 6, 2012  
Laboratory Reference: 1209-040  
Project: 105-003

### **Case Narrative**

Samples were collected on September 4, 5, and 6, 2012 and received by the laboratory on September 6, 2012. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

#### Halogenated Volatiles EPA 8260B (soil) Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 1 of 2

Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-35.0 RG</b>					
Laboratory ID:	09-040-01					
Dichlorodifluoromethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	0.40	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	0.40	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	2.0	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	0.40	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	0.40	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260	9-14-12	9-14-12	

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-35.0 RG</b>					
Laboratory ID:	09-040-01					
1,1,2-Trichloroethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	130	2.0	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	2.0	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	0.40	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	0.40	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	0.40	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	0.40	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260	9-14-12	9-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>83</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>87</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>88</i>	<i>63-120</i>				

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 1 of 2

Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-50.0 RG</b>					
Laboratory ID:	09-040-05					
Dichlorodifluoromethane	ND	10	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	50	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	10	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	10	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	50	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	10	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	10	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	50	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	50	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	10	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	10	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	10	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	10	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	10	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	10	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	10	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	10	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	10	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	10	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	10	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	10	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	10	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	10	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	50	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	10	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	10	EPA 8260	9-14-12	9-14-12	

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-50.0 RG</b>					
Laboratory ID:	09-040-05					
1,1,2-Trichloroethane	ND	10	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	920	10	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	10	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	10	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	10	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	10	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	10	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	50	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	10	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	10	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	10	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	10	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	10	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	10	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	10	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	10	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	50	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	10	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	10	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	10	EPA 8260	9-14-12	9-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>82</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>85</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>86</i>	<i>63-120</i>				

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 1 of 2

Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-70.0 RG</b>					
Laboratory ID:	09-040-08					
Dichlorodifluoromethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	10	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	2.0	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	10	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	2.0	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	10	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	10	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	2.0	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	2.0	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	10	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	2.0	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	2.0	EPA 8260	9-14-12	9-14-12	

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-70.0 RG</b>					
Laboratory ID:	09-040-08					
1,1,2-Trichloroethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	270	2.0	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	10	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	2.0	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	2.0	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	10	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	2.0	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	2.0	EPA 8260	9-14-12	9-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	85	66-120				
<i>Toluene-d8</i>	86	70-120				
<i>4-Bromofluorobenzene</i>	85	63-120				

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-80.0 RG</b>					
Laboratory ID:	09-040-10					
Dichlorodifluoromethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	10	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	2.0	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	10	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	2.0	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	10	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	10	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	2.0	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	2.0	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	10	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	2.0	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	2.0	EPA 8260	9-14-12	9-14-12	



Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-80.0 RG</b>					
Laboratory ID:	09-040-10					
1,1,2-Trichloroethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	450	2.0	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	10	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	2.0	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	2.0	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	10	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	2.0	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	2.0	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	2.0	EPA 8260	9-14-12	9-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>82</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>86</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>63-120</i>				

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>trip blank</b>					
<b>Laboratory ID:</b>	<b>09-040-11</b>					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	1.0	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	1.0	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	1.0	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	1.0	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-14-12	9-14-12	

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>trip blank</b>					
Laboratory ID:	09-040-11					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	1.0	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>82</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>90</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>88</i>	<i>63-120</i>				

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0914W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chloromethane	ND	1.0	EPA 8260	9-14-12	9-14-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromomethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chloroethane	ND	1.0	EPA 8260	9-14-12	9-14-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
Iodomethane	ND	1.0	EPA 8260	9-14-12	9-14-12	
Methylene Chloride	ND	1.0	EPA 8260	9-14-12	9-14-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromochloromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chloroform	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Trichloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Dibromomethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-14-12	9-14-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-14-12	9-14-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-14-12	9-14-12	

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
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Laboratory ID:	MB0914W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Tetrachloroethene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Chlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
Bromoform	ND	1.0	EPA 8260	9-14-12	9-14-12	
Bromobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-14-12	9-14-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-14-12	9-14-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-14-12	9-14-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	9-14-12	9-14-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-14-12	9-14-12	
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<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	79	66-120				
<i>Toluene-d8</i>	82	70-120				
<i>4-Bromofluorobenzene</i>	82	63-120				

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	
					Recovery				RPD	Limit
SPIKE BLANKS										
Laboratory ID:	SB0914W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	11.1	10.7	10.0	10.0	111	107	65-141	4	15	
Benzene	10.4	10.1	10.0	10.0	104	101	77-120	3	15	
Trichloroethene	10.5	9.94	10.0	10.0	105	99	80-120	5	15	
Toluene	10.1	10.0	10.0	10.0	101	100	80-120	1	15	
Chlorobenzene	11.0	10.5	10.0	10.0	110	105	80-120	5	15	
Surrogate:										
Dibromofluoromethane					77	84	66-120			
Toluene-d8					84	89	70-120			
4-Bromofluorobenzene					81	89	63-120			

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB6-33.0-36.0</b>						
Laboratory ID: 09-040-02						
Dichlorodifluoromethane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Chloromethane	ND	0.0049	EPA 8260	9-7-12	9-7-12	
Vinyl Chloride	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Bromomethane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Chloroethane	ND	0.0049	EPA 8260	9-7-12	9-7-12	
Trichlorofluoromethane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
1,1-Dichloroethene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Iodomethane	ND	0.0049	EPA 8260	9-7-12	9-7-12	
Methylene Chloride	ND	0.0049	EPA 8260	9-7-12	9-7-12	
(trans) 1,2-Dichloroethene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
1,1-Dichloroethane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
2,2-Dichloropropane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
(cis) 1,2-Dichloroethene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Bromochloromethane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Chloroform	ND	0.00097	EPA 8260	9-7-12	9-7-12	
1,1,1-Trichloroethane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Carbon Tetrachloride	ND	0.00097	EPA 8260	9-7-12	9-7-12	
1,1-Dichloropropene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
1,2-Dichloroethane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Trichloroethene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
1,2-Dichloropropane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Dibromomethane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Bromodichloromethane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
2-Chloroethyl Vinyl Ether	ND	0.0049	EPA 8260	9-7-12	9-7-12	
(cis) 1,3-Dichloropropene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
(trans) 1,3-Dichloropropene	ND	0.00097	EPA 8260	9-7-12	9-7-12	

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
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 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-33.0-36.0</b>					
Laboratory ID:	09-040-02					
1,1,2-Trichloroethane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Tetrachloroethene	0.028	0.00097	EPA 8260	9-7-12	9-7-12	
1,3-Dichloropropane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Dibromochloromethane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
1,2-Dibromoethane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Chlorobenzene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
1,1,1,2-Tetrachloroethane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Bromoform	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Bromobenzene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
1,1,2,2-Tetrachloroethane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
1,2,3-Trichloropropane	ND	0.00097	EPA 8260	9-7-12	9-7-12	
2-Chlorotoluene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
4-Chlorotoluene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
1,3-Dichlorobenzene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
1,4-Dichlorobenzene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
1,2-Dichlorobenzene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
1,2-Dibromo-3-chloropropane	ND	0.0049	EPA 8260	9-7-12	9-7-12	
1,2,4-Trichlorobenzene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
Hexachlorobutadiene	ND	0.0049	EPA 8260	9-7-12	9-7-12	
1,2,3-Trichlorobenzene	ND	0.00097	EPA 8260	9-7-12	9-7-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>92</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>92</i>	<i>52-125</i>				



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**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-46.0-47.0</b>					
<b>Laboratory ID:</b>	<b>09-040-04</b>					
Dichlorodifluoromethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Chloromethane	ND	0.0051	EPA 8260	9-7-12	9-7-12	
Vinyl Chloride	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Bromomethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Chloroethane	ND	0.0051	EPA 8260	9-7-12	9-7-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Iodomethane	ND	0.0051	EPA 8260	9-7-12	9-7-12	
Methylene Chloride	ND	0.0051	EPA 8260	9-7-12	9-7-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Bromochloromethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Chloroform	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Trichloroethene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Dibromomethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Bromodichloromethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
2-Chloroethyl Vinyl Ether	ND	0.0051	EPA 8260	9-7-12	9-7-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-7-12	9-7-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-46.0-47.0</b>					
Laboratory ID:	09-040-04					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Tetrachloroethene	0.0038	0.0010	EPA 8260	9-7-12	9-7-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Dibromochloromethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Chlorobenzene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Bromoform	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Bromobenzene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
2-Chlorotoluene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
4-Chlorotoluene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,2-Dibromo-3-chloropropane	ND	0.0051	EPA 8260	9-7-12	9-7-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Hexachlorobutadiene	ND	0.0051	EPA 8260	9-7-12	9-7-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>52-125</i>				

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**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB6-51.0-55.0</b>						
Laboratory ID: 09-040-06						
Dichlorodifluoromethane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Chloromethane	ND	0.0045	EPA 8260	9-7-12	9-7-12	
Vinyl Chloride	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Bromomethane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Chloroethane	ND	0.0045	EPA 8260	9-7-12	9-7-12	
Trichlorofluoromethane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
1,1-Dichloroethene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Iodomethane	ND	0.0045	EPA 8260	9-7-12	9-7-12	
Methylene Chloride	ND	0.0045	EPA 8260	9-7-12	9-7-12	
(trans) 1,2-Dichloroethene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
1,1-Dichloroethane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
2,2-Dichloropropane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
(cis) 1,2-Dichloroethene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Bromochloromethane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Chloroform	ND	0.00091	EPA 8260	9-7-12	9-7-12	
1,1,1-Trichloroethane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Carbon Tetrachloride	ND	0.00091	EPA 8260	9-7-12	9-7-12	
1,1-Dichloropropene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
1,2-Dichloroethane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Trichloroethene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
1,2-Dichloropropane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Dibromomethane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Bromodichloromethane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
2-Chloroethyl Vinyl Ether	ND	0.0045	EPA 8260	9-7-12	9-7-12	
(cis) 1,3-Dichloropropene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
(trans) 1,3-Dichloropropene	ND	0.00091	EPA 8260	9-7-12	9-7-12	

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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-51.0-55.0</b>					
Laboratory ID:	09-040-06					
1,1,2-Trichloroethane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Tetrachloroethene	0.10	0.00091	EPA 8260	9-7-12	9-7-12	
1,3-Dichloropropane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Dibromochloromethane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
1,2-Dibromoethane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Chlorobenzene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
1,1,1,2-Tetrachloroethane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Bromoform	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Bromobenzene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
1,1,2,2-Tetrachloroethane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
1,2,3-Trichloropropane	ND	0.00091	EPA 8260	9-7-12	9-7-12	
2-Chlorotoluene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
4-Chlorotoluene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
1,3-Dichlorobenzene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
1,4-Dichlorobenzene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
1,2-Dichlorobenzene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
1,2-Dibromo-3-chloropropane	ND	0.0045	EPA 8260	9-7-12	9-7-12	
1,2,4-Trichlorobenzene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
Hexachlorobutadiene	ND	0.0045	EPA 8260	9-7-12	9-7-12	
1,2,3-Trichlorobenzene	ND	0.00091	EPA 8260	9-7-12	9-7-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>52-125</i>				

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-62.5-65.0</b>					
<b>Laboratory ID:</b>	<b>09-040-07</b>					
Dichlorodifluoromethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Chloromethane	ND	0.0055	EPA 8260	9-7-12	9-7-12	
Vinyl Chloride	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Bromomethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Chloroethane	ND	0.0055	EPA 8260	9-7-12	9-7-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Iodomethane	ND	0.0055	EPA 8260	9-7-12	9-7-12	
Methylene Chloride	ND	0.0055	EPA 8260	9-7-12	9-7-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Bromochloromethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Chloroform	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Trichloroethene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Dibromomethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Bromodichloromethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
2-Chloroethyl Vinyl Ether	ND	0.0055	EPA 8260	9-7-12	9-7-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-7-12	9-7-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-62.5-65.0</b>					
Laboratory ID:	09-040-07					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Tetrachloroethene	0.0029	0.0011	EPA 8260	9-7-12	9-7-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Dibromochloromethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Chlorobenzene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Bromoform	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Bromobenzene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
2-Chlorotoluene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
4-Chlorotoluene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,2-Dibromo-3-chloropropane	ND	0.0055	EPA 8260	9-7-12	9-7-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Hexachlorobutadiene	ND	0.0055	EPA 8260	9-7-12	9-7-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>52-125</i>				

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-75.0-78.0</b>					
Laboratory ID:	09-040-09					
Dichlorodifluoromethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Chloromethane	ND	0.0053	EPA 8260	9-7-12	9-7-12	
Vinyl Chloride	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Bromomethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Chloroethane	ND	0.0053	EPA 8260	9-7-12	9-7-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Iodomethane	ND	0.0053	EPA 8260	9-7-12	9-7-12	
Methylene Chloride	ND	0.0053	EPA 8260	9-7-12	9-7-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Bromochloromethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Chloroform	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Trichloroethene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Dibromomethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Bromodichloromethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
2-Chloroethyl Vinyl Ether	ND	0.0053	EPA 8260	9-7-12	9-7-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-7-12	9-7-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-75.0-78.0</b>					
Laboratory ID:	09-040-09					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Tetrachloroethene	0.19	0.0011	EPA 8260	9-7-12	9-7-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Dibromochloromethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Chlorobenzene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Bromoform	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Bromobenzene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260	9-7-12	9-7-12	
2-Chlorotoluene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
4-Chlorotoluene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
1,2-Dibromo-3-chloropropane	ND	0.0053	EPA 8260	9-7-12	9-7-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
Hexachlorobutadiene	ND	0.0053	EPA 8260	9-7-12	9-7-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260	9-7-12	9-7-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>52-125</i>				



Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0907S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Chloromethane	ND	0.0050	EPA 8260	9-7-12	9-7-12	
Vinyl Chloride	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Bromomethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Chloroethane	ND	0.0050	EPA 8260	9-7-12	9-7-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Iodomethane	ND	0.0050	EPA 8260	9-7-12	9-7-12	
Methylene Chloride	ND	0.0050	EPA 8260	9-7-12	9-7-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Bromochloromethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Chloroform	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Trichloroethene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Dibromomethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Bromodichloromethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260	9-7-12	9-7-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-7-12	9-7-12	

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0907S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Tetrachloroethene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Dibromochloromethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Chlorobenzene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Bromoform	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Bromobenzene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260	9-7-12	9-7-12	
2-Chlorotoluene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
4-Chlorotoluene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260	9-7-12	9-7-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
Hexachlorobutadiene	ND	0.0050	EPA 8260	9-7-12	9-7-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260	9-7-12	9-7-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>106</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>52-125</i>				

Date of Report: September 17, 2012  
 Samples Submitted: September 6, 2012  
 Laboratory Reference: 1209-040  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent		Recovery		RPD	
					Recovery		Limits		RPD	Limit
SPIKE BLANKS										
Laboratory ID:		SB0907S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0529	0.0528	0.0500	0.0500	106	106	65-141	0	15	
Benzene	0.0497	0.0504	0.0500	0.0500	99	101	69-121	1	15	
Trichloroethene	0.0487	0.0482	0.0500	0.0500	97	96	75-120	1	15	
Toluene	0.0494	0.0493	0.0500	0.0500	99	99	75-120	0	15	
Chlorobenzene	0.0513	0.0516	0.0500	0.0500	103	103	75-120	1	15	
Surrogate:										
Dibromofluoromethane					95	98	63-127			
Toluene-d8					97	99	65-129			
4-Bromofluorobenzene					96	97	52-125			

Date of Report: September 17, 2012  
Samples Submitted: September 6, 2012  
Laboratory Reference: 1209-040  
Project: 105-003

**% MOISTURE**

Date Analyzed: 9-7-12

Client ID	Lab ID	% Moisture
SB6-33.0-36.0	09-040-02	12
SB6-46.0-47.0	09-040-04	11
SB6-51.0-55.0	09-040-06	9
SB6-62.5-65.0	09-040-07	21
SB6-75.0-78.0	09-040-09	14



### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - Sample extract treated with an acid/silica gel cleanup procedure.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



Analytical Laboratory Testing Services  
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## Chain of Custody

Page 1 of 2

ANALYTICAL LABORATORY TESTING SERVICES 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com										Turnaround Request (in working days)										Laboratory Number: 09-040																													
Company: Pacific Crest Environmental										<input type="checkbox"/> Same Day <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input checked="" type="checkbox"/> Standard (7 Days) (TPH analysis 5 Days)																																							
Project Number: 105-003																																																	
Project Name: Parthousc Drapery																																																	
Project Manager: Bill Carroll																																																	
Sampled by: April Wiebenga										<input type="checkbox"/> (other) _____																																							
Lab ID										Date Sampled										Time Sampled										Matrix										No. of Cont.									
Sample Identification										Sampled										Sampled										Matrix										No. of Cont.									
1 SB6-35.0 Rg										9-5-12										1110										H2O										3									
2 SB6-33.0-36.0										9-5-12										1435										Soil										4									
3 SB6-45.0-46.0										9-5-12										1510										Soil										4									
4 SB6-46.0-47.0										9-5-12										1515										Soil										4									
5 SB6-50.0 Rg										9-5-12										1545										H2O										3									
6 SB6-51.0-55.0										9-5-12										1640										Soil										4									
7 SB6-62.5-65.0										9-6-12										0820										Soil										4									
8 SB6-70.0 Rg										9-6-12										0845										H2O										3									
9 SB6-75.0-78.0										9-6-12										0940										Soil										4									
10 SB6-80.0 Rg										9-6-12										0945										H2O										3									
Signature										Company										Date										Time										Comments/Special Instructions									
Relinquished										Pacific Crest										9-6-12										1538																			
Received										Speedy messenger										9-6-12										16:28																			
Relinquished										Speedy messenger										9/11/12										16:28																			
Received																																																	
Relinquished																																																	
Received																																																	
Reviewed/Date										Reviewed/Date										Chromatograms with final report <input type="checkbox"/>																													





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# Chain of Custody

Page 2 of 2

[illegible]



14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

September 11, 2012

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1209-029

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on September 5, 2012.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister  
Project Manager

Enclosures



Date of Report: September 11, 2012  
Samples Submitted: September 5, 2012  
Laboratory Reference: 1209-029  
Project: 105-003

### **Case Narrative**

Samples were collected on September 4 and 5, 2012 and received by the laboratory on September 5, 2012. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

#### Halogenated Volatiles EPA 8260B Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
 Laboratory Reference: 1209-029  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-2.0-4.0</b>					
Laboratory ID:	09-029-01					
Dichlorodifluoromethane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	0.0045	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	0.0045	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	0.0045	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	0.0045	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	0.0045	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.00090	EPA 8260	9-6-12	9-6-12	

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
 Laboratory Reference: 1209-029  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-2.0-4.0</b>					
Laboratory ID:	09-029-01					
1,1,2-Trichloroethane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.00090	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	0.0045	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.0045	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.00090	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>52-125</i>				

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
 Laboratory Reference: 1209-029  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-7.5-9.5</b>					
Laboratory ID:	09-029-02					
Dichlorodifluoromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	0.0053	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	0.0053	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	0.0053	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	0.0053	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	0.0053	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-6-12	9-6-12	

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
 Laboratory Reference: 1209-029  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-7.5-9.5</b>					
Laboratory ID:	09-029-02					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	0.0053	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.0053	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>52-125</i>				

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 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-13.0-17.0</b>					
<b>Laboratory ID:</b>	<b>09-029-03</b>					
Dichlorodifluoromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	0.0048	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	0.0048	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	0.0048	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	0.0048	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	0.0048	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.00096	EPA 8260	9-6-12	9-6-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-13.0-17.0</b>					
Laboratory ID:	09-029-03					
1,1,2-Trichloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	0.0048	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.0048	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>52-125</i>				

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-25.0-26.5</b>					
Laboratory ID:	09-029-06					
Dichlorodifluoromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	0.0050	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	0.0050	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	0.0050	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	0.0050	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-6-12	9-6-12	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-25.0-26.5</b>					
Laboratory ID:	09-029-06					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.0050	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>52-125</i>				

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-34.0-35.0</b>					
<b>Laboratory ID:</b>	<b>09-029-07</b>					
Dichlorodifluoromethane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	0.0047	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	0.0047	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	0.0047	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	0.0047	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	0.0047	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.00094	EPA 8260	9-6-12	9-6-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-34.0-35.0</b>					
Laboratory ID:	09-029-07					
1,1,2-Trichloroethane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.00094	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	0.0047	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.0047	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.00094	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>52-125</i>				

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**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-42.0-45.0</b>					
Laboratory ID:	09-029-08					
Dichlorodifluoromethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	0.0062	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	0.0062	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	0.0062	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	0.0062	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	0.0062	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260	9-6-12	9-6-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-42.0-45.0</b>					
Laboratory ID:	09-029-08					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	0.0062	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.0062	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>52-125</i>				

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 Project: 105-003

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-52.5-55.0</b>					
<b>Laboratory ID:</b>	<b>09-029-10</b>					
Dichlorodifluoromethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	0.0058	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	0.0058	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	0.0058	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	0.0058	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	0.0058	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260	9-6-12	9-6-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-52.5-55.0</b>					
Laboratory ID:	09-029-10					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	0.0058	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.0058	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>52-125</i>				

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-62.5-65.0</b>					
Laboratory ID:	09-029-12					
Dichlorodifluoromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	0.0053	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	0.0053	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	0.0053	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	0.0053	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	0.0053	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-6-12	9-6-12	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-62.5-65.0</b>					
Laboratory ID:	09-029-12					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	0.0053	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.0053	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>52-125</i>				

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-75.0-77.5</b>					
<b>Laboratory ID:</b>	<b>09-029-14</b>					
Dichlorodifluoromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	0.0057	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	0.0057	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	0.0057	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	0.0057	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	0.0057	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260	9-6-12	9-6-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-75.0-77.5</b>					
Laboratory ID:	09-029-14					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	0.0057	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.0057	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>52-125</i>				

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-2.5-5.0</b>					
<b>Laboratory ID:</b>	<b>09-029-16</b>					
Dichlorodifluoromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	0.0050	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	0.0050	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	0.0050	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	0.0050	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-6-12	9-6-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-2.5-5.0</b>					
Laboratory ID:	09-029-16					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.0050	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>52-125</i>				

Date of Report: September 11, 2012  
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 Laboratory Reference: 1209-029  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-7.5-10.0</b>					
<b>Laboratory ID:</b>	<b>09-029-17</b>					
Dichlorodifluoromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	0.0048	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	0.0048	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	0.0048	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	0.0048	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	0.0048	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.00096	EPA 8260	9-6-12	9-6-12	

Date of Report: September 11, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-7.5-10.0</b>					
Laboratory ID:	09-029-17					
1,1,2-Trichloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	0.0013	0.00096	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	0.0048	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.0048	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>52-125</i>				

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
 Laboratory Reference: 1209-029  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB6-12.5-15.0</b>						
Laboratory ID: 09-029-18						
Dichlorodifluoromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	0.0048	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	0.0048	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	0.0048	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	0.0048	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	0.0048	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.00096	EPA 8260	9-6-12	9-6-12	



Date of Report: September 11, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-12.5-15.0</b>					
Laboratory ID:	09-029-18					
1,1,2-Trichloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	0.0012	0.00096	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.00096	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	0.0048	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.0048	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.00096	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>52-125</i>				

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
 Laboratory Reference: 1209-029  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB6-22.5-25.0</b>						
Laboratory ID: 09-029-19						
Dichlorodifluoromethane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	0.0046	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	0.0046	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	0.0046	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	0.0046	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	0.0046	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.00093	EPA 8260	9-6-12	9-6-12	

Date of Report: September 11, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB6-22.5-25.0</b>					
Laboratory ID:	09-029-19					
1,1,2-Trichloroethane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.00093	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	0.0046	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.0046	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.00093	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>52-125</i>				

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
 Laboratory Reference: 1209-029  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0906S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	0.0050	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	0.0050	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	0.0050	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	0.0050	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260	9-6-12	9-6-12	

Date of Report: September 11, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0906S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.0050	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260	9-6-12	9-6-12	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>52-125</i>				

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
 Laboratory Reference: 1209-029  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent		Recovery		RPD	
					Recovery		Limits		RPD	Limit
SPIKE BLANKS										
Laboratory ID:		SB0906S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0526	0.0511	0.0500	0.0500	105	102	65-141	3	15	
Benzene	0.0490	0.0494	0.0500	0.0500	98	99	69-121	1	15	
Trichloroethene	0.0480	0.0489	0.0500	0.0500	96	98	75-120	2	15	
Toluene	0.0489	0.0498	0.0500	0.0500	98	100	75-120	2	15	
Chlorobenzene	0.0527	0.0516	0.0500	0.0500	105	103	75-120	2	15	
Surrogate:										
Dibromofluoromethane					96	94	63-127			
Toluene-d8					96	96	65-129			
4-Bromofluorobenzene					98	95	52-125			

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
 Laboratory Reference: 1209-029  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 1 of 2

Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-30.0 RG</b>					
Laboratory ID:	09-029-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	1.0	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	1.0	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	1.0	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	1.0	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-6-12	9-6-12	

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
 Laboratory Reference: 1209-029  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-30.0 RG</b>					
Laboratory ID:	09-029-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	0.37	0.20	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	1.0	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>85</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>86</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>84</i>	<i>63-120</i>				



Date of Report: September 11, 2012  
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 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-48.0 RG</b>					
Laboratory ID:	09-029-09					
Dichlorodifluoromethane	0.33	0.20	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	1.0	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	1.0	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	0.44	0.20	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	1.0	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	1.0	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-6-12	9-6-12	

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-48.0 RG</b>					
Laboratory ID:	09-029-09					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	0.62	0.20	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	1.0	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>80</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>88</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>83</i>	<i>63-120</i>				

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
 Laboratory Reference: 1209-029  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Matrix: Water  
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-75.0 RG</b>					
Laboratory ID:	09-029-15					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	1.0	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	1.0	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	1.0	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	1.0	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-6-12	9-6-12	

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB7-75.0 RG</b>					
Laboratory ID:	09-029-15					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	1.0	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>84</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>85</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>84</i>	<i>63-120</i>				

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
 Laboratory Reference: 1209-029  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0906W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chloromethane	ND	1.0	EPA 8260	9-6-12	9-6-12	
Vinyl Chloride	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromomethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chloroethane	ND	1.0	EPA 8260	9-6-12	9-6-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
Iodomethane	ND	1.0	EPA 8260	9-6-12	9-6-12	
Methylene Chloride	ND	1.0	EPA 8260	9-6-12	9-6-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromochloromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chloroform	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Trichloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Dibromomethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromodichloromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	9-6-12	9-6-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-6-12	9-6-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	9-6-12	9-6-12	

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0906W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Tetrachloroethene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Dibromochloromethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Chlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
Bromoform	ND	1.0	EPA 8260	9-6-12	9-6-12	
Bromobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	9-6-12	9-6-12	
2-Chlorotoluene	ND	0.20	EPA 8260	9-6-12	9-6-12	
4-Chlorotoluene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	9-6-12	9-6-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	9-6-12	9-6-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	9-6-12	9-6-12	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>78</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>86</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>81</i>	<i>63-120</i>				

Date of Report: September 11, 2012  
 Samples Submitted: September 5, 2012  
 Laboratory Reference: 1209-029  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	
					Recovery				RPD	Limit
SPIKE BLANKS										
Laboratory ID:	SB0906W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	10.4	10.2	10.0	10.0	104	102	65-141	2	15	
Benzene	11.1	11.3	10.0	10.0	111	113	77-120	2	15	
Trichloroethene	9.83	9.32	10.0	10.0	98	93	80-120	5	15	
Toluene	10.3	10.1	10.0	10.0	103	101	80-120	2	15	
Chlorobenzene	10.8	10.6	10.0	10.0	108	106	80-120	2	15	
Surrogate:										
Dibromofluoromethane					75	81	66-120			
Toluene-d8					84	84	70-120			
4-Bromofluorobenzene					83	87	63-120			

Date of Report: September 11, 2012  
Samples Submitted: September 5, 2012  
Laboratory Reference: 1209-029  
Project: 105-003

**% MOISTURE**

Date Analyzed: 9-6-12

Client ID	Lab ID	% Moisture
SB7-2.0-4.0	09-029-01	10
SB7-7.5-9.5	09-029-02	16
SB7-13.0-17.0	09-029-03	12
SB7-25.0-26.5	09-029-06	8
SB7-34.0-35.0	09-029-07	14
SB7-42.0-45.0	09-029-08	13
SB7-52.5-55.0	09-029-10	7
SB7-62.5-65.0	09-029-12	20
SB7-75.0-77.5	09-029-14	23
SB6-2.5-5.0	09-029-16	12
SB6-7.5-10.0	09-029-17	7
SB6-12.5-15.0	09-029-18	6
SB6-22.5-25.0	09-029-19	6





### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - Sample extract treated with an acid/silica gel cleanup procedure.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



Analytical Laboratory Testing Services  
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## Chain of Custody

Page 2 of 2

CIVIL-ENGINEERING INC. Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-envy.com						Turnaround Request (in working days)							Laboratory Number: <b>09-029</b>														
Company: Pacific Crest Environmental						(Check One) <input type="checkbox"/> Same Day <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input checked="" type="checkbox"/> Standard (7 Days) (TPH analysis 5 Days)																					
Project Name: 105-003																											
Project Manager: Penthause Drapery																											
Sampled by: Bill Carroll																											
Sampled by: April Niebenga						(other) _____																					
Lab ID		Sample Identification		Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID																			
11	SBJ-55.0-57.5	9-4-12	1715	Soil	4	NWTPH-Gx/BTEX																					
12	SBJ-62.5-65.0	9-4-12	1720	Soil	4	NWTPH-Gx																					
13	SBJ-72.5-75.0	9-5-12	0905	Soil	4	NWTPH-Dx																					
14	SBJ-75.0-77.5		0945	Soil	4	Volatiles 8260B																					
15	SBJ-75.0 Kg		0930	H <sub>2</sub> O	3	Halogenated Volatiles 8260B																					
16	SJB-2.5-5.0		1115	Soil	4	Semivolatiles 8270D/SIM (with low-level PAHs)																					
17	SJB-7.5-10.0		1125	Soil	4	PAHs 8270D/SIM (low-level)																					
18	SJB-12.5-15.0		1140	Soil	4	PCBs 8082																					
19	SJB-22.5-25.0		1300	Soil	4	Organochlorine Pesticides 8081A																					
		Signature		Company		Date	Time	Comments/Special Instructions																			
Relinquished		Chris [Signature]		Pacific Crest Env.		9-5-12	1535																				
Received		Van [Signature]		SPBY ad		9.5.12	1535																				
Relinquished		Van [Signature]		SPBY		9.5.12	1645																				
Received		[Signature]		QZE		9/5/12	1645																				
Relinquished																											
Received																											
Reviewed/Date								Chromatograms with final report <input type="checkbox"/>																			







14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

December 18, 2012

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1212-098

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on December 14, 2012.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister  
Project Manager

Enclosures

Date of Report: December 18, 2012  
Samples Submitted: December 14, 2012  
Laboratory Reference: 1212-098  
Project: 105-003

### **Case Narrative**

Samples were collected on December 13, 2012 and received by the laboratory on December 14, 2012. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

#### Halogenated Volatiles EPA 8260C Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Surrogate Standard Dibromofluoromethane is outside control limits for sample CCU-11 due to sample matrix effects. The sample was re-analyzed at a dilution with normal surrogate recoveries.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: December 18, 2012  
 Samples Submitted: December 14, 2012  
 Laboratory Reference: 1212-098  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>CCU-11</b>					
<b>Laboratory ID:</b>	<b>12-098-02</b>					
Dichlorodifluoromethane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Chloromethane	ND	0.0073	EPA 8260C	12-18-12	12-18-12	
Vinyl Chloride	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Bromomethane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Chloroethane	ND	0.0073	EPA 8260C	12-18-12	12-18-12	
Trichlorofluoromethane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
1,1-Dichloroethene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Iodomethane	ND	0.0073	EPA 8260C	12-18-12	12-18-12	
Methylene Chloride	ND	0.0073	EPA 8260C	12-18-12	12-18-12	
(trans) 1,2-Dichloroethene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
1,1-Dichloroethane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
2,2-Dichloropropane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
(cis) 1,2-Dichloroethene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Bromochloromethane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Chloroform	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
1,1,1-Trichloroethane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Carbon Tetrachloride	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
1,1-Dichloropropene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
1,2-Dichloroethane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Trichloroethene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
1,2-Dichloropropane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Dibromomethane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Bromodichloromethane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
2-Chloroethyl Vinyl Ether	ND	0.0073	EPA 8260C	12-18-12	12-18-12	
(cis) 1,3-Dichloropropene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
(trans) 1,3-Dichloropropene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	

Date of Report: December 18, 2012  
 Samples Submitted: December 14, 2012  
 Laboratory Reference: 1212-098  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>CCU-11</b>					
Laboratory ID:	12-098-02					
1,1,2-Trichloroethane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Tetrachloroethene	ND	0.0073	EPA 8260C	12-18-12	12-18-12	
1,3-Dichloropropane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Dibromochloromethane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
1,2-Dibromoethane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Chlorobenzene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
1,1,1,2-Tetrachloroethane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Bromoform	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Bromobenzene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
1,1,2,2-Tetrachloroethane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
1,2,3-Trichloropropane	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
2-Chlorotoluene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
4-Chlorotoluene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
1,3-Dichlorobenzene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
1,4-Dichlorobenzene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
1,2-Dichlorobenzene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
1,2-Dibromo-3-chloropropane	ND	0.0073	EPA 8260C	12-18-12	12-18-12	
1,2,4-Trichlorobenzene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
Hexachlorobutadiene	ND	0.0073	EPA 8260C	12-18-12	12-18-12	
1,2,3-Trichlorobenzene	ND	0.0015	EPA 8260C	12-18-12	12-18-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	53	63-127				Q
<i>Toluene-d8</i>	95	65-129				
<i>4-Bromofluorobenzene</i>	93	52-125				

Date of Report: December 18, 2012  
 Samples Submitted: December 14, 2012  
 Laboratory Reference: 1212-098  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB1218S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Chloromethane	ND	0.0050	EPA 8260C	12-18-12	12-18-12	
Vinyl Chloride	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Bromomethane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Chloroethane	ND	0.0050	EPA 8260C	12-18-12	12-18-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Iodomethane	ND	0.0050	EPA 8260C	12-18-12	12-18-12	
Methylene Chloride	ND	0.0050	EPA 8260C	12-18-12	12-18-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Bromochloromethane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Chloroform	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Trichloroethene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Dibromomethane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Bromodichloromethane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	12-18-12	12-18-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	



Date of Report: December 18, 2012  
 Samples Submitted: December 14, 2012  
 Laboratory Reference: 1212-098  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C  
 METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB1218S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Tetrachloroethene	ND	0.0050	EPA 8260C	12-18-12	12-18-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Dibromochloromethane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Chlorobenzene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Bromoform	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Bromobenzene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
2-Chlorotoluene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
4-Chlorotoluene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	12-18-12	12-18-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	12-18-12	12-18-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	12-18-12	12-18-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>118</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>52-125</i>				

Date of Report: December 18, 2012  
 Samples Submitted: December 14, 2012  
 Laboratory Reference: 1212-098  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
					Recovery					
SPIKE BLANKS										
Laboratory ID:	SB1218S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0503	0.0519	0.0500	0.0500	101	104	65-141	3	15	
Benzene	0.0492	0.0510	0.0500	0.0500	98	102	69-121	4	15	
Trichloroethene	0.0497	0.0521	0.0500	0.0500	99	104	75-120	5	15	
Toluene	0.0433	0.0463	0.0500	0.0500	87	93	75-120	7	15	
Chlorobenzene	0.0508	0.0532	0.0500	0.0500	102	106	75-120	5	15	
Surrogate:										
Dibromofluoromethane					110	114	63-127			
Toluene-d8					90	97	65-129			
4-Bromofluorobenzene					91	97	52-125			

Date of Report: December 18, 2012  
Samples Submitted: December 14, 2012  
Laboratory Reference: 1212-098  
Project: 105-003

### **% MOISTURE**

Date Analyzed: 12-17-12

Client ID	Lab ID	% Moisture
CCU-11	12-098-02	6



### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



# Chain of Custody

**MA OnSite Environmental Inc.**  
14648 NE 95th Street • Redmond, WA 98052  
Phone: (425) 883-3881 • Fax: (425) 885-4603

Turnaround Request  
(in working days)  
(Check One)

Laboratory Number:

12-098

Requested Analysis

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Day ☐ 3 Day

☒ Standard (7 working days)  
(TPH analysis 5 working days)

☐ (other)

Company:

PACIFIC CREST

Project Number:

105-003

Project Name:

PRUTHOUSE REPORT

Project Manager:

BILL CARROLL

Sampled by:

KIMBERLY P. REDDUX

Lab ID

Sample Identification

Date Sampled

Time Sampled

Matrix

# of Cont.

NWTPH-HCID

NWTPH-Gx/BTEX

NWTPH-Dx

Volatiles by 8260B

Halogenated Volatiles by 8260B

Semivolatiles by 8270C

PAHs by 8270C / SIM

PCBs by 8082

Pesticides by 8081A

Herbicides by 8151A

Total RCRA Metals (8)

TCLP Metals

HEM by 1664

VPH

EPH

% Moisture

1 CCL-11

12/13

1150

COAL OIL

4

2 CCU-11

12/13

1150

COAL OIL

4

3 CC-12

12/13

1150

COAL OIL

4

4 CC-10

12/13

1150

COAL OIL

4

*Kimberly P. Reddux*

Signature

Company

Date

Time

Comments/Special Instructions:

Relinquished by

*Kimberly P. Reddux*

Pacific Crest

12-14-12

12:24

Received by

*Stacy Dune*

On Site Environmental

12-14-12

12:24

Relinquished by

Received by

Relinquished by

Received by

Reviewed by/Date

Reviewed by/Date

Chromatograms with final report ☐

*Q = HOLD, FURTHER CCU-11 RESULTS*



14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

December 17, 2012

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1212-060

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on December 10, 2012.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister  
Project Manager

Enclosures

Date of Report: December 17, 2012  
Samples Submitted: December 10, 2012  
Laboratory Reference: 1212-060  
Project: 105-003

### **Case Narrative**

Samples were collected on December 8, 2012 and received by the laboratory on December 10, 2012. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

#### Halogenated Volatiles EPA 8260C Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: December 17, 2012  
 Samples Submitted: December 10, 2012  
 Laboratory Reference: 1212-060  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB11-2-4</b>					
<b>Laboratory ID:</b>	<b>12-060-01</b>					
Dichlorodifluoromethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Chloromethane	ND	0.0047	EPA 8260C	12-16-12	12-16-12	
Vinyl Chloride	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Bromomethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Chloroethane	ND	0.0047	EPA 8260C	12-16-12	12-16-12	
Trichlorofluoromethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloroethene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Iodomethane	ND	0.0047	EPA 8260C	12-16-12	12-16-12	
Methylene Chloride	ND	0.0047	EPA 8260C	12-16-12	12-16-12	
(trans) 1,2-Dichloroethene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloroethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
2,2-Dichloropropane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
(cis) 1,2-Dichloroethene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Bromochloromethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Chloroform	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,1,1-Trichloroethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Carbon Tetrachloride	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloropropene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,2-Dichloroethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Trichloroethene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,2-Dichloropropane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Dibromomethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Bromodichloromethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
2-Chloroethyl Vinyl Ether	ND	0.0047	EPA 8260C	12-16-12	12-16-12	
(cis) 1,3-Dichloropropene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
(trans) 1,3-Dichloropropene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	



Date of Report: December 17, 2012  
 Samples Submitted: December 10, 2012  
 Laboratory Reference: 1212-060  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB11-2-4</b>					
Laboratory ID:	12-060-01					
1,1,2-Trichloroethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Tetrachloroethene	0.0087	0.0047	EPA 8260C	12-16-12	12-16-12	
1,3-Dichloropropane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Dibromochloromethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,2-Dibromoethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Chlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,1,1,2-Tetrachloroethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Bromoform	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Bromobenzene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,1,2,2-Tetrachloroethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,2,3-Trichloropropane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
2-Chlorotoluene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
4-Chlorotoluene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,3-Dichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,4-Dichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,2-Dichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,2-Dibromo-3-chloropropane	ND	0.0047	EPA 8260C	12-16-12	12-16-12	
1,2,4-Trichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Hexachlorobutadiene	ND	0.0047	EPA 8260C	12-16-12	12-16-12	
1,2,3-Trichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>125</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>52-125</i>				

Date of Report: December 17, 2012  
 Samples Submitted: December 10, 2012  
 Laboratory Reference: 1212-060  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB11-8-10</b>					
<b>Laboratory ID:</b>	<b>12-060-02</b>					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Chloromethane	ND	0.0051	EPA 8260C	12-16-12	12-16-12	
Vinyl Chloride	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Bromomethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Chloroethane	ND	0.0051	EPA 8260C	12-16-12	12-16-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Iodomethane	ND	0.0051	EPA 8260C	12-16-12	12-16-12	
Methylene Chloride	ND	0.0051	EPA 8260C	12-16-12	12-16-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Bromochloromethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Chloroform	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Trichloroethene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Dibromomethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Bromodichloromethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
2-Chloroethyl Vinyl Ether	ND	0.0051	EPA 8260C	12-16-12	12-16-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	

Date of Report: December 17, 2012  
 Samples Submitted: December 10, 2012  
 Laboratory Reference: 1212-060  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB11-8-10</b>					
Laboratory ID:	12-060-02					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Tetrachloroethene	0.024	0.0051	EPA 8260C	12-16-12	12-16-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Dibromochloromethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Chlorobenzene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Bromoform	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Bromobenzene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
2-Chlorotoluene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
4-Chlorotoluene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,2-Dibromo-3-chloropropane	ND	0.0051	EPA 8260C	12-16-12	12-16-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Hexachlorobutadiene	ND	0.0051	EPA 8260C	12-16-12	12-16-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>117</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>52-125</i>				

Date of Report: December 17, 2012  
 Samples Submitted: December 10, 2012  
 Laboratory Reference: 1212-060  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB11-10-12</b>					
<b>Laboratory ID:</b>	<b>12-060-03</b>					
Dichlorodifluoromethane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Chloromethane	ND	0.0046	EPA 8260C	12-16-12	12-16-12	
Vinyl Chloride	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Bromomethane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Chloroethane	ND	0.0046	EPA 8260C	12-16-12	12-16-12	
Trichlorofluoromethane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloroethene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Iodomethane	ND	0.0046	EPA 8260C	12-16-12	12-16-12	
Methylene Chloride	ND	0.0046	EPA 8260C	12-16-12	12-16-12	
(trans) 1,2-Dichloroethene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloroethane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
2,2-Dichloropropane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
(cis) 1,2-Dichloroethene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Bromochloromethane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Chloroform	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
1,1,1-Trichloroethane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Carbon Tetrachloride	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloropropene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
1,2-Dichloroethane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Trichloroethene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
1,2-Dichloropropane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Dibromomethane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Bromodichloromethane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
2-Chloroethyl Vinyl Ether	ND	0.0046	EPA 8260C	12-16-12	12-16-12	
(cis) 1,3-Dichloropropene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
(trans) 1,3-Dichloropropene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	

Date of Report: December 17, 2012  
 Samples Submitted: December 10, 2012  
 Laboratory Reference: 1212-060  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB11-10-12</b>					
Laboratory ID:	12-060-03					
1,1,2-Trichloroethane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Tetrachloroethene	0.025	0.0046	EPA 8260C	12-16-12	12-16-12	
1,3-Dichloropropane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Dibromochloromethane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
1,2-Dibromoethane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Chlorobenzene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
1,1,1,2-Tetrachloroethane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Bromoform	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Bromobenzene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
1,1,2,2-Tetrachloroethane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
1,2,3-Trichloropropane	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
2-Chlorotoluene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
4-Chlorotoluene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
1,3-Dichlorobenzene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
1,4-Dichlorobenzene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
1,2-Dichlorobenzene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
1,2-Dibromo-3-chloropropane	ND	0.0046	EPA 8260C	12-16-12	12-16-12	
1,2,4-Trichlorobenzene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
Hexachlorobutadiene	ND	0.0046	EPA 8260C	12-16-12	12-16-12	
1,2,3-Trichlorobenzene	ND	0.00092	EPA 8260C	12-16-12	12-16-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>126</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>52-125</i>				

Date of Report: December 17, 2012  
 Samples Submitted: December 10, 2012  
 Laboratory Reference: 1212-060  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
 page 1 of 2

Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB12-2-4</b>					
<b>Laboratory ID:</b>	<b>12-060-04</b>					
Dichlorodifluoromethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Chloromethane	ND	0.0047	EPA 8260C	12-16-12	12-16-12	
Vinyl Chloride	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Bromomethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Chloroethane	ND	0.0047	EPA 8260C	12-16-12	12-16-12	
Trichlorofluoromethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloroethene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Iodomethane	ND	0.0047	EPA 8260C	12-16-12	12-16-12	
Methylene Chloride	ND	0.0047	EPA 8260C	12-16-12	12-16-12	
(trans) 1,2-Dichloroethene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloroethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
2,2-Dichloropropane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
(cis) 1,2-Dichloroethene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Bromochloromethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Chloroform	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,1,1-Trichloroethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Carbon Tetrachloride	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloropropene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,2-Dichloroethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Trichloroethene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,2-Dichloropropane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Dibromomethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Bromodichloromethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
2-Chloroethyl Vinyl Ether	ND	0.0047	EPA 8260C	12-16-12	12-16-12	
(cis) 1,3-Dichloropropene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
(trans) 1,3-Dichloropropene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	

Date of Report: December 17, 2012  
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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB12-2-4</b>					
<b>Laboratory ID:</b>	<b>12-060-04</b>					
1,1,2-Trichloroethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Tetrachloroethene	0.13	0.0047	EPA 8260C	12-16-12	12-16-12	
1,3-Dichloropropane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Dibromochloromethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,2-Dibromoethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Chlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,1,1,2-Tetrachloroethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Bromoform	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Bromobenzene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,1,2,2-Tetrachloroethane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,2,3-Trichloropropane	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
2-Chlorotoluene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
4-Chlorotoluene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,3-Dichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,4-Dichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,2-Dichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
1,2-Dibromo-3-chloropropane	ND	0.0047	EPA 8260C	12-16-12	12-16-12	
1,2,4-Trichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
Hexachlorobutadiene	ND	0.0047	EPA 8260C	12-16-12	12-16-12	
1,2,3-Trichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-16-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>121</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>52-125</i>				

Date of Report: December 17, 2012  
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 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: SB12-2-4 (duplicate)</b>						
Laboratory ID: 12-060-05						
Dichlorodifluoromethane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Chloromethane	ND	0.0048	EPA 8260C	12-16-12	12-16-12	
Vinyl Chloride	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Bromomethane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Chloroethane	ND	0.0048	EPA 8260C	12-16-12	12-16-12	
Trichlorofluoromethane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloroethene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Iodomethane	ND	0.0048	EPA 8260C	12-16-12	12-16-12	
Methylene Chloride	ND	0.0048	EPA 8260C	12-16-12	12-16-12	
(trans) 1,2-Dichloroethene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloroethane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
2,2-Dichloropropane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
(cis) 1,2-Dichloroethene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Bromochloromethane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Chloroform	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
1,1,1-Trichloroethane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Carbon Tetrachloride	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloropropene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
1,2-Dichloroethane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Trichloroethene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
1,2-Dichloropropane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Dibromomethane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Bromodichloromethane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
2-Chloroethyl Vinyl Ether	ND	0.0048	EPA 8260C	12-16-12	12-16-12	
(cis) 1,3-Dichloropropene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
(trans) 1,3-Dichloropropene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	



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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB12-2-4 (duplicate)</b>					
Laboratory ID:	12-060-05					
1,1,2-Trichloroethane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Tetrachloroethene	0.084	0.0048	EPA 8260C	12-16-12	12-16-12	
1,3-Dichloropropane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Dibromochloromethane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
1,2-Dibromoethane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Chlorobenzene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
1,1,1,2-Tetrachloroethane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Bromoform	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Bromobenzene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
1,1,2,2-Tetrachloroethane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
1,2,3-Trichloropropane	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
2-Chlorotoluene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
4-Chlorotoluene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
1,3-Dichlorobenzene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
1,4-Dichlorobenzene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
1,2-Dichlorobenzene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
1,2-Dibromo-3-chloropropane	ND	0.0048	EPA 8260C	12-16-12	12-16-12	
1,2,4-Trichlorobenzene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
Hexachlorobutadiene	ND	0.0048	EPA 8260C	12-16-12	12-16-12	
1,2,3-Trichlorobenzene	ND	0.00096	EPA 8260C	12-16-12	12-16-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>122</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>52-125</i>				

Date of Report: December 17, 2012  
 Samples Submitted: December 10, 2012  
 Laboratory Reference: 1212-060  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB10-0-1</b>					
<b>Laboratory ID:</b>	<b>12-060-06</b>					
Dichlorodifluoromethane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Chloromethane	ND	0.0047	EPA 8260C	12-16-12	12-17-12	
Vinyl Chloride	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Bromomethane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Chloroethane	ND	0.0047	EPA 8260C	12-16-12	12-17-12	
Trichlorofluoromethane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
1,1-Dichloroethene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Iodomethane	ND	0.0047	EPA 8260C	12-16-12	12-17-12	
Methylene Chloride	ND	0.0047	EPA 8260C	12-16-12	12-17-12	
(trans) 1,2-Dichloroethene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
1,1-Dichloroethane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
2,2-Dichloropropane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
(cis) 1,2-Dichloroethene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Bromochloromethane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Chloroform	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
1,1,1-Trichloroethane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Carbon Tetrachloride	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
1,1-Dichloropropene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
1,2-Dichloroethane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Trichloroethene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
1,2-Dichloropropane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Dibromomethane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Bromodichloromethane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
2-Chloroethyl Vinyl Ether	ND	0.0047	EPA 8260C	12-16-12	12-17-12	
(cis) 1,3-Dichloropropene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
(trans) 1,3-Dichloropropene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	

Date of Report: December 17, 2012  
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**HALOGENATED VOLATILES by EPA 8260C**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SB10-0-1</b>					
<b>Laboratory ID:</b>	<b>12-060-06</b>					
1,1,2-Trichloroethane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Tetrachloroethene	0.089	0.0047	EPA 8260C	12-16-12	12-17-12	
1,3-Dichloropropane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Dibromochloromethane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
1,2-Dibromoethane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Chlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
1,1,1,2-Tetrachloroethane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Bromoform	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Bromobenzene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
1,1,2,2-Tetrachloroethane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
1,2,3-Trichloropropane	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
2-Chlorotoluene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
4-Chlorotoluene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
1,3-Dichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
1,4-Dichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
1,2-Dichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
1,2-Dibromo-3-chloropropane	ND	0.0047	EPA 8260C	12-16-12	12-17-12	
1,2,4-Trichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
Hexachlorobutadiene	ND	0.0047	EPA 8260C	12-16-12	12-17-12	
1,2,3-Trichlorobenzene	ND	0.00094	EPA 8260C	12-16-12	12-17-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>125</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>52-125</i>				

Date of Report: December 17, 2012  
 Samples Submitted: December 10, 2012  
 Laboratory Reference: 1212-060  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**

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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB1216S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Chloromethane	ND	0.0050	EPA 8260C	12-16-12	12-16-12	
Vinyl Chloride	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Bromomethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Chloroethane	ND	0.0050	EPA 8260C	12-16-12	12-16-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Iodomethane	ND	0.0050	EPA 8260C	12-16-12	12-16-12	
Methylene Chloride	ND	0.0050	EPA 8260C	12-16-12	12-16-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Bromochloromethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Chloroform	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Trichloroethene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Dibromomethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Bromodichloromethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	12-16-12	12-16-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	

Date of Report: December 17, 2012  
 Samples Submitted: December 10, 2012  
 Laboratory Reference: 1212-060  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C  
 METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB1216S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Tetrachloroethene	ND	0.0050	EPA 8260C	12-16-12	12-16-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Dibromochloromethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Chlorobenzene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Bromoform	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Bromobenzene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
2-Chlorotoluene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
4-Chlorotoluene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	12-16-12	12-16-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	12-16-12	12-16-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	12-16-12	12-16-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>122</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>52-125</i>				

Date of Report: December 17, 2012  
 Samples Submitted: December 10, 2012  
 Laboratory Reference: 1212-060  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260C**  
**SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	Limits		Limit	
SPIKE BLANKS										
Laboratory ID:	SB1216S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0532	0.0543	0.0500	0.0500	106	109	65-141	2	15	
Benzene	0.0513	0.0511	0.0500	0.0500	103	102	69-121	0	15	
Trichloroethene	0.0517	0.0518	0.0500	0.0500	103	104	75-120	0	15	
Toluene	0.0440	0.0450	0.0500	0.0500	88	90	75-120	2	15	
Chlorobenzene	0.0523	0.0531	0.0500	0.0500	105	106	75-120	2	15	
Surrogate:										
Dibromofluoromethane					122	114	63-127			
Toluene-d8					96	93	65-129			
4-Bromofluorobenzene					94	94	52-125			

Date of Report: December 17, 2012  
Samples Submitted: December 10, 2012  
Laboratory Reference: 1212-060  
Project: 105-003

### % MOISTURE

Date Analyzed: 12-16-12

Client ID	Lab ID	% Moisture
SB11-2-4	12-060-01	10
SB11-8-10	12-060-02	10
SB11-10-12	12-060-03	10
SB12-2-4	12-060-04	22
SB12-2-4 (duplicate)	12-060-05	18
SB10-0-1	12-060-06	10



### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference





**OnSite  
Environmental Inc.**  
14648 NE 95th Street • Redmond, WA 98052  
Phone: (425) 883-3681 • www.onsite-env.com

# Chain of Custody

Page 1 of 1

**12-060**

Turnaround Request (in working days)			Laboratory Number:																		
(Check One)																					
<input type="checkbox"/> Same Day <input type="checkbox"/> 1 Day																					
<input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days																					
<input checked="" type="checkbox"/> Standard (7 Days) (TPH analysis 5 Days)																					
<input type="checkbox"/> _____ (other)																					
Company:	Pacific Crest Environmental																				
Project Number:	105-003																				
Project Name:	Penthouse Drapery																				
Project Manager:	B. Carroll																				
Sampled by:	A. Niesenga																				
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers																
1	SB11-2-4	12/8/12	1005	Soil	4	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA / MTCA Metals (circle one)	TCLP Metals	HEM (oil and grease) 1664	% Moisture
2	SB11-8-10		1020								X										
3	SB11-10-12		1030								X										
4	SB12-2-4		1055								X										
5	SB12-2-4 (duplicate)		1100								X										
6	SB10-10-1 DB		1140								X										
Signature		Company		Date	Time	Comments/Special Instructions															
Relinquished		Pacific Crest Env.		12/10/12	0855	Please CC April Niesenga on lab report, thanks!															
Received																					
Relinquished																					
Received																					
Relinquished																					
Received																					
Relinquished																					
Reviewed/Date		Reviewed/Date		Chromatograms with final report <input type="checkbox"/>																	



14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

August 15, 2012

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1208-070

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on August 8, 2012.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal line extending to the right.

David Baumeister  
Project Manager

Enclosures

Date of Report: August 15, 2012  
Samples Submitted: August 8, 2012  
Laboratory Reference: 1208-070  
Project: 105-003

### **Case Narrative**

Samples were collected on August 7, 2012 and received by the laboratory on August 8, 2012. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

page 1 of 2

Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>MW2-080712</b>					
<b>Laboratory ID:</b>	<b>08-070-01</b>					
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloromethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Iodomethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Methylene Chloride	ND	1.0	EPA 8260	8-10-12	8-10-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
(cis) 1,2-Dichloroethene	0.27	0.20	EPA 8260	8-10-12	8-10-12	
Bromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroform	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Trichloroethene	0.38	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-10-12	8-10-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW2-080712</b>					
Laboratory ID:	08-070-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Tetrachloroethene	2.6	1.0	EPA 8260	8-10-12	8-10-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromoform	ND	1.0	EPA 8260	8-10-12	8-10-12	
Bromobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>88</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>86</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>86</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

page 1 of 2

Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>MW8-080712</b>					
<b>Laboratory ID:</b>	<b>08-070-02</b>					
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloromethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Iodomethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Methylene Chloride	ND	1.0	EPA 8260	8-10-12	8-10-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethane	0.24	0.20	EPA 8260	8-10-12	8-10-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroform	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1-Trichloroethane	1.1	0.20	EPA 8260	8-10-12	8-10-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Trichloroethene	0.44	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-10-12	8-10-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW8-080712</b>					
Laboratory ID:	08-070-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromoform	ND	1.0	EPA 8260	8-10-12	8-10-12	
Bromobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	96	66-120				
<i>Toluene-d8</i>	90	70-120				
<i>4-Bromofluorobenzene</i>	93	63-120				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

page 1 of 2

Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>		<b>MW14-080712</b>				
Laboratory ID:		08-070-03				
Dichlorodifluoromethane	ND	50	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	250	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	50	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	50	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	250	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	50	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	50	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	250	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	250	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	50	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	50	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	50	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	ND	50	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	50	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	50	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	50	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	50	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	50	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	50	EPA 8260	8-13-12	8-13-12	
Trichloroethene	ND	50	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	50	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	50	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	50	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	250	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	50	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	50	EPA 8260	8-13-12	8-13-12	



Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW14-080712</b>					
Laboratory ID:	08-070-03					
1,1,2-Trichloroethane	ND	50	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	7900	250	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	50	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	50	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	50	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	50	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	50	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	250	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	50	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	50	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	50	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	50	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	50	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	50	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	50	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	50	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	250	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	50	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	50	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	50	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>79</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>85</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>86</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

page 1 of 2

Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW21S-080712</b>						
Laboratory ID: 08-070-04						
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloromethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Iodomethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Methylene Chloride	ND	1.0	EPA 8260	8-10-12	8-10-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroform	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Trichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-10-12	8-10-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW21S-080712</b>					
Laboratory ID:	08-070-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Tetrachloroethene	7.8	1.0	EPA 8260	8-10-12	8-10-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromoform	ND	1.0	EPA 8260	8-10-12	8-10-12	
Bromobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	88	66-120				
<i>Toluene-d8</i>	86	70-120				
<i>4-Bromofluorobenzene</i>	86	63-120				

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW21D-080712</b>				
Laboratory ID:		08-070-05				
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloromethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Iodomethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Methylene Chloride	ND	1.0	EPA 8260	8-10-12	8-10-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethane	0.27	0.20	EPA 8260	8-10-12	8-10-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroform	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Trichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-10-12	8-10-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW21D-080712</b>					
Laboratory ID:	08-070-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromoform	ND	1.0	EPA 8260	8-10-12	8-10-12	
Bromobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>89</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>85</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>91</i>	<i>63-120</i>				

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# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW22-080712</b>				
Laboratory ID:		08-070-06				
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloromethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Iodomethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Methylene Chloride	ND	1.0	EPA 8260	8-10-12	8-10-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethane	0.31	0.20	EPA 8260	8-10-12	8-10-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroform	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1-Trichloroethane	0.21	0.20	EPA 8260	8-10-12	8-10-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Trichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-10-12	8-10-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW22-080712</b>					
Laboratory ID:	08-070-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromoform	ND	1.0	EPA 8260	8-10-12	8-10-12	
Bromobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>89</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>87</i>	<i>63-120</i>				

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# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW24S-080712</b>						
Laboratory ID: 08-070-07						
Dichlorodifluoromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	5.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	5.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	5.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	5.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	2.6	1.0	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichloroethene	7.9	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	5.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260	8-13-12	8-13-12	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW24S-080712</b>					
Laboratory ID:	08-070-07					
1,1,2-Trichloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	170	5.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	5.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	1.0	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>80</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>86</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>86</i>	<i>63-120</i>				

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW24D-080712</b>				
Laboratory ID:		08-070-08				
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloromethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Iodomethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Methylene Chloride	ND	1.0	EPA 8260	8-10-12	8-10-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
(cis) 1,2-Dichloroethene	15	0.20	EPA 8260	8-10-12	8-10-12	
Bromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroform	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1-Trichloroethane	0.26	0.20	EPA 8260	8-10-12	8-10-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Trichloroethene	3.0	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-10-12	8-10-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	

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# **HALOGENATED VOLATILES by EPA 8260B**

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<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>MW24D-080712</b>					
<b>Laboratory ID:</b>	<b>08-070-08</b>					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Tetrachloroethene	19	1.0	EPA 8260	8-10-12	8-10-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromoform	ND	1.0	EPA 8260	8-10-12	8-10-12	
Bromobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>87</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>86</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW25S-080712</b>						
Laboratory ID: 08-070-09						
Dichlorodifluoromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	5.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	5.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	5.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	5.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichloroethene	1.6	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	5.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260	8-13-12	8-13-12	

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW25S-080712</b>					
Laboratory ID:	08-070-09					
1,1,2-Trichloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	89	5.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	5.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	1.0	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>79</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>86</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>84</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW25I-080712</b>						
Laboratory ID: 08-070-10						
Dichlorodifluoromethane	ND	2.0	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	10	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	2.0	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	2.0	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	10	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	2.0	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	2.0	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	10	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	10	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	2.0	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	2.0	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	2.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	6.6	2.0	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	2.0	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	2.0	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	2.0	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	2.0	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	2.0	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	2.0	EPA 8260	8-13-12	8-13-12	
Trichloroethene	7.4	2.0	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	2.0	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	2.0	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	2.0	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	10	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	2.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	2.0	EPA 8260	8-13-12	8-13-12	

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW25I-080712</b>					
Laboratory ID:	08-070-10					
1,1,2-Trichloroethane	ND	2.0	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	290	10	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	2.0	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	2.0	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	2.0	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	2.0	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	2.0	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	10	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	2.0	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	2.0	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	2.0	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	2.0	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	2.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	2.0	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	2.0	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	2.0	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	10	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	2.0	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	2.0	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	2.0	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>80</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>87</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>86</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW25D-080712</b>						
Laboratory ID: 08-070-11						
Dichlorodifluoromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	5.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	5.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	5.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	5.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	7.4	1.0	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichloroethene	10	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	5.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260	8-13-12	8-13-12	



Date of Report: August 15, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW25D-080712</b>					
Laboratory ID:	08-070-11					
1,1,2-Trichloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	170	5.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	5.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	1.0	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>82</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>88</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW26S-080712</b>						
Laboratory ID: 08-070-12						
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloromethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Iodomethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Methylene Chloride	ND	1.0	EPA 8260	8-10-12	8-10-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroform	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Trichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-10-12	8-10-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	

Date of Report: August 15, 2012  
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# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW26S-080712</b>					
Laboratory ID:	08-070-12					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromoform	ND	1.0	EPA 8260	8-10-12	8-10-12	
Bromobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	89	66-120				
<i>Toluene-d8</i>	88	70-120				
<i>4-Bromofluorobenzene</i>	92	63-120				

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 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW26I-080712</b>				
Laboratory ID:		08-070-13				
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloromethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Iodomethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Methylene Chloride	ND	1.0	EPA 8260	8-10-12	8-10-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroform	0.20	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1-Trichloroethane	0.92	0.20	EPA 8260	8-10-12	8-10-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Trichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-10-12	8-10-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW261-080712</b>					
Laboratory ID:	08-070-13					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromoform	ND	1.0	EPA 8260	8-10-12	8-10-12	
Bromobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	96	66-120				
<i>Toluene-d8</i>	91	70-120				
<i>4-Bromofluorobenzene</i>	95	63-120				

Date of Report: August 15, 2012  
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 Laboratory Reference: 1208-070  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW26D-080712</b>						
Laboratory ID: 08-070-14						
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloromethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Iodomethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Methylene Chloride	ND	1.0	EPA 8260	8-10-12	8-10-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroform	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1-Trichloroethane	0.31	0.20	EPA 8260	8-10-12	8-10-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Trichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-10-12	8-10-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW26D-080712</b>					
Laboratory ID:	08-070-14					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromoform	ND	1.0	EPA 8260	8-10-12	8-10-12	
Bromobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>88</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>88</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>88</i>	<i>63-120</i>				

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# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW27S-080712</b>						
Laboratory ID: 08-070-15						
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Trichloroethene	1.6	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW27S-080712</b>					
Laboratory ID:	08-070-15					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	15	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>80</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>89</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>83</i>	<i>63-120</i>				

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# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW27I-080712</b>				
Laboratory ID:		08-070-16				
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloromethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Iodomethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Methylene Chloride	ND	1.0	EPA 8260	8-10-12	8-10-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
(cis) 1,2-Dichloroethene	0.74	0.20	EPA 8260	8-10-12	8-10-12	
Bromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroform	0.65	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Trichloroethene	3.4	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-10-12	8-10-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW271-080712</b>					
Laboratory ID:	08-070-16					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Tetrachloroethene	43	1.0	EPA 8260	8-10-12	8-10-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromoform	ND	1.0	EPA 8260	8-10-12	8-10-12	
Bromobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>86</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>85</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW27D-080712</b>				
Laboratory ID:		08-070-17				
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	0.24	0.20	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Trichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	

Date of Report: August 15, 2012  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW27D-080712</b>					
Laboratory ID:	08-070-17					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>81</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>88</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>84</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
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 Laboratory Reference: 1208-070  
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# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW28S-080712</b>				
Laboratory ID:		08-070-18				
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloromethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethene	0.29	0.20	EPA 8260	8-10-12	8-10-12	
Iodomethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Methylene Chloride	ND	1.0	EPA 8260	8-10-12	8-10-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethane	0.51	0.20	EPA 8260	8-10-12	8-10-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroform	0.25	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1-Trichloroethane	1.6	0.20	EPA 8260	8-10-12	8-10-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloroethane	0.33	0.20	EPA 8260	8-10-12	8-10-12	
Trichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-10-12	8-10-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW28S-080712</b>					
Laboratory ID:	08-070-18					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromoform	ND	1.0	EPA 8260	8-10-12	8-10-12	
Bromobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>87</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>88</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>87</i>	<i>63-120</i>				

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# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW28I-080712</b>				
Laboratory ID:		08-070-19				
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	1.4	0.20	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Trichloroethene	3.1	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW281-080712</b>					
Laboratory ID:	08-070-19					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>79</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>88</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>85</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: MW28D-080712</b>						
Laboratory ID: 08-070-20						
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloromethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethene	0.87	0.20	EPA 8260	8-10-12	8-10-12	
Iodomethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Methylene Chloride	ND	1.0	EPA 8260	8-10-12	8-10-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethane	0.48	0.20	EPA 8260	8-10-12	8-10-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroform	1.6	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1-Trichloroethane	3.0	0.20	EPA 8260	8-10-12	8-10-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloroethane	0.36	0.20	EPA 8260	8-10-12	8-10-12	
Trichloroethene	7.7	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-10-12	8-10-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW28D-080712</b>					
Laboratory ID:	08-070-20					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromoform	ND	1.0	EPA 8260	8-10-12	8-10-12	
Bromobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	88	66-120				
<i>Toluene-d8</i>	85	70-120				
<i>4-Bromofluorobenzene</i>	86	63-120				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW29-080712</b>				
Laboratory ID:		08-070-21				
Dichlorodifluoromethane	ND	60	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	300	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	60	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	60	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	300	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	60	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	60	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	300	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	300	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	60	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	60	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	60	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	ND	60	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	60	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	60	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	60	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	60	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	60	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	60	EPA 8260	8-13-12	8-13-12	
Trichloroethene	ND	60	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	60	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	60	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	60	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	300	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	60	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	60	EPA 8260	8-13-12	8-13-12	

Date of Report: August 15, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW29-080712</b>					
Laboratory ID:	08-070-21					
1,1,2-Trichloroethane	ND	60	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	12000	300	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	60	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	60	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	60	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	60	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	60	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	300	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	60	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	60	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	60	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	60	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	60	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	60	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	60	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	60	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	300	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	60	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	60	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	60	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>83</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>89</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>90</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
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# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: MW30S-080712</b>						
Laboratory ID: 08-070-22						
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Trichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	

Date of Report: August 15, 2012  
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# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW30S-080712</b>					
Laboratory ID:	08-070-22					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>80</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>87</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW30I-080712</b>				
Laboratory ID:		08-070-23				
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Trichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	



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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW30I-080712</b>					
Laboratory ID:	08-070-23					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>78</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>86</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>87</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW30D-080712</b>						
Laboratory ID: 08-070-24						
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Trichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	

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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW30D-080712</b>					
Laboratory ID:	08-070-24					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>78</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>87</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>88</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW31S-080712</b>						
Laboratory ID: 08-070-25						
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroform	0.31	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	0.32	0.20	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Trichloroethene	3.4	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW31S-080712</b>					
Laboratory ID:	08-070-25					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	21	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	82	66-120				
<i>Toluene-d8</i>	89	70-120				
<i>4-Bromofluorobenzene</i>	92	63-120				

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW311-080712</b>				
Laboratory ID:		08-070-26				
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	0.36	0.20	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroform	0.63	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	0.76	0.20	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Trichloroethene	2.1	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW311-080712</b>					
Laboratory ID:	08-070-26					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	3.6	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>84</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>91</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>63-120</i>				

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# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW31D-080712</b>						
Laboratory ID: 08-070-27						
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Trichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW31D-080712</b>					
Laboratory ID:	08-070-27					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	83	66-120				
<i>Toluene-d8</i>	92	70-120				
<i>4-Bromofluorobenzene</i>	94	63-120				

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW32S-080712</b>				
Laboratory ID:		08-070-28				
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroform	0.27	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	0.76	0.20	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Trichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW32S-080712</b>					
Laboratory ID:	08-070-28					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	83	66-120				
<i>Toluene-d8</i>	92	70-120				
<i>4-Bromofluorobenzene</i>	93	63-120				

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW32I-080712</b>				
Laboratory ID:		08-070-29				
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	0.38	0.20	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroform	0.20	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	0.20	0.20	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Trichloroethene	0.54	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	

Date of Report: August 15, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW32I-080712</b>					
Laboratory ID:	08-070-29					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	3.2	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	83	66-120				
<i>Toluene-d8</i>	92	70-120				
<i>4-Bromofluorobenzene</i>	95	63-120				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW32D-080712</b>						
Laboratory ID: 08-070-30						
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroform	0.35	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Trichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	

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# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW32D-080712</b>					
Laboratory ID:	08-070-30					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>84</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>90</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>63-120</i>				

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# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SCC1-080712</b>					
Laboratory ID:	08-070-31					
Dichlorodifluoromethane	0.23	0.20	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	0.52	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Trichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	



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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SCC1-080712</b>					
Laboratory ID:	08-070-31					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	27	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>78</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>86</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>63-120</i>				

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# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>SCC2-080712</b>				
Laboratory ID:		08-070-32				
Dichlorodifluoromethane	ND	30	EPA 8260	8-14-12	8-14-12	
Chloromethane	ND	150	EPA 8260	8-14-12	8-14-12	
Vinyl Chloride	ND	30	EPA 8260	8-14-12	8-14-12	
Bromomethane	ND	30	EPA 8260	8-14-12	8-14-12	
Chloroethane	ND	150	EPA 8260	8-14-12	8-14-12	
Trichlorofluoromethane	ND	30	EPA 8260	8-14-12	8-14-12	
1,1-Dichloroethene	ND	30	EPA 8260	8-14-12	8-14-12	
Iodomethane	ND	150	EPA 8260	8-14-12	8-14-12	
Methylene Chloride	ND	150	EPA 8260	8-14-12	8-14-12	
(trans) 1,2-Dichloroethene	ND	30	EPA 8260	8-14-12	8-14-12	
1,1-Dichloroethane	ND	30	EPA 8260	8-14-12	8-14-12	
2,2-Dichloropropane	ND	30	EPA 8260	8-14-12	8-14-12	
(cis) 1,2-Dichloroethene	ND	30	EPA 8260	8-14-12	8-14-12	
Bromochloromethane	ND	30	EPA 8260	8-14-12	8-14-12	
Chloroform	ND	30	EPA 8260	8-14-12	8-14-12	
1,1,1-Trichloroethane	ND	30	EPA 8260	8-14-12	8-14-12	
Carbon Tetrachloride	ND	30	EPA 8260	8-14-12	8-14-12	
1,1-Dichloropropene	ND	30	EPA 8260	8-14-12	8-14-12	
1,2-Dichloroethane	ND	30	EPA 8260	8-14-12	8-14-12	
Trichloroethene	ND	30	EPA 8260	8-14-12	8-14-12	
1,2-Dichloropropane	ND	30	EPA 8260	8-14-12	8-14-12	
Dibromomethane	ND	30	EPA 8260	8-14-12	8-14-12	
Bromodichloromethane	ND	30	EPA 8260	8-14-12	8-14-12	
2-Chloroethyl Vinyl Ether	ND	150	EPA 8260	8-14-12	8-14-12	
(cis) 1,3-Dichloropropene	ND	30	EPA 8260	8-14-12	8-14-12	
(trans) 1,3-Dichloropropene	ND	30	EPA 8260	8-14-12	8-14-12	

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**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>SCC2-080712</b>					
Laboratory ID:	08-070-32					
1,1,2-Trichloroethane	ND	30	EPA 8260	8-14-12	8-14-12	
Tetrachloroethene	5900	150	EPA 8260	8-14-12	8-14-12	
1,3-Dichloropropane	ND	30	EPA 8260	8-14-12	8-14-12	
Dibromochloromethane	ND	30	EPA 8260	8-14-12	8-14-12	
1,2-Dibromoethane	ND	30	EPA 8260	8-14-12	8-14-12	
Chlorobenzene	ND	30	EPA 8260	8-14-12	8-14-12	
1,1,1,2-Tetrachloroethane	ND	30	EPA 8260	8-14-12	8-14-12	
Bromoform	ND	150	EPA 8260	8-14-12	8-14-12	
Bromobenzene	ND	30	EPA 8260	8-14-12	8-14-12	
1,1,2,2-Tetrachloroethane	ND	30	EPA 8260	8-14-12	8-14-12	
1,2,3-Trichloropropane	ND	30	EPA 8260	8-14-12	8-14-12	
2-Chlorotoluene	ND	30	EPA 8260	8-14-12	8-14-12	
4-Chlorotoluene	ND	30	EPA 8260	8-14-12	8-14-12	
1,3-Dichlorobenzene	ND	30	EPA 8260	8-14-12	8-14-12	
1,4-Dichlorobenzene	ND	30	EPA 8260	8-14-12	8-14-12	
1,2-Dichlorobenzene	ND	30	EPA 8260	8-14-12	8-14-12	
1,2-Dibromo-3-chloropropane	ND	150	EPA 8260	8-14-12	8-14-12	
1,2,4-Trichlorobenzene	ND	30	EPA 8260	8-14-12	8-14-12	
Hexachlorobutadiene	ND	30	EPA 8260	8-14-12	8-14-12	
1,2,3-Trichlorobenzene	ND	30	EPA 8260	8-14-12	8-14-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>88</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>89</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>88</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
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**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0810W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloromethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Iodomethane	ND	1.0	EPA 8260	8-10-12	8-10-12	
Methylene Chloride	ND	1.0	EPA 8260	8-10-12	8-10-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chloroform	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Trichloroethene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromomethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-10-12	8-10-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-10-12	8-10-12	

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**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0810W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Chlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
Bromoform	ND	1.0	EPA 8260	8-10-12	8-10-12	
Bromobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-10-12	8-10-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-10-12	8-10-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-10-12	8-10-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-10-12	8-10-12	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	83	66-120				
<i>Toluene-d8</i>	98	70-120				
<i>4-Bromofluorobenzene</i>	91	63-120				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0813W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloromethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Iodomethane	ND	1.0	EPA 8260	8-13-12	8-13-12	
Methylene Chloride	ND	1.0	EPA 8260	8-13-12	8-13-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chloroform	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Trichloroethene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromomethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-13-12	8-13-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-13-12	8-13-12	

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0813W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Chlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
Bromoform	ND	1.0	EPA 8260	8-13-12	8-13-12	
Bromobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-13-12	8-13-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-13-12	8-13-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-13-12	8-13-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-13-12	8-13-12	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	83	66-120				
<i>Toluene-d8</i>	90	70-120				
<i>4-Bromofluorobenzene</i>	84	63-120				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0814W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260	8-14-12	8-14-12	
Chloromethane	ND	1.0	EPA 8260	8-14-12	8-14-12	
Vinyl Chloride	ND	0.20	EPA 8260	8-14-12	8-14-12	
Bromomethane	ND	0.20	EPA 8260	8-14-12	8-14-12	
Chloroethane	ND	1.0	EPA 8260	8-14-12	8-14-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	8-14-12	8-14-12	
Iodomethane	ND	1.0	EPA 8260	8-14-12	8-14-12	
Methylene Chloride	ND	1.0	EPA 8260	8-14-12	8-14-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	8-14-12	8-14-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	8-14-12	8-14-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	8-14-12	8-14-12	
Bromochloromethane	ND	0.20	EPA 8260	8-14-12	8-14-12	
Chloroform	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	8-14-12	8-14-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	8-14-12	8-14-12	
Trichloroethene	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	8-14-12	8-14-12	
Dibromomethane	ND	0.20	EPA 8260	8-14-12	8-14-12	
Bromodichloromethane	ND	0.20	EPA 8260	8-14-12	8-14-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	8-14-12	8-14-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-14-12	8-14-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	8-14-12	8-14-12	



Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0814W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	8-14-12	8-14-12	
Tetrachloroethene	ND	1.0	EPA 8260	8-14-12	8-14-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	8-14-12	8-14-12	
Dibromochloromethane	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	8-14-12	8-14-12	
Chlorobenzene	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	8-14-12	8-14-12	
Bromoform	ND	1.0	EPA 8260	8-14-12	8-14-12	
Bromobenzene	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	8-14-12	8-14-12	
2-Chlorotoluene	ND	0.20	EPA 8260	8-14-12	8-14-12	
4-Chlorotoluene	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	8-14-12	8-14-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	8-14-12	8-14-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	8-14-12	8-14-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	8-14-12	8-14-12	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>91</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>90</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>83</i>	<i>63-120</i>				

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent		Recovery		RPD	
					Recovery		Limits		RPD	Limit
SPIKE BLANKS										
Laboratory ID:	SB0810W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	11.9	12.2	10.0	10.0	119	122	65-141	2	15	
Benzene	10.1	9.89	10.0	10.0	101	99	77-120	2	15	
Trichloroethene	10.4	9.83	10.0	10.0	104	98	80-120	6	15	
Toluene	9.91	10.0	10.0	10.0	99	100	80-120	1	15	
Chlorobenzene	10.7	10.7	10.0	10.0	107	107	80-120	0	15	
Surrogate:										
Dibromofluoromethane					89	85	66-120			
Toluene-d8					92	87	70-120			
4-Bromofluorobenzene					87	90	63-120			

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent	Recovery		RPD		
					Recovery	Limits	RPD	Limit	Flags	
SPIKE BLANKS										
Laboratory ID:	SB0813W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	12.5	11.2	10.0	10.0	125	112	65-141	11	15	
Benzene	10.9	9.87	10.0	10.0	109	99	77-120	10	15	
Trichloroethene	11.6	10.4	10.0	10.0	116	104	80-120	11	15	
Toluene	11.5	10.4	10.0	10.0	115	104	80-120	10	15	
Chlorobenzene	11.1	10.2	10.0	10.0	111	102	80-120	8	15	
Surrogate:										
Dibromofluoromethane					84	84	66-120			
Toluene-d8					95	93	70-120			
4-Bromofluorobenzene					86	85	63-120			

Date of Report: August 15, 2012  
 Samples Submitted: August 8, 2012  
 Laboratory Reference: 1208-070  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent		Recovery		RPD	
					Recovery		Limits		RPD	Limit
SPIKE BLANKS										
Laboratory ID:	SB0814W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	11.5	10.6	10.0	10.0	115	106	65-141	8	15	
Benzene	11.2	10.7	10.0	10.0	112	107	77-120	5	15	
Trichloroethene	10.0	9.57	10.0	10.0	100	96	80-120	4	15	
Toluene	10.3	9.87	10.0	10.0	103	99	80-120	4	15	
Chlorobenzene	11.6	11.0	10.0	10.0	116	110	80-120	5	15	
Surrogate:										
Dibromofluoromethane					89	89	66-120			
Toluene-d8					87	85	70-120			
4-Bromofluorobenzene					74	88	63-120			



### Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical \_\_\_\_\_.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

ND - Not Detected at PQL

PQL - Practical Quantitation Limit

RPD - Relative Percent Difference



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# Chain of Custody

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08-070

Environmental Inc.

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Laboratory Number:

08-070

Company:

Pacific Crest Environmental

Project Number:

105-003

Project Name:

Panthouse Drapery

Project Manager:

Bill Carroll

Sampled by:

April Witschong

Turnaround Request  
(in working days)

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Days ☐ 3 Days

☒ Standard (7 Days)  
(TPH analysis 5 Days)

☐ \_\_\_\_\_  
(other)

Lab ID Sample Identification

Date

Sampled

Time

Sampled

Matrix

1 MW2-080712

8/7/12

0930

H2O

3

2 MW6-080712

1520

3 MW14-080712

1225





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## Chain of Custody

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CIVIL ENGINEERING INC.					
Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.on-site-env.com					
Company:		Pacific Crest Environmental		Turnaround Request (in working days)	
Project Number:		105-003		(Check One) <input type="checkbox"/> Same Day <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input checked="" type="checkbox"/> Standard (7 Days) (TPH analysis 5 Days)	
Project Name:		Parthaus Drapery			
Project Manager:		Bill Carroll			
Sampled by:		April Wichegna		<input type="checkbox"/> _____ (other)	
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.
11	MW2SD - 080712	8/7/12	1320	H <sub>2</sub> O	3
12	MW2GS - 080712		1525		
13	MW2GI - 080712		1530		
14	MW2GD - 080712		1535		
15	MW27S - 080712		1430		
16	MW27I - 080712		1435		
17	MW27D - 080712		1440		
18	MW28S - 080712		1030		
19	MW28I - 080712		1025		
20	MW28D - 080712		1010		
Signature		Company	Date	Time	Comments/Special Instructions
		Pacific Crest Env.	8/8/12	1441	* See page 1 for note
Relinquished					
Received					
Relinquished					
Received					
Relinquished					
Received					
Relinquished					
Chromatograms with final report <input type="checkbox"/>					





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## Chain of Custody

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Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.onsite-env.com										08-070									
Company: Pacific Crest Environmental										Turnaround Request (in working days)									
Project Number: 105-003										<input type="checkbox"/> Same Day <input type="checkbox"/> 1 Day									
Project Name: Penthouse Drapery										<input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days									
Project Manager: Bill Carroll										<input checked="" type="checkbox"/> Standard (7 Days) (T/PH analysis 5 Days)									
Sampled by: April Wiebenga										<input type="checkbox"/> (other) _____									
Lab ID										Date Sampled Time Sampled Matrix No. of Cont.									
Sample Identification																			
21 MW29-080712										8/7/12 1230 H2O 3									
22 MW30S-080712										1100									
23 MW30I-080712										1105									
24 MW30D-080712										1110									
25 MW31S-080712										1335									
26 MW31I-080712										1340									
27 MW31D-080712										1345									
28 MW32S-080712										1455									
29 MW32I-080712										1500									
30 MW32D-080712										1505									
Signature										Company									
Relinquished										Pacific Crest Env.									
Received										8/9/12 1441									
Relinquished										8/8/12 17:11									
Received										8/8/12 15:25									
Relinquished										8/11/12 1525									
Received																			
Reviewed/Date										Reviewed/Date									
Chromatograms with final report <input type="checkbox"/>																			





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## Chain of Custody

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Company:		Pacific Crest Environmental			Turnaround Request (in working days)		Laboratory Number: 08-070																
Project Number:		105-003			<input type="checkbox"/> Same Day <input type="checkbox"/> 1 Day																		
Project Name:		Panthouse Drapery			<input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days																		
Project Manager:		Bill Carroll			<input checked="" type="checkbox"/> Standard (7 Days) (TPH analysis 5 Days)																		
Sampled by:		April Wickens			<input type="checkbox"/> _____ (other)																		
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	% Moisture	
31	SCC1-080712	8/7/12	1210	H2O	3						X												
32	SCC2-080712	↓	1215	↓	↓						X												
Signature		Pacific Crest Env.			Date	Time	Comments/Special Instructions																
Relinquished		8/8/12			1441			* see page 1 for note															
Received		8/8/12			1441																		
Relinquished		8/8/12			1525																		
Received		8/8/12			1525																		
Relinquished																							
Received																							
Reviewed/Date								Chromatograms with final report <input type="checkbox"/>															



14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

August 2, 2012

Bill Carroll  
Pacific Crest Environmental, LLC  
P.O. Box 952  
North Bend, WA 98045

Re: Analytical Data for Project 105-003  
Laboratory Reference No. 1207-200

Dear Bill:

Enclosed are the analytical results and associated quality control data for samples submitted on July 26, 2012.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", followed by a long horizontal flourish.

David Baumeister  
Project Manager

Enclosures

Date of Report: August 2, 2012  
Samples Submitted: July 26, 2012  
Laboratory Reference: 1207-200  
Project: 105-003

### **Case Narrative**

Samples were collected on July 24 and 25, 2012 and received by the laboratory on July 26, 2012. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

page 1 of 2

Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW18-1-072412</b>						
Laboratory ID: 07-200-01						
Dichlorodifluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloromethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Vinyl Chloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Iodomethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Methylene Chloride	ND	1.0	EPA 8260	7-30-12	7-30-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroform	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Trichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromodichloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	7-30-12	7-30-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	

Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW18-1-072412</b>					
Laboratory ID:	07-200-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Tetrachloroethene	1.6	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromoform	ND	1.0	EPA 8260	7-30-12	7-30-12	
Bromobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
4-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	7-30-12	7-30-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>77</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>93</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>92</i>	<i>63-120</i>				

Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW18-2-072412</b>						
Laboratory ID: 07-200-02						
Dichlorodifluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloromethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Vinyl Chloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Iodomethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Methylene Chloride	ND	1.0	EPA 8260	7-30-12	7-30-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroform	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Trichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromodichloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	7-30-12	7-30-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	

Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW18-2-072412</b>					
Laboratory ID:	07-200-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Tetrachloroethene	3.7	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromoform	ND	1.0	EPA 8260	7-30-12	7-30-12	
Bromobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
4-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	7-30-12	7-30-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	76	66-120				
<i>Toluene-d8</i>	92	70-120				
<i>4-Bromofluorobenzene</i>	90	63-120				

Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW18-3-072412</b>						
Laboratory ID: 07-200-03						
Dichlorodifluoromethane	ND	0.40	EPA 8260	7-30-12	7-30-12	
Chloromethane	ND	2.0	EPA 8260	7-30-12	7-30-12	
Vinyl Chloride	ND	0.40	EPA 8260	7-30-12	7-30-12	
Bromomethane	ND	0.40	EPA 8260	7-30-12	7-30-12	
Chloroethane	ND	2.0	EPA 8260	7-30-12	7-30-12	
Trichlorofluoromethane	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethene	ND	0.40	EPA 8260	7-30-12	7-30-12	
Iodomethane	ND	2.0	EPA 8260	7-30-12	7-30-12	
Methylene Chloride	ND	2.0	EPA 8260	7-30-12	7-30-12	
(trans) 1,2-Dichloroethene	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethane	ND	0.40	EPA 8260	7-30-12	7-30-12	
2,2-Dichloropropane	ND	0.40	EPA 8260	7-30-12	7-30-12	
(cis) 1,2-Dichloroethene	ND	0.40	EPA 8260	7-30-12	7-30-12	
Bromochloromethane	ND	0.40	EPA 8260	7-30-12	7-30-12	
Chloroform	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,1,1-Trichloroethane	ND	0.40	EPA 8260	7-30-12	7-30-12	
Carbon Tetrachloride	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,1-Dichloropropene	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,2-Dichloroethane	ND	0.40	EPA 8260	7-30-12	7-30-12	
Trichloroethene	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,2-Dichloropropane	ND	0.40	EPA 8260	7-30-12	7-30-12	
Dibromomethane	ND	0.40	EPA 8260	7-30-12	7-30-12	
Bromodichloromethane	ND	0.40	EPA 8260	7-30-12	7-30-12	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260	7-30-12	7-30-12	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260	7-30-12	7-30-12	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260	7-30-12	7-30-12	



Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW18-3-072412</b>					
Laboratory ID:	07-200-03					
1,1,2-Trichloroethane	ND	0.40	EPA 8260	7-30-12	7-30-12	
Tetrachloroethene	89	0.40	EPA 8260	7-30-12	7-30-12	
1,3-Dichloropropane	ND	0.40	EPA 8260	7-30-12	7-30-12	
Dibromochloromethane	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,2-Dibromoethane	ND	0.40	EPA 8260	7-30-12	7-30-12	
Chlorobenzene	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260	7-30-12	7-30-12	
Bromoform	ND	2.0	EPA 8260	7-30-12	7-30-12	
Bromobenzene	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,1,2,2-Tetrachloroethane	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichloropropane	ND	0.40	EPA 8260	7-30-12	7-30-12	
2-Chlorotoluene	ND	0.40	EPA 8260	7-30-12	7-30-12	
4-Chlorotoluene	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,3-Dichlorobenzene	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,4-Dichlorobenzene	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,2-Dichlorobenzene	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,2-Dibromo-3-chloropropane	ND	2.0	EPA 8260	7-30-12	7-30-12	
1,2,4-Trichlorobenzene	ND	0.40	EPA 8260	7-30-12	7-30-12	
Hexachlorobutadiene	ND	0.40	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260	7-30-12	7-30-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>85</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>87</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>88</i>	<i>63-120</i>				

Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW19-1-072512</b>						
Laboratory ID: 07-200-04						
Dichlorodifluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloromethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Vinyl Chloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethene	0.60	0.20	EPA 8260	7-30-12	7-30-12	
Iodomethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Methylene Chloride	ND	1.0	EPA 8260	7-30-12	7-30-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethane	0.69	0.20	EPA 8260	7-30-12	7-30-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
(cis) 1,2-Dichloroethene	0.23	0.20	EPA 8260	7-30-12	7-30-12	
Bromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroform	0.46	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1-Trichloroethane	2.0	0.20	EPA 8260	7-30-12	7-30-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloroethane	0.47	0.20	EPA 8260	7-30-12	7-30-12	
Trichloroethene	13	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromodichloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	7-30-12	7-30-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	

Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW19-1-072512</b>					
Laboratory ID:	07-200-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Tetrachloroethene	0.60	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromoform	ND	1.0	EPA 8260	7-30-12	7-30-12	
Bromobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
4-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	7-30-12	7-30-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>91</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>91</i>	<i>63-120</i>				

Date of Report: August 2, 2012  
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 Laboratory Reference: 1207-200  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>		<b>MW19-2-072512</b>				
Laboratory ID:		07-200-05				
Dichlorodifluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloromethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Vinyl Chloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethene	1.3	0.20	EPA 8260	7-30-12	7-30-12	
Iodomethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Methylene Chloride	ND	1.0	EPA 8260	7-30-12	7-30-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethane	0.61	0.20	EPA 8260	7-30-12	7-30-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroform	0.87	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1-Trichloroethane	3.7	0.20	EPA 8260	7-30-12	7-30-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloroethane	0.49	0.20	EPA 8260	7-30-12	7-30-12	
Trichloroethene	6.3	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromodichloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	7-30-12	7-30-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	

Date of Report: August 2, 2012  
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# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW19-2-072512</b>					
Laboratory ID:	07-200-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Tetrachloroethene	0.35	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromoform	ND	1.0	EPA 8260	7-30-12	7-30-12	
Bromobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
4-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	7-30-12	7-30-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>85</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>63-120</i>				

Date of Report: August 2, 2012  
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# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW19-6-072512</b>				
Laboratory ID:		07-200-06				
Dichlorodifluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloromethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Vinyl Chloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Iodomethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Methylene Chloride	ND	1.0	EPA 8260	7-30-12	7-30-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
(cis) 1,2-Dichloroethene	1.2	0.20	EPA 8260	7-30-12	7-30-12	
Bromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroform	1.1	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1-Trichloroethane	1.3	0.20	EPA 8260	7-30-12	7-30-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Trichloroethene	1.7	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromodichloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	7-30-12	7-30-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW19-6-072512</b>					
Laboratory ID:	07-200-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Tetrachloroethene	8.1	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromoform	ND	1.0	EPA 8260	7-30-12	7-30-12	
Bromobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
4-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	7-30-12	7-30-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>84</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>88</i>	<i>63-120</i>				

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# **HALOGENATED VOLATILES by EPA 8260B**

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Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW20-1-072512</b>						
Laboratory ID: 07-200-07						
Dichlorodifluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloromethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Vinyl Chloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Iodomethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Methylene Chloride	ND	1.0	EPA 8260	7-30-12	7-30-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
(cis) 1,2-Dichloroethene	11	0.20	EPA 8260	7-30-12	7-30-12	
Bromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroform	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Trichloroethene	2.3	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromodichloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	7-30-12	7-30-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	



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# HALOGENATED VOLATILES by EPA 8260B

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW20-1-072512</b>					
Laboratory ID:	07-200-07					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Tetrachloroethene	3.5	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromoform	ND	1.0	EPA 8260	7-30-12	7-30-12	
Bromobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
4-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	7-30-12	7-30-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	85	66-120				
<i>Toluene-d8</i>	98	70-120				
<i>4-Bromofluorobenzene</i>	89	63-120				

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# HALOGENATED VOLATILES by EPA 8260B

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Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>		<b>MW20-2-072512</b>				
Laboratory ID:		07-200-08				
Dichlorodifluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloromethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Vinyl Chloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Iodomethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Methylene Chloride	ND	1.0	EPA 8260	7-30-12	7-30-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
(cis) 1,2-Dichloroethene	3.7	0.20	EPA 8260	7-30-12	7-30-12	
Bromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroform	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Trichloroethene	0.48	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromodichloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	7-30-12	7-30-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW20-2-072512</b>					
Laboratory ID:	07-200-08					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Tetrachloroethene	0.27	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromoform	ND	1.0	EPA 8260	7-30-12	7-30-12	
Bromobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
4-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	7-30-12	7-30-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	85	66-120				
<i>Toluene-d8</i>	95	70-120				
<i>4-Bromofluorobenzene</i>	87	63-120				

Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID: MW20-3-072512</b>						
Laboratory ID: 07-200-09						
Dichlorodifluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloromethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Vinyl Chloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Iodomethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Methylene Chloride	ND	1.0	EPA 8260	7-30-12	7-30-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
(cis) 1,2-Dichloroethene	6.7	0.20	EPA 8260	7-30-12	7-30-12	
Bromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroform	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Trichloroethene	3.4	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromodichloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	7-30-12	7-30-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	

Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW20-3-072512</b>					
Laboratory ID:	07-200-09					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Tetrachloroethene	0.72	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromoform	ND	1.0	EPA 8260	7-30-12	7-30-12	
Bromobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
4-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	7-30-12	7-30-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>81</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>92</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>84</i>	<i>63-120</i>				

Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

# **HALOGENATED VOLATILES by EPA 8260B**

page 1 of 2

Matrix: Water

Units: ug/L

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID: MW20-5-072512</b>						
Laboratory ID: 07-200-10						
Dichlorodifluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloromethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Vinyl Chloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Iodomethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Methylene Chloride	ND	1.0	EPA 8260	7-30-12	7-30-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
(cis) 1,2-Dichloroethene	3.9	0.20	EPA 8260	7-30-12	7-30-12	
Bromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroform	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Trichloroethene	0.39	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromodichloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	7-30-12	7-30-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	

Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

# HALOGENATED VOLATILES by EPA 8260B

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>MW20-5-072512</b>					
Laboratory ID:	07-200-10					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Tetrachloroethene	0.21	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromoform	ND	1.0	EPA 8260	7-30-12	7-30-12	
Bromobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
4-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	7-30-12	7-30-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	83	66-120				
<i>Toluene-d8</i>	92	70-120				
<i>4-Bromofluorobenzene</i>	83	63-120				

Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0730W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloromethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Vinyl Chloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Trichlorofluoromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Iodomethane	ND	1.0	EPA 8260	7-30-12	7-30-12	
Methylene Chloride	ND	1.0	EPA 8260	7-30-12	7-30-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chloroform	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Carbon Tetrachloride	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Trichloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromomethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromodichloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260	7-30-12	7-30-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260	7-30-12	7-30-12	



Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0730W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Tetrachloroethene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Dibromochloromethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromoethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Chlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
Bromoform	ND	1.0	EPA 8260	7-30-12	7-30-12	
Bromobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260	7-30-12	7-30-12	
2-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
4-Chlorotoluene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260	7-30-12	7-30-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
Hexachlorobutadiene	ND	0.20	EPA 8260	7-30-12	7-30-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260	7-30-12	7-30-12	
<hr/>						
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	73	66-120				
<i>Toluene-d8</i>	89	70-120				
<i>4-Bromofluorobenzene</i>	93	63-120				

Date of Report: August 2, 2012  
 Samples Submitted: July 26, 2012  
 Laboratory Reference: 1207-200  
 Project: 105-003

**HALOGENATED VOLATILES by EPA 8260B**  
**SB/SBD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent		Recovery		RPD	
					Recovery		Limits		RPD	Limit
SPIKE BLANKS										
Laboratory ID:	SB0730W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	8.95	9.48	10.0	10.0	90	95	65-141	6	15	
Benzene	9.39	9.71	10.0	10.0	94	97	77-120	3	15	
Trichloroethene	9.91	10.5	10.0	10.0	99	105	80-120	6	15	
Toluene	10.1	10.6	10.0	10.0	101	106	80-120	5	15	
Chlorobenzene	10.3	11.1	10.0	10.0	103	111	80-120	7	15	
Surrogate:										
Dibromofluoromethane					85	80	66-120			
Toluene-d8					94	92	70-120			
4-Bromofluorobenzene					101	98	63-120			



### Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical \_\_\_\_\_.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

Y - Sample extract treated with an acid/silica gel cleanup procedure.

Z -

ND - Not Detected at PQL

PQL - Practical Quantitation Limit

RPD - Relative Percent Difference



# Chain of Custody

Page 1 of 1

Laboratory Number:

Requested Analysis

07-200

PACIFIC CREST ENVIRONMENTAL, LLC

105-003

PENHOUSE  
DEALER

BILL CARROLL

GREEN LISH / APRIL WIEBENHA

☐ Same Day      ☐ 1 Day  
☐ 2 Day      ☐ 3 Day  
☒ Standard (7 working days)  
 (TPH analysis 5 working days)  
☐

(other)

[illegible][illegible]

Comments/Special Instructions:

Pacific Crest Env.

+126/12	-7:40
---------	-------

Stacey Jones

On Site Env.

7-26-12	8:45 a
---------	--------

Received by

Received by

Reviewed by/Date

Chromatograms with final report ☐



1311 N. 35th St.  
Seattle, WA 98103  
T: (206) 352-3790  
F: (206) 352-7178  
info@fremontanalytical.com

**URS Corporation**  
David Raubvogel  
1501 4th Ave., Suite 1400  
Seattle, Washington 98101

**RE: Belshaw TPH Data Gap**  
**Lab ID: 1209024**

September 13, 2012

**Attention David Raubvogel:**

Fremont Analytical, Inc. received 14 sample(s) on 9/6/2012 for the analyses presented in the following report.

***Gasoline by NWTPH-Gx***  
***Sample Moisture (Percent Moisture)***  
***Total Metals by EPA Method 200.8***  
***Total Metals by EPA Method 6020***  
***Volatile Organic Compounds by EPA Method 8260***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Michael Dee  
Sr. Chemist / Principal



Date: 09/13/2012

**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap  
**Lab Order:** 1209024

## Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1209024-001	URS-SB-7-26	09/06/2012 8:50 AM	09/06/2012 3:45 PM
1209024-002	URS-SB-7-31	09/06/2012 9:40 AM	09/06/2012 3:45 PM
1209024-003	URS-SB-7-GW	09/06/2012 9:00 AM	09/06/2012 3:45 PM
1209024-004	URS-SB-7-41	09/06/2012 9:50 AM	09/06/2012 3:45 PM
1209024-005	URS-SB-8-21	09/06/2012 11:15 AM	09/06/2012 3:45 PM
1209024-006	URS-SB-8-31	09/06/2012 12:00 PM	09/06/2012 3:45 PM
1209024-007	URS-SB-8-GW	09/06/2012 11:35 AM	09/06/2012 3:45 PM
1209024-008	URS-SB-8-41.5	09/06/2012 12:15 PM	09/06/2012 3:45 PM
1209024-009	URS-SB-9-26	09/06/2012 1:35 PM	09/06/2012 3:45 PM
1209024-010	URS-SB-9-GW	09/06/2012 1:45 PM	09/06/2012 3:45 PM
1209024-011	URS-SB-9-36	09/06/2012 2:10 PM	09/06/2012 3:45 PM
1209024-012	URS-SB-9-41	09/06/2012 2:25 PM	09/06/2012 3:45 PM
1209024-013	Trip Blank HCL	08/11/2012 12:00 AM	09/06/2012 3:45 PM
1209024-014	Trip Blank MEOH		09/06/2012 3:45 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

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**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

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**I. SAMPLE RECEIPT:**

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

**II. GENERAL REPORTING COMMENTS:**

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

**III. ANALYSES AND EXCEPTIONS:**

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Prep Comments for PREP-MET-TOT, Sample 1209024-010B: High solids, water was decanted prior to prep.

Prep Comments for PREP-MET-TOT, Sample 1209024-007B: High solids, water was decanted prior to prep.

Prep Comments for PREP-MET-TOT, Sample 1209024-003B: High solids, water was decanted prior to prep.





# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 8:50:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-001

Matrix: Soil

Client Sample ID: URS-SB-7-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5690

Analyst: EM

Gasoline	ND	5.29		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Surr: 1,2-Dichloroethane-d4	121	65-135		%REC	1	9/12/2012 4:52:00 PM
Surr: Fluorobenzene	94.7	65-135		%REC	1	9/12/2012 4:52:00 PM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0635		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Chloromethane	ND	0.0635		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Vinyl chloride	ND	0.00212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Bromomethane	ND	0.0952		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0529		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Chloroethane	ND	0.0635		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,1-Dichloroethene	ND	0.0529		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Methylene chloride	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
trans-1,2-Dichloroethene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0529		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,1-Dichloroethane	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
2,2-Dichloropropane	ND	0.0529		mg/Kg-dry	1	9/12/2012 4:52:00 PM
cis-1,2-Dichloroethene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Chloroform	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,1-Dichloropropene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Carbon tetrachloride	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,2-Dichloroethane (EDC)	ND	0.0317		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Benzene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Trichloroethene (TCE)	ND	0.0317		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,2-Dichloropropane	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Bromodichloromethane	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Dibromomethane	ND	0.0423		mg/Kg-dry	1	9/12/2012 4:52:00 PM
cis-1,3-Dichloropropene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Toluene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
trans-1,3-Dichloropropylene	ND	0.0317		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,1,2-Trichloroethane	ND	0.0317		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,3-Dichloropropane	ND	0.0529		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Tetrachloroethene (PCE)	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 8:50:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-001

Matrix: Soil

Client Sample ID: URS-SB-7-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dibromochloromethane	ND	0.0317		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,2-Dibromoethane (EDB)	ND	0.00529		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Chlorobenzene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0317		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Ethylbenzene	ND	0.0317		mg/Kg-dry	1	9/12/2012 4:52:00 PM
m,p-Xylene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
o-Xylene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Styrene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Isopropylbenzene	ND	0.0847		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Bromoform	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
n-Propylbenzene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Bromobenzene	ND	0.0317		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,3,5-Trimethylbenzene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
2-Chlorotoluene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
4-Chlorotoluene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
tert-Butylbenzene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,2,3-Trichloropropane	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,2,4-Trichlorobenzene	ND	0.0529		mg/Kg-dry	1	9/12/2012 4:52:00 PM
sec-Butylbenzene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
4-Isopropyltoluene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,3-Dichlorobenzene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,4-Dichlorobenzene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
n-Butylbenzene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,2-Dichlorobenzene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0317		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,2,4-Trimethylbenzene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Hexachlorobutadiene	ND	0.106		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Naphthalene	ND	0.0317		mg/Kg-dry	1	9/12/2012 4:52:00 PM
1,2,3-Trichlorobenzene	ND	0.0212		mg/Kg-dry	1	9/12/2012 4:52:00 PM
Surr: 1-Bromo-4-fluorobenzene	102	63.1-141		%REC	1	9/12/2012 4:52:00 PM
Surr: Dibromofluoromethane	97.6	67.6-119		%REC	1	9/12/2012 4:52:00 PM
Surr: Toluene-d8	104	78.5-126		%REC	1	9/12/2012 4:52:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

**Client:** URS Corporation

**Collection Date:** 9/6/2012 8:50:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209024-001

**Matrix:** Soil

**Client Sample ID:** URS-SB-7-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	1.95	0.169		mg/Kg-dry	1	9/11/2012 8:50:32 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5620

Analyst: CM

Percent Moisture	6.65			wt%	1	9/7/2012 9:36:17 AM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 9:40:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-002

Matrix: Soil

Client Sample ID: URS-SB-7-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5690

Analyst: EM

Gasoline	ND	5.44		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Surr: 1,2-Dichloroethane-d4	122	65-135		%REC	1	9/12/2012 5:58:00 PM
Surr: Fluorobenzene	95.4	65-135		%REC	1	9/12/2012 5:58:00 PM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0652		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Chloromethane	ND	0.0652		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Vinyl chloride	ND	0.00217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Bromomethane	ND	0.0978		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0544		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Chloroethane	ND	0.0652		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,1-Dichloroethene	ND	0.0544		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Methylene chloride	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
trans-1,2-Dichloroethene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0544		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,1-Dichloroethane	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
2,2-Dichloropropane	ND	0.0544		mg/Kg-dry	1	9/12/2012 5:58:00 PM
cis-1,2-Dichloroethene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Chloroform	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,1-Dichloropropene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Carbon tetrachloride	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,2-Dichloroethane (EDC)	ND	0.0326		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Benzene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Trichloroethene (TCE)	ND	0.0326		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,2-Dichloropropane	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Bromodichloromethane	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Dibromomethane	ND	0.0435		mg/Kg-dry	1	9/12/2012 5:58:00 PM
cis-1,3-Dichloropropene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Toluene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
trans-1,3-Dichloropropylene	ND	0.0326		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,1,2-Trichloroethane	ND	0.0326		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,3-Dichloropropane	ND	0.0544		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Tetrachloroethene (PCE)	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 9:40:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-002

Matrix: Soil

Client Sample ID: URS-SB-7-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dibromochloromethane	ND	0.0326		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,2-Dibromoethane (EDB)	ND	0.00544		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Chlorobenzene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0326		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Ethylbenzene	ND	0.0326		mg/Kg-dry	1	9/12/2012 5:58:00 PM
m,p-Xylene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
o-Xylene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Styrene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Isopropylbenzene	ND	0.0870		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Bromoform	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
n-Propylbenzene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Bromobenzene	ND	0.0326		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,3,5-Trimethylbenzene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
2-Chlorotoluene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
4-Chlorotoluene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
tert-Butylbenzene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,2,3-Trichloropropane	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,2,4-Trichlorobenzene	ND	0.0544		mg/Kg-dry	1	9/12/2012 5:58:00 PM
sec-Butylbenzene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
4-Isopropyltoluene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,3-Dichlorobenzene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,4-Dichlorobenzene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
n-Butylbenzene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,2-Dichlorobenzene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0326		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,2,4-Trimethylbenzene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Hexachlorobutadiene	ND	0.109		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Naphthalene	ND	0.0326		mg/Kg-dry	1	9/12/2012 5:58:00 PM
1,2,3-Trichlorobenzene	ND	0.0217		mg/Kg-dry	1	9/12/2012 5:58:00 PM
Surr: 1-Bromo-4-fluorobenzene	95.0	63.1-141		%REC	1	9/12/2012 5:58:00 PM
Surr: Dibromofluoromethane	101	67.6-119		%REC	1	9/12/2012 5:58:00 PM
Surr: Toluene-d8	105	78.5-126		%REC	1	9/12/2012 5:58:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

**Client:** URS Corporation

**Collection Date:** 9/6/2012 9:40:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209024-002

**Matrix:** Soil

**Client Sample ID:** URS-SB-7-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	2.71	0.164		mg/Kg-dry	1	9/11/2012 9:00:09 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5620

Analyst: CM

Percent Moisture	11.1			wt%	1	9/7/2012 9:36:17 AM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 9:00:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-003

Matrix: Water

Client Sample ID: URS-SB-7-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Gasoline by NWTPH-Gx**

Batch ID: R5666

Analyst: EM

Gasoline	ND	50.0		µg/L	1	9/12/2012 4:40:00 AM
Surr: 1,2-Dichloroethane-d4	103	65-135		%REC	1	9/12/2012 4:40:00 AM
Surr: Fluorobenzene	106	65-135		%REC	1	9/12/2012 4:40:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: R5663

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Chloromethane	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Vinyl chloride	ND	0.200		µg/L	1	9/12/2012 4:40:00 AM
Bromomethane	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Chloroethane	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Methylene chloride	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	9/12/2012 4:40:00 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Chloroform	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,1,1-Trichloroethane (TCA)	1.74	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Carbon tetrachloride	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Benzene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Trichloroethene (TCE)	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Bromodichloromethane	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Dibromomethane	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Toluene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 9:00:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-003

Matrix: Water

Client Sample ID: URS-SB-7-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5663

Analyst: EM

Dibromochloromethane	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	9/12/2012 4:40:00 AM
Chlorobenzene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Ethylbenzene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
m,p-Xylene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
o-Xylene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Styrene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Isopropylbenzene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Bromoform	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
n-Propylbenzene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Bromobenzene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
2-Chlorotoluene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
4-Chlorotoluene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
tert-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	9/12/2012 4:40:00 AM
sec-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
n-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
Hexachlorobutadiene	ND	4.00		µg/L	1	9/12/2012 4:40:00 AM
Naphthalene	ND	1.00		µg/L	1	9/12/2012 4:40:00 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	9/12/2012 4:40:00 AM
Surr: 1-Bromo-4-fluorobenzene	96.2	79.2-120		%REC	1	9/12/2012 4:40:00 AM
Surr: Dibromofluoromethane	98.1	76-114		%REC	1	9/12/2012 4:40:00 AM
Surr: Toluene-d8	104	86.8-119		%REC	1	9/12/2012 4:40:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

**Client:** URS Corporation

**Collection Date:** 9/6/2012 9:00:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209024-003

**Matrix:** Water

**Client Sample ID:** URS-SB-7-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 200.8**

Batch ID: 3148

Analyst: SG

Lead	5.04	1.00		µg/L	1	9/11/2012 11:14:29 AM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 9:50:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-004

Matrix: Soil

Client Sample ID: URS-SB-7-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Gasoline by NWTPH-Gx</b>				Batch ID: R5690		Analyst: EM
Gasoline	ND	4.58		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Surr: 1,2-Dichloroethane-d4	118	65-135		%REC	1	9/12/2012 11:24:00 PM
Surr: Fluorobenzene	92.5	65-135		%REC	1	9/12/2012 11:24:00 PM

## **Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3170

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0550		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Chloromethane	ND	0.0550		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Vinyl chloride	ND	0.00183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Bromomethane	ND	0.0825		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0458		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Chloroethane	ND	0.0550		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,1-Dichloroethene	ND	0.0458		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Methylene chloride	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
trans-1,2-Dichloroethene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0458		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,1-Dichloroethane	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
2,2-Dichloropropane	ND	0.0458		mg/Kg-dry	1	9/12/2012 11:24:00 PM
cis-1,2-Dichloroethene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Chloroform	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,1-Dichloropropene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Carbon tetrachloride	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,2-Dichloroethane (EDC)	ND	0.0275		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Benzene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Trichloroethene (TCE)	ND	0.0275		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,2-Dichloropropane	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Bromodichloromethane	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Dibromomethane	ND	0.0367		mg/Kg-dry	1	9/12/2012 11:24:00 PM
cis-1,3-Dichloropropene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Toluene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
trans-1,3-Dichloropropylene	ND	0.0275		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,1,2-Trichloroethane	ND	0.0275		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,3-Dichloropropane	ND	0.0458		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Tetrachloroethene (PCE)	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 9:50:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-004

Matrix: Soil

Client Sample ID: URS-SB-7-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dibromochloromethane	ND	0.0275		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,2-Dibromoethane (EDB)	ND	0.00458		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Chlorobenzene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0275		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Ethylbenzene	ND	0.0275		mg/Kg-dry	1	9/12/2012 11:24:00 PM
m,p-Xylene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
o-Xylene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Styrene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Isopropylbenzene	ND	0.0734		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Bromoform	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
n-Propylbenzene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Bromobenzene	ND	0.0275		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,3,5-Trimethylbenzene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
2-Chlorotoluene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
4-Chlorotoluene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
tert-Butylbenzene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,2,3-Trichloropropane	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,2,4-Trichlorobenzene	ND	0.0458		mg/Kg-dry	1	9/12/2012 11:24:00 PM
sec-Butylbenzene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
4-Isopropyltoluene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,3-Dichlorobenzene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,4-Dichlorobenzene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
n-Butylbenzene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,2-Dichlorobenzene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0275		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,2,4-Trimethylbenzene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Hexachlorobutadiene	ND	0.0917		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Naphthalene	ND	0.0275		mg/Kg-dry	1	9/12/2012 11:24:00 PM
1,2,3-Trichlorobenzene	ND	0.0183		mg/Kg-dry	1	9/12/2012 11:24:00 PM
Surr: 1-Bromo-4-fluorobenzene	93.8	63.1-141		%REC	1	9/12/2012 11:24:00 PM
Surr: Dibromofluoromethane	100	67.6-119		%REC	1	9/12/2012 11:24:00 PM
Surr: Toluene-d8	102	78.5-126		%REC	1	9/12/2012 11:24:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

**Client:** URS Corporation

**Collection Date:** 9/6/2012 9:50:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209024-004

**Matrix:** Soil

**Client Sample ID:** URS-SB-7-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	2.89	0.173		mg/Kg-dry	1	9/11/2012 9:38:36 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5620

Analyst: CM

Percent Moisture	14.9			wt%	1	9/7/2012 9:36:17 AM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 11:15:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-005

Matrix: Soil

Client Sample ID: URS-SB-8-21

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Gasoline by NWTPH-Gx</b>			Batch ID: R5690		Analyst: EM	
Gasoline	ND	4.91		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Surr: 1,2-Dichloroethane-d4	120	65-135		%REC	1	9/12/2012 11:56:00 PM
Surr: Fluorobenzene	95.3	65-135		%REC	1	9/12/2012 11:56:00 PM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0590		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Chloromethane	ND	0.0590		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Vinyl chloride	ND	0.00197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Bromomethane	ND	0.0884		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0491		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Chloroethane	ND	0.0590		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,1-Dichloroethene	ND	0.0491		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Methylene chloride	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
trans-1,2-Dichloroethene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0491		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,1-Dichloroethane	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
2,2-Dichloropropane	ND	0.0491		mg/Kg-dry	1	9/12/2012 11:56:00 PM
cis-1,2-Dichloroethene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Chloroform	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,1-Dichloropropene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Carbon tetrachloride	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,2-Dichloroethane (EDC)	ND	0.0295		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Benzene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Trichloroethene (TCE)	ND	0.0295		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,2-Dichloropropane	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Bromodichloromethane	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Dibromomethane	ND	0.0393		mg/Kg-dry	1	9/12/2012 11:56:00 PM
cis-1,3-Dichloropropene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Toluene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
trans-1,3-Dichloropropylene	ND	0.0295		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,1,2-Trichloroethane	ND	0.0295		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,3-Dichloropropane	ND	0.0491		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Tetrachloroethene (PCE)	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 11:15:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-005

Matrix: Soil

Client Sample ID: URS-SB-8-21

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>				Batch ID: 3170		Analyst: EM
Dibromochloromethane	ND	0.0295		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,2-Dibromoethane (EDB)	ND	0.00491		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Chlorobenzene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0295		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Ethylbenzene	ND	0.0295		mg/Kg-dry	1	9/12/2012 11:56:00 PM
m,p-Xylene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
o-Xylene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Styrene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Isopropylbenzene	ND	0.0786		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Bromoform	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
n-Propylbenzene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Bromobenzene	ND	0.0295		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,3,5-Trimethylbenzene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
2-Chlorotoluene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
4-Chlorotoluene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
tert-Butylbenzene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,2,3-Trichloropropane	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,2,4-Trichlorobenzene	ND	0.0491		mg/Kg-dry	1	9/12/2012 11:56:00 PM
sec-Butylbenzene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
4-Isopropyltoluene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,3-Dichlorobenzene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,4-Dichlorobenzene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
n-Butylbenzene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,2-Dichlorobenzene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0295		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,2,4-Trimethylbenzene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Hexachlorobutadiene	ND	0.0983		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Naphthalene	ND	0.0295		mg/Kg-dry	1	9/12/2012 11:56:00 PM
1,2,3-Trichlorobenzene	ND	0.0197		mg/Kg-dry	1	9/12/2012 11:56:00 PM
Surr: 1-Bromo-4-fluorobenzene	99.1	63.1-141		%REC	1	9/12/2012 11:56:00 PM
Surr: Dibromofluoromethane	98.8	67.6-119		%REC	1	9/12/2012 11:56:00 PM
Surr: Toluene-d8	104	78.5-126		%REC	1	9/12/2012 11:56:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

**Client:** URS Corporation

**Collection Date:** 9/6/2012 11:15:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209024-005

**Matrix:** Soil

**Client Sample ID:** URS-SB-8-21

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	1.46	0.159		mg/Kg-dry	1	9/11/2012 9:48:13 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5620

Analyst: CM

Percent Moisture	8.25			wt%	1	9/7/2012 9:36:17 AM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

**Client:** URS Corporation

**Collection Date:** 9/6/2012 12:00:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209024-006

**Matrix:** Soil

**Client Sample ID:** URS-SB-8-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5690

Analyst: EM

Gasoline	ND	7.07		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Surr: 1,2-Dichloroethane-d4	121	65-135		%REC	1	9/13/2012 12:28:00 AM
Surr: Fluorobenzene	96.1	65-135		%REC	1	9/13/2012 12:28:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0848		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Chloromethane	ND	0.0848		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Vinyl chloride	ND	0.00283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Bromomethane	ND	0.127		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0707		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Chloroethane	ND	0.0848		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,1-Dichloroethene	ND	0.0707		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Methylene chloride	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
trans-1,2-Dichloroethene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0707		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,1-Dichloroethane	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
2,2-Dichloropropane	ND	0.0707		mg/Kg-dry	1	9/13/2012 12:28:00 AM
cis-1,2-Dichloroethene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Chloroform	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,1-Dichloropropene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Carbon tetrachloride	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,2-Dichloroethane (EDC)	ND	0.0424		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Benzene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Trichloroethene (TCE)	ND	0.0424		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,2-Dichloropropane	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Bromodichloromethane	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Dibromomethane	ND	0.0565		mg/Kg-dry	1	9/13/2012 12:28:00 AM
cis-1,3-Dichloropropene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Toluene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
trans-1,3-Dichloropropylene	ND	0.0424		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,1,2-Trichloroethane	ND	0.0424		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,3-Dichloropropane	ND	0.0707		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Tetrachloroethene (PCE)	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 12:00:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-006

Matrix: Soil

Client Sample ID: URS-SB-8-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dibromochloromethane	ND	0.0424		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,2-Dibromoethane (EDB)	ND	0.00707		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Chlorobenzene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0424		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Ethylbenzene	ND	0.0424		mg/Kg-dry	1	9/13/2012 12:28:00 AM
m,p-Xylene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
o-Xylene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Styrene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Isopropylbenzene	ND	0.113		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Bromoform	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
n-Propylbenzene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Bromobenzene	ND	0.0424		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,3,5-Trimethylbenzene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
2-Chlorotoluene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
4-Chlorotoluene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
tert-Butylbenzene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,2,3-Trichloropropane	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,2,4-Trichlorobenzene	ND	0.0707		mg/Kg-dry	1	9/13/2012 12:28:00 AM
sec-Butylbenzene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
4-Isopropyltoluene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,3-Dichlorobenzene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,4-Dichlorobenzene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
n-Butylbenzene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,2-Dichlorobenzene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0424		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,2,4-Trimethylbenzene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Hexachlorobutadiene	ND	0.141		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Naphthalene	ND	0.0424		mg/Kg-dry	1	9/13/2012 12:28:00 AM
1,2,3-Trichlorobenzene	ND	0.0283		mg/Kg-dry	1	9/13/2012 12:28:00 AM
Surr: 1-Bromo-4-fluorobenzene	94.0	63.1-141		%REC	1	9/13/2012 12:28:00 AM
Surr: Dibromofluoromethane	99.4	67.6-119		%REC	1	9/13/2012 12:28:00 AM
Surr: Toluene-d8	102	78.5-126		%REC	1	9/13/2012 12:28:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





## Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

**Client:** URS Corporation

**Collection Date:** 9/6/2012 12:00:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209024-006

**Matrix:** Soil

**Client Sample ID:** URS-SB-8-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	2.60	0.188		mg/Kg-dry	1	9/11/2012 9:57:50 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5620

Analyst: CM

Percent Moisture	9.88			wt%	1	9/7/2012 9:36:17 AM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 11:35:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-007

Matrix: Water

Client Sample ID: URS-SB-8-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Gasoline by NWTPH-Gx**

Batch ID: R5666

Analyst: EM

Gasoline	ND	50.0		µg/L	1	9/12/2012 5:38:00 AM
Surr: 1,2-Dichloroethane-d4	107	65-135		%REC	1	9/12/2012 5:38:00 AM
Surr: Fluorobenzene	108	65-135		%REC	1	9/12/2012 5:38:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: R5663

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Chloromethane	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Vinyl chloride	ND	0.200		µg/L	1	9/12/2012 5:38:00 AM
Bromomethane	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Chloroethane	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Methylene chloride	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	9/12/2012 5:38:00 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Chloroform	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Carbon tetrachloride	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Benzene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Trichloroethene (TCE)	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Bromodichloromethane	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Dibromomethane	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Toluene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 11:35:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-007

Matrix: Water

Client Sample ID: URS-SB-8-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5663

Analyst: EM

Dibromochloromethane	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	9/12/2012 5:38:00 AM
Chlorobenzene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Ethylbenzene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
m,p-Xylene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
o-Xylene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Styrene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Isopropylbenzene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Bromoform	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
n-Propylbenzene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Bromobenzene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
2-Chlorotoluene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
4-Chlorotoluene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
tert-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	9/12/2012 5:38:00 AM
sec-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
n-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
Hexachlorobutadiene	ND	4.00		µg/L	1	9/12/2012 5:38:00 AM
Naphthalene	ND	1.00		µg/L	1	9/12/2012 5:38:00 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	9/12/2012 5:38:00 AM
Surr: 1-Bromo-4-fluorobenzene	99.7	79.2-120		%REC	1	9/12/2012 5:38:00 AM
Surr: Dibromofluoromethane	100	76-114		%REC	1	9/12/2012 5:38:00 AM
Surr: Toluene-d8	102	86.8-119		%REC	1	9/12/2012 5:38:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

**Client:** URS Corporation

**Collection Date:** 9/6/2012 11:35:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209024-007

**Matrix:** Water

**Client Sample ID:** URS-SB-8-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 200.8**

Batch ID: 3148

Analyst: SG

Lead	4.20	1.00		µg/L	1	9/11/2012 11:52:52 AM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 12:15:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-008

Matrix: Soil

Client Sample ID: URS-SB-8-41.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5690

Analyst: EM

Gasoline	ND	6.77		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Surr: 1,2-Dichloroethane-d4	117	65-135		%REC	1	9/13/2012 1:01:00 AM
Surr: Fluorobenzene	93.9	65-135		%REC	1	9/13/2012 1:01:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0812		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Chloromethane	ND	0.0812		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Vinyl chloride	ND	0.00271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Bromomethane	ND	0.122		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0677		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Chloroethane	ND	0.0812		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,1-Dichloroethene	ND	0.0677		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Methylene chloride	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
trans-1,2-Dichloroethene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0677		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,1-Dichloroethane	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
2,2-Dichloropropane	ND	0.0677		mg/Kg-dry	1	9/13/2012 1:01:00 AM
cis-1,2-Dichloroethene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Chloroform	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,1-Dichloropropene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Carbon tetrachloride	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,2-Dichloroethane (EDC)	ND	0.0406		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Benzene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Trichloroethene (TCE)	ND	0.0406		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,2-Dichloropropane	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Bromodichloromethane	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Dibromomethane	ND	0.0542		mg/Kg-dry	1	9/13/2012 1:01:00 AM
cis-1,3-Dichloropropene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Toluene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
trans-1,3-Dichloropropylene	ND	0.0406		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,1,2-Trichloroethane	ND	0.0406		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,3-Dichloropropane	ND	0.0677		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Tetrachloroethene (PCE)	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 12:15:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-008

Matrix: Soil

Client Sample ID: URS-SB-8-41.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dibromochloromethane	ND	0.0406		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,2-Dibromoethane (EDB)	ND	0.00677		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Chlorobenzene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0406		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Ethylbenzene	ND	0.0406		mg/Kg-dry	1	9/13/2012 1:01:00 AM
m,p-Xylene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
o-Xylene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Styrene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Isopropylbenzene	ND	0.108		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Bromoform	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
n-Propylbenzene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Bromobenzene	ND	0.0406		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,3,5-Trimethylbenzene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
2-Chlorotoluene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
4-Chlorotoluene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
tert-Butylbenzene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,2,3-Trichloropropane	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,2,4-Trichlorobenzene	ND	0.0677		mg/Kg-dry	1	9/13/2012 1:01:00 AM
sec-Butylbenzene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
4-Isopropyltoluene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,3-Dichlorobenzene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,4-Dichlorobenzene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
n-Butylbenzene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,2-Dichlorobenzene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0406		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,2,4-Trimethylbenzene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Hexachlorobutadiene	ND	0.135		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Naphthalene	ND	0.0406		mg/Kg-dry	1	9/13/2012 1:01:00 AM
1,2,3-Trichlorobenzene	ND	0.0271		mg/Kg-dry	1	9/13/2012 1:01:00 AM
Surr: 1-Bromo-4-fluorobenzene	92.9	63.1-141		%REC	1	9/13/2012 1:01:00 AM
Surr: Dibromofluoromethane	98.5	67.6-119		%REC	1	9/13/2012 1:01:00 AM
Surr: Toluene-d8	103	78.5-126		%REC	1	9/13/2012 1:01:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

**Client:** URS Corporation

**Collection Date:** 9/6/2012 12:15:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209024-008

**Matrix:** Soil

**Client Sample ID:** URS-SB-8-41.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	1.26	0.185		mg/Kg-dry	1	9/11/2012 10:07:27 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5620

Analyst: CM

Percent Moisture	17.0			wt%	1	9/7/2012 9:36:17 AM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 1:35:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-009

Matrix: Soil

Client Sample ID: URS-SB-9-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5690

Analyst: EM

Gasoline	ND	5.04		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Surr: 1,2-Dichloroethane-d4	120	65-135		%REC	1	9/13/2012 1:32:00 AM
Surr: Fluorobenzene	97.8	65-135		%REC	1	9/13/2012 1:32:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0605		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Chloromethane	ND	0.0605		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Vinyl chloride	ND	0.00202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Bromomethane	ND	0.0908		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0504		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Chloroethane	ND	0.0605		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,1-Dichloroethene	ND	0.0504		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Methylene chloride	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
trans-1,2-Dichloroethene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0504		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,1-Dichloroethane	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
2,2-Dichloropropane	ND	0.0504		mg/Kg-dry	1	9/13/2012 1:32:00 AM
cis-1,2-Dichloroethene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Chloroform	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,1-Dichloropropene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Carbon tetrachloride	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,2-Dichloroethane (EDC)	ND	0.0303		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Benzene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Trichloroethene (TCE)	ND	0.0303		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,2-Dichloropropane	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Bromodichloromethane	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Dibromomethane	ND	0.0403		mg/Kg-dry	1	9/13/2012 1:32:00 AM
cis-1,3-Dichloropropene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Toluene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
trans-1,3-Dichloropropylene	ND	0.0303		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,1,2-Trichloroethane	ND	0.0303		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,3-Dichloropropane	ND	0.0504		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Tetrachloroethene (PCE)	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 1:35:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-009

Matrix: Soil

Client Sample ID: URS-SB-9-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dibromochloromethane	ND	0.0303		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,2-Dibromoethane (EDB)	ND	0.00504		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Chlorobenzene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0303		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Ethylbenzene	ND	0.0303		mg/Kg-dry	1	9/13/2012 1:32:00 AM
m,p-Xylene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
o-Xylene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Styrene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Isopropylbenzene	ND	0.0807		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Bromoform	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
n-Propylbenzene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Bromobenzene	ND	0.0303		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,3,5-Trimethylbenzene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
2-Chlorotoluene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
4-Chlorotoluene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
tert-Butylbenzene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,2,3-Trichloropropane	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,2,4-Trichlorobenzene	ND	0.0504		mg/Kg-dry	1	9/13/2012 1:32:00 AM
sec-Butylbenzene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
4-Isopropyltoluene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,3-Dichlorobenzene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,4-Dichlorobenzene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
n-Butylbenzene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,2-Dichlorobenzene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0303		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,2,4-Trimethylbenzene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Hexachlorobutadiene	ND	0.101		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Naphthalene	ND	0.0303		mg/Kg-dry	1	9/13/2012 1:32:00 AM
1,2,3-Trichlorobenzene	ND	0.0202		mg/Kg-dry	1	9/13/2012 1:32:00 AM
Surr: 1-Bromo-4-fluorobenzene	104	63.1-141		%REC	1	9/13/2012 1:32:00 AM
Surr: Dibromofluoromethane	98.8	67.6-119		%REC	1	9/13/2012 1:32:00 AM
Surr: Toluene-d8	102	78.5-126		%REC	1	9/13/2012 1:32:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

**Client:** URS Corporation

**Collection Date:** 9/6/2012 1:35:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209024-009

**Matrix:** Soil

**Client Sample ID:** URS-SB-9-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	1.94	0.167		mg/Kg-dry	1	9/11/2012 10:17:04 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5620

Analyst: CM

Percent Moisture	8.50			wt%	1	9/7/2012 9:36:17 AM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 1:45:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-010

Matrix: Water

Client Sample ID: URS-SB-9-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5666

Analyst: EM

Gasoline	ND	50.0		µg/L	1	9/12/2012 6:07:00 AM
Surr: 1,2-Dichloroethane-d4	105	65-135		%REC	1	9/12/2012 6:07:00 AM
Surr: Fluorobenzene	103	65-135		%REC	1	9/12/2012 6:07:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5663

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Chloromethane	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Vinyl chloride	ND	0.200		µg/L	1	9/12/2012 6:07:00 AM
Bromomethane	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Chloroethane	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Methylene chloride	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	9/12/2012 6:07:00 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Chloroform	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Carbon tetrachloride	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Benzene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Trichloroethene (TCE)	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Bromodichloromethane	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Dibromomethane	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Toluene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 1:45:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-010

Matrix: Water

Client Sample ID: URS-SB-9-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5663

Analyst: EM

Dibromochloromethane	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	9/12/2012 6:07:00 AM
Chlorobenzene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Ethylbenzene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
m,p-Xylene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
o-Xylene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Styrene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Isopropylbenzene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Bromoform	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
n-Propylbenzene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Bromobenzene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
2-Chlorotoluene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
4-Chlorotoluene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
tert-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	9/12/2012 6:07:00 AM
sec-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
n-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
Hexachlorobutadiene	ND	4.00		µg/L	1	9/12/2012 6:07:00 AM
Naphthalene	ND	1.00		µg/L	1	9/12/2012 6:07:00 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	9/12/2012 6:07:00 AM
Surr: 1-Bromo-4-fluorobenzene	96.7	79.2-120		%REC	1	9/12/2012 6:07:00 AM
Surr: Dibromofluoromethane	102	76-114		%REC	1	9/12/2012 6:07:00 AM
Surr: Toluene-d8	105	86.8-119		%REC	1	9/12/2012 6:07:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

**Client:** URS Corporation

**Collection Date:** 9/6/2012 1:45:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209024-010

**Matrix:** Water

**Client Sample ID:** URS-SB-9-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 200.8**

Batch ID: 3148

Analyst: SG

Lead	2.34	1.00		µg/L	1	9/11/2012 12:02:28 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 2:10:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-011

Matrix: Soil

Client Sample ID: URS-SB-9-36

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5690

Analyst: EM

Gasoline	ND	4.98		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Surr: 1,2-Dichloroethane-d4	114	65-135		%REC	1	9/13/2012 2:05:00 AM
Surr: Fluorobenzene	91.0	65-135		%REC	1	9/13/2012 2:05:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0598		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Chloromethane	ND	0.0598		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Vinyl chloride	ND	0.00199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Bromomethane	ND	0.0897		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0498		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Chloroethane	ND	0.0598		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,1-Dichloroethene	ND	0.0498		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Methylene chloride	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
trans-1,2-Dichloroethene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0498		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,1-Dichloroethane	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
2,2-Dichloropropane	ND	0.0498		mg/Kg-dry	1	9/13/2012 2:05:00 AM
cis-1,2-Dichloroethene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Chloroform	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,1-Dichloropropene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Carbon tetrachloride	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,2-Dichloroethane (EDC)	ND	0.0299		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Benzene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Trichloroethene (TCE)	ND	0.0299		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,2-Dichloropropane	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Bromodichloromethane	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Dibromomethane	ND	0.0399		mg/Kg-dry	1	9/13/2012 2:05:00 AM
cis-1,3-Dichloropropene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Toluene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
trans-1,3-Dichloropropylene	ND	0.0299		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,1,2-Trichloroethane	ND	0.0299		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,3-Dichloropropane	ND	0.0498		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Tetrachloroethene (PCE)	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 2:10:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-011

Matrix: Soil

Client Sample ID: URS-SB-9-36

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dibromochloromethane	ND	0.0299		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,2-Dibromoethane (EDB)	ND	0.00498		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Chlorobenzene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0299		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Ethylbenzene	ND	0.0299		mg/Kg-dry	1	9/13/2012 2:05:00 AM
m,p-Xylene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
o-Xylene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Styrene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Isopropylbenzene	ND	0.0797		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Bromoform	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
n-Propylbenzene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Bromobenzene	ND	0.0299		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,3,5-Trimethylbenzene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
2-Chlorotoluene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
4-Chlorotoluene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
tert-Butylbenzene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,2,3-Trichloropropane	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,2,4-Trichlorobenzene	ND	0.0498		mg/Kg-dry	1	9/13/2012 2:05:00 AM
sec-Butylbenzene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
4-Isopropyltoluene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,3-Dichlorobenzene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,4-Dichlorobenzene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
n-Butylbenzene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,2-Dichlorobenzene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0299		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,2,4-Trimethylbenzene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Hexachlorobutadiene	ND	0.0997		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Naphthalene	ND	0.0299		mg/Kg-dry	1	9/13/2012 2:05:00 AM
1,2,3-Trichlorobenzene	ND	0.0199		mg/Kg-dry	1	9/13/2012 2:05:00 AM
Surr: 1-Bromo-4-fluorobenzene	91.2	63.1-141		%REC	1	9/13/2012 2:05:00 AM
Surr: Dibromofluoromethane	100	67.6-119		%REC	1	9/13/2012 2:05:00 AM
Surr: Toluene-d8	106	78.5-126		%REC	1	9/13/2012 2:05:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

**Client:** URS Corporation

**Collection Date:** 9/6/2012 2:10:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209024-011

**Matrix:** Soil

**Client Sample ID:** URS-SB-9-36

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	2.48	0.160		mg/Kg-dry	1	9/11/2012 10:26:41 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5620

Analyst: CM

Percent Moisture	9.54			wt%	1	9/7/2012 9:36:17 AM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 2:25:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-012

Matrix: Soil

Client Sample ID: URS-SB-9-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5690

Analyst: EM

Gasoline	ND	4.10		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Surr: 1,2-Dichloroethane-d4	116	65-135		%REC	1	9/13/2012 2:37:00 AM
Surr: Fluorobenzene	94.2	65-135		%REC	1	9/13/2012 2:37:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0492		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Chloromethane	ND	0.0492		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Vinyl chloride	ND	0.00164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Bromomethane	ND	0.0738		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0410		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Chloroethane	ND	0.0492		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,1-Dichloroethene	ND	0.0410		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Methylene chloride	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
trans-1,2-Dichloroethene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0410		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,1-Dichloroethane	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
2,2-Dichloropropane	ND	0.0410		mg/Kg-dry	1	9/13/2012 2:37:00 AM
cis-1,2-Dichloroethene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Chloroform	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,1-Dichloropropene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Carbon tetrachloride	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,2-Dichloroethane (EDC)	ND	0.0246		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Benzene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Trichloroethene (TCE)	ND	0.0246		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,2-Dichloropropane	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Bromodichloromethane	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Dibromomethane	ND	0.0328		mg/Kg-dry	1	9/13/2012 2:37:00 AM
cis-1,3-Dichloropropene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Toluene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
trans-1,3-Dichloropropylene	ND	0.0246		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,1,2-Trichloroethane	ND	0.0246		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,3-Dichloropropane	ND	0.0410		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Tetrachloroethene (PCE)	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

Client: URS Corporation

Collection Date: 9/6/2012 2:25:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209024-012

Matrix: Soil

Client Sample ID: URS-SB-9-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3170

Analyst: EM

Dibromochloromethane	ND	0.0246		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,2-Dibromoethane (EDB)	ND	0.00410		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Chlorobenzene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0246		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Ethylbenzene	ND	0.0246		mg/Kg-dry	1	9/13/2012 2:37:00 AM
m,p-Xylene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
o-Xylene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Styrene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Isopropylbenzene	ND	0.0656		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Bromoform	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
n-Propylbenzene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Bromobenzene	ND	0.0246		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,3,5-Trimethylbenzene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
2-Chlorotoluene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
4-Chlorotoluene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
tert-Butylbenzene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,2,3-Trichloropropane	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,2,4-Trichlorobenzene	ND	0.0410		mg/Kg-dry	1	9/13/2012 2:37:00 AM
sec-Butylbenzene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
4-Isopropyltoluene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,3-Dichlorobenzene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,4-Dichlorobenzene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
n-Butylbenzene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,2-Dichlorobenzene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0246		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,2,4-Trimethylbenzene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Hexachlorobutadiene	ND	0.0820		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Naphthalene	ND	0.0246		mg/Kg-dry	1	9/13/2012 2:37:00 AM
1,2,3-Trichlorobenzene	ND	0.0164		mg/Kg-dry	1	9/13/2012 2:37:00 AM
Surr: 1-Bromo-4-fluorobenzene	99.2	63.1-141		%REC	1	9/13/2012 2:37:00 AM
Surr: Dibromofluoromethane	96.9	67.6-119		%REC	1	9/13/2012 2:37:00 AM
Surr: Toluene-d8	104	78.5-126		%REC	1	9/13/2012 2:37:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209024

Date Reported: 9/13/2012

**Client:** URS Corporation

**Collection Date:** 9/6/2012 2:25:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209024-012

**Matrix:** Soil

**Client Sample ID:** URS-SB-9-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	2.17	0.158		mg/Kg-dry	1	9/11/2012 10:36:19 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5620

Analyst: CM

Percent Moisture	8.80			wt%	1	9/7/2012 9:36:17 AM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Total Metals by EPA Method 200.8

Sample ID: <b>MB-3148</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>		Prep Date: <b>9/10/2012</b>	RunNo: <b>5645</b>
Client ID: <b>MBLKW</b>	Batch ID: <b>3148</b>	Analysis Date: <b>9/11/2012</b>		SeqNo: <b>111230</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead ND 1.00

Sample ID: <b>LCS-3148</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>		Prep Date: <b>9/10/2012</b>	RunNo: <b>5645</b>
Client ID: <b>LCSW</b>	Batch ID: <b>3148</b>	Analysis Date: <b>9/11/2012</b>		SeqNo: <b>111231</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead 55.1 1.00 50.00 0 110 85 115

Sample ID: <b>1209024-003BDUP</b>	SampType: <b>DUP</b>	Units: <b>µg/L</b>		Prep Date: <b>9/10/2012</b>	RunNo: <b>5645</b>
Client ID: <b>URS-SB-7-GW</b>	Batch ID: <b>3148</b>	Analysis Date: <b>9/11/2012</b>		SeqNo: <b>111235</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead 6.77 1.00 5.037 29.3 30

Sample ID: <b>1209024-003BMS</b>	SampType: <b>MS</b>	Units: <b>µg/L</b>		Prep Date: <b>9/10/2012</b>	RunNo: <b>5645</b>
Client ID: <b>URS-SB-7-GW</b>	Batch ID: <b>3148</b>	Analysis Date: <b>9/11/2012</b>		SeqNo: <b>111236</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead 254 1.00 250.0 5.037 99.5 70 130

Sample ID: <b>1209024-003BMSD</b>	SampType: <b>MSD</b>	Units: <b>µg/L</b>		Prep Date: <b>9/10/2012</b>	RunNo: <b>5645</b>
Client ID: <b>URS-SB-7-GW</b>	Batch ID: <b>3148</b>	Analysis Date: <b>9/11/2012</b>		SeqNo: <b>111237</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead 253 1.00 250.0 5.037 99.0 70 130 253.9 0.492 30

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

**Work Order:** 1209024  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Total Metals by EPA Method 6020

Sample ID: <b>MB-3145</b>		SampType: <b>MBLK</b>		Units: <b>mg/Kg</b>		Prep Date: <b>9/7/2012</b>			RunNo: <b>5665</b>		
Client ID: <b>MBLKS</b>		Batch ID: <b>3145</b>					Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111390</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	ND	0.200									
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Sample ID: <b>LCS-3145</b>		SampType: <b>LCS</b>		Units: <b>mg/Kg</b>		Prep Date: <b>9/7/2012</b>			RunNo: <b>5665</b>		
Client ID: <b>LCSS</b>		Batch ID: <b>3145</b>					Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111391</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	63.9	0.200	56.70	0	113	65.26	134.57				
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Sample ID: <b>1209016-001BMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>				Prep Date: <b>9/7/2012</b>				RunNo: <b>5665</b>		
Client ID: <b>BATCH</b>	Batch ID: <b>3145</b>					Analysis Date: <b>9/11/2012</b>				SeqNo: <b>111395</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	25.3	0.189	23.58	1.515	101	75	125				
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Sample ID: 1209016-001BMSD		SampType: MSD		Units: mg/Kg-dry		Prep Date: 9/7/2012			RunNo: 5665			
Client ID: BATCH		Batch ID: 3145					Analysis Date: 9/11/2012			SeqNo: 111396		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	24.0	0.172	21.50	1.515	105	75	125	25.32	5.20	30	
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Sample ID: 1209024-002BDUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 9/10/2012			RunNo: 5665			
Client ID: URS-SB-7-31		Batch ID: 3145					Analysis Date: 9/11/2012			SeqNo: 111410		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	2.45	0.165						2.706	9.81	30	
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**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Gasoline by NWTPH-Gx

Sample ID: 1209024-001ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 9/11/2012			RunNo: 5690			
Client ID: URS-SB-7-26		Batch ID: R5690					Analysis Date: 9/12/2012			SeqNo: 112005		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Gasoline	ND	5.29						0	0	30	
Surr: 1,2-Dichloroethane-d4	0.640		0.5291		121	65	135		0		
Surr: Fluorobenzene	0.513		0.5291		96.9	65	135		0		

Sample ID: <b>LCSR5690</b>		SampType: <b>LCS</b>		Units: <b>mg/Kg</b>		Prep Date: <b>9/11/2012</b>			RunNo: <b>5690</b>		
Client ID: <b>LCSS</b>		Batch ID: <b>R5690</b>					Analysis Date: <b>9/12/2012</b>			SeqNo: <b>112016</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	18.7	5.00	25.00	0	74.7	65	135				
Surr: 1,2-Dichloroethane-d4	0.610		0.5000		122	65	135				
Surr: Fluorobenzene	0.504		0.5000		101	65	135				

Sample ID: <b>MB-R5690</b>		SampType: <b>MBLK</b>		Units: <b>mg/Kg</b>		Prep Date: <b>9/11/2012</b>			RunNo: <b>5690</b>		
Client ID: <b>MBLKS</b>		Batch ID: <b>R5690</b>					Analysis Date: <b>9/12/2012</b>			SeqNo: <b>112018</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.00									
Surr: 1,2-Dichloroethane-d4	0.604		0.5000		121	65	135				
Surr: Fluorobenzene	0.496		0.5000		99.2	65	135				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Gasoline by NWTPH-Gx

Sample ID: <b>MB-R5666</b>		SampType: <b>MBLK</b>		Units: <b>µg/L</b>		Prep Date: <b>9/11/2012</b>			RunNo: <b>5666</b>		
Client ID: <b>MBLKW</b>		Batch ID: <b>R5666</b>		Analysis Date: <b>9/11/2012</b>						SeqNo: <b>111435</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	50.0									
Surr: 1,2-Dichloroethane-d4	10.7		10.00		107	65	135				
Surr: Fluorobenzene	11.0		10.00		110	65	135				

Sample ID: 1209024-003ADUP		SampType: DUP			Units: µg/L		Prep Date: 9/12/2012			RunNo: 5666		
Client ID: URS-SB-7-GW		Batch ID: R5666			Analysis Date: 9/12/2012			SeqNo: 111437				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Gasoline	ND	50.0						0	0	30	
Surr: 1,2-Dichloroethane-d4	10.6		10.00		106	65	135		0		
Surr: Fluorobenzene	10.9		10.00		109	65	135		0		

Sample ID: <b>LCS-R5666</b>		SampType: <b>LCS</b>			Units: <b>µg/L</b>		Prep Date: <b>9/11/2012</b>			RunNo: <b>5666</b>		
Client ID: <b>LCSW</b>		Batch ID: <b>R5666</b>			Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111445</b>				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Gasoline	438	50.0	500.0	0	87.6	65	135				
Surr: 1,2-Dichloroethane-d4	10.3		10.00		103	65	135				
Surr: Fluorobenzene	10.4		10.00		104	65	135				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209024-001ADUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 9/11/2012			RunNo: 5691		
Client ID: URS-SB-7-26	Batch ID: 3170	Analysis Date: 9/12/2012						SeqNo: 112020			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0635						0	0	30	
Chloromethane	ND	0.0635						0	0	30	
Vinyl chloride	ND	0.00212						0	0	30	
Bromomethane	ND	0.0952						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.0529						0	0	30	
Chloroethane	ND	0.0635						0	0	30	
1,1-Dichloroethene	ND	0.0529						0	0	30	
Methylene chloride	ND	0.0212						0	0	30	
trans-1,2-Dichloroethene	ND	0.0212						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	0.0529						0	0	30	
1,1-Dichloroethane	ND	0.0212						0	0	30	
2,2-Dichloropropane	ND	0.0529						0	0	30	
cis-1,2-Dichloroethene	ND	0.0212						0	0	30	
Chloroform	ND	0.0212						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0212						0	0	30	
1,1-Dichloropropene	ND	0.0212						0	0	30	
Carbon tetrachloride	ND	0.0212						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.0317						0	0	30	
Benzene	ND	0.0212						0	0	30	
Trichloroethene (TCE)	ND	0.0317						0	0	30	
1,2-Dichloropropane	ND	0.0212						0	0	30	
Bromodichloromethane	ND	0.0212						0	0	30	
Dibromomethane	ND	0.0423						0	0	30	
cis-1,3-Dichloropropene	ND	0.0212						0	0	30	
Toluene	ND	0.0212						0	0	30	
trans-1,3-Dichloropropylene	ND	0.0317						0	0	30	
1,1,2-Trichloroethane	ND	0.0317						0	0	30	
1,3-Dichloropropane	ND	0.0529						0	0	30	
Tetrachloroethene (PCE)	ND	0.0212						0	0	30	

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209024-001ADUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 9/11/2012			RunNo: 5691		
Client ID: URS-SB-7-26	Batch ID: 3170	Analysis Date: 9/12/2012						SeqNo: 112020			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	0.0317						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.00529						0	0	30	
Chlorobenzene	ND	0.0212						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.0317						0	0	30	
Ethylbenzene	ND	0.0317						0	0	30	
m,p-Xylene	ND	0.0212						0	0	30	
o-Xylene	ND	0.0212						0	0	30	
Styrene	ND	0.0212						0	0	30	
Isopropylbenzene	ND	0.0847						0	0	30	
Bromoform	ND	0.0212						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.0212						0	0	30	
n-Propylbenzene	ND	0.0212						0	0	30	
Bromobenzene	ND	0.0317						0	0	30	
1,3,5-Trimethylbenzene	ND	0.0212						0	0	30	
2-Chlorotoluene	ND	0.0212						0	0	30	
4-Chlorotoluene	ND	0.0212						0	0	30	
tert-Butylbenzene	ND	0.0212						0	0	30	
1,2,3-Trichloropropane	ND	0.0212						0	0	30	
1,2,4-Trichlorobenzene	ND	0.0529						0	0	30	
sec-Butylbenzene	ND	0.0212						0	0	30	
4-Isopropyltoluene	ND	0.0212						0	0	30	
1,3-Dichlorobenzene	ND	0.0212						0	0	30	
1,4-Dichlorobenzene	ND	0.0212						0	0	30	
n-Butylbenzene	ND	0.0212						0	0	30	
1,2-Dichlorobenzene	ND	0.0212						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.0317						0	0	30	
1,2,4-Trimethylbenzene	ND	0.0212						0	0	30	
Hexachlorobutadiene	ND	0.106						0	0	30	
Naphthalene	ND	0.0317						0	0	30	

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209024-001ADUP	SampType: DUP	Units: mg/Kg-dry			Prep Date: 9/11/2012			RunNo: 5691			
Client ID: URS-SB-7-26	Batch ID: 3170				Analysis Date: 9/12/2012			SeqNo: 112020			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	ND	0.0212						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	0.497		0.5291		94.0	63.1	141		0		
Surr: Dibromofluoromethane	0.523		0.5291		98.8	67.6	119		0		
Surr: Toluene-d8	0.541		0.5291		102	78.5	126		0		

Sample ID: 1209024-002AMS	SampType: MS	Units: mg/Kg-dry				Prep Date: 9/11/2012			RunNo: 5691		
Client ID: URS-SB-7-31	Batch ID: 3170					Analysis Date: 9/12/2012			SeqNo: 112022		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.05	0.0652	1.087	0	96.8	43.5	121				
Chloromethane	1.31	0.0652	1.087	0	121	45	130				
Vinyl chloride	1.35	0.00217	1.087	0	124	51.2	146				
Bromomethane	0.468	0.0978	1.087	0	43.1	70	130				S
Trichlorofluoromethane (CFC-11)	0.408	0.0544	1.087	0	37.5	52.2	132				S
Chloroethane	0.493	0.0652	1.087	0	45.4	43.8	117				
1,1-Dichloroethene	1.02	0.0544	1.087	0	93.6	61.9	141				
Methylene chloride	1.08	0.0217	1.087	0	99.3	54.7	142				
trans-1,2-Dichloroethene	1.04	0.0217	1.087	0	96.1	52	136				
Methyl tert-butyl ether (MTBE)	1.10	0.0544	1.087	0	101	54.4	132				
1,1-Dichloroethane	1.08	0.0217	1.087	0	99.8	51.8	141				
2,2-Dichloropropane	0.916	0.0544	1.087	0	84.3	36	123				
cis-1,2-Dichloroethene	1.08	0.0217	1.087	0	99.8	58.6	136				
Chloroform	1.18	0.0217	1.087	0	109	53.2	129				
1,1,1-Trichloroethane (TCA)	1.20	0.0217	1.087	0	110	58.3	145				
1,1-Dichloropropene	1.17	0.0217	1.087	0	107	55.1	138				
Carbon tetrachloride	1.11	0.0217	1.087	0	102	53.3	144				
1,2-Dichloroethane (EDC)	1.19	0.0326	1.087	0	109	51.3	139				
Benzene	1.16	0.0217	1.087	0	107	63.5	133				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209024-002AMS	SampType: MS	Units: mg/Kg-dry				Prep Date: 9/11/2012			RunNo: 5691		
Client ID: URS-SB-7-31	Batch ID: 3170	Analysis Date: 9/12/2012						SeqNo: 112022			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	1.04	0.0326	1.087	0	95.9	68.6	132				
1,2-Dichloropropane	1.19	0.0217	1.087	0	109	59	136				
Bromodichloromethane	1.14	0.0217	1.087	0	105	50.7	141				
Dibromomethane	1.16	0.0435	1.087	0	106	50.6	137				
cis-1,3-Dichloropropene	1.11	0.0217	1.087	0	102	52.3	129				
Toluene	1.24	0.0217	1.087	0	114	67.8	129				
trans-1,3-Dichloropropylene	1.11	0.0326	1.087	0	102	52.2	138				
1,1,2-Trichloroethane	1.20	0.0326	1.087	0	111	51.6	137				
1,3-Dichloropropane	1.21	0.0544	1.087	0	111	53.1	134				
Tetrachloroethene (PCE)	1.02	0.0217	1.087	0	93.6	44.1	141				
Dibromochloromethane	1.07	0.0326	1.087	0	98.5	55.3	140				
1,2-Dibromoethane (EDB)	1.14	0.00544	1.087	0	105	50.4	136				
Chlorobenzene	1.24	0.0217	1.087	0	114	60	133				
1,1,1,2-Tetrachloroethane	1.16	0.0326	1.087	0	107	53.1	142				
Ethylbenzene	1.20	0.0326	1.087	0	110	54.5	134				
m,p-Xylene	2.42	0.0217	2.174	0	111	53.1	132				
o-Xylene	1.23	0.0217	1.087	0	113	53.3	139				
Styrene	1.20	0.0217	1.087	0	110	51.1	132				
Isopropylbenzene	1.18	0.0870	1.087	0	108	58.9	138				
Bromoform	0.915	0.0217	1.087	0	84.2	57.9	130				
1,1,2,2-Tetrachloroethane	1.29	0.0217	1.087	0	119	51.9	131				
n-Propylbenzene	1.18	0.0217	1.087	0	109	53.6	140				
Bromobenzene	1.13	0.0326	1.087	0	104	54.2	140				
1,3,5-Trimethylbenzene	1.15	0.0217	1.087	0	105	51.8	136				
2-Chlorotoluene	1.16	0.0217	1.087	0	107	51.6	136				
4-Chlorotoluene	1.15	0.0217	1.087	0	106	50.1	139				
tert-Butylbenzene	1.36	0.0217	1.087	0	125	50.5	135				
1,2,3-Trichloropropane	1.13	0.0217	1.087	0	104	50.5	131				
1,2,4-Trichlorobenzene	1.09	0.0544	1.087	0	101	50.8	130				

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209024-002AMS	SampType: MS	Units: mg/Kg-dry				Prep Date: 9/11/2012			RunNo: 5691		
Client ID: URS-SB-7-31	Batch ID: 3170	Analysis Date: 9/12/2012							SeqNo: 112022		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	1.16	0.0217	1.087	0	106	52.6	141				
4-Isopropyltoluene	1.10	0.0217	1.087	0	101	52.9	134				
1,3-Dichlorobenzene	1.10	0.0217	1.087	0	101	52.6	131				
1,4-Dichlorobenzene	1.05	0.0217	1.087	0	97.0	52.9	129				
n-Butylbenzene	1.06	0.0217	1.087	0	97.9	52.6	130				
1,2-Dichlorobenzene	1.18	0.0217	1.087	0	109	55.8	129				
1,2-Dibromo-3-chloropropane	1.20	0.0326	1.087	0	111	53	129				
1,2,4-Trimethylbenzene	1.10	0.0217	1.087	0	102	50.6	137				
Hexachlorobutadiene	0.988	0.109	1.087	0	90.9	51.5	130				
Naphthalene	1.18	0.0326	1.087	0	109	52.3	124				
1,2,3-Trichlorobenzene	1.11	0.0217	1.087	0	102	54.4	124				
Surr: 1-Bromo-4-fluorobenzene	0.552		0.5436		102	63.1	141				
Surr: Dibromofluoromethane	0.535		0.5436		98.5	67.6	119				
Surr: Toluene-d8	0.555		0.5436		102	78.5	126				

**NOTES:**

S - Outlying QC recoveries were associated with this sample. The method is in control as indicated by the LCS.

Sample ID: <b>LCS-3170</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/11/2012</b>			RunNo: <b>5691</b>		
Client ID: <b>LCSS</b>	Batch ID: <b>3170</b>	Analysis Date: <b>9/12/2012</b>						SeqNo: <b>112032</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.10	0.0600	1.000	0	110	37.7	136				
Chloromethane	1.10	0.0600	1.000	0	110	38.8	132				
Vinyl chloride	1.07	0.00200	1.000	0	107	56.1	130				
Bromomethane	1.18	0.0900	1.000	0	118	44.3	149				
Trichlorofluoromethane (CFC-11)	1.15	0.0500	1.000	0	115	61.8	130				
Chloroethane	1.24	0.0600	1.000	0	124	52.2	131				
1,1-Dichloroethene	1.21	0.0500	1.000	0	121	64.6	134				
Methylene chloride	1.20	0.0200	1.000	0	120	60.6	140				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3170</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/11/2012</b>			RunNo: <b>5691</b>		
Client ID: <b>LCSS</b>	Batch ID: <b>3170</b>	Analysis Date: <b>9/12/2012</b>							SeqNo: <b>112032</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	1.17	0.0200	1.000	0	117	68.7	127				
Methyl tert-butyl ether (MTBE)	1.16	0.0500	1.000	0	116	73.4	128				
1,1-Dichloroethane	1.24	0.0200	1.000	0	124	65.5	132				
2,2-Dichloropropane	1.01	0.0500	1.000	0	101	28.1	149				
cis-1,2-Dichloroethene	1.22	0.0200	1.000	0	122	71.6	123				
Chloroform	1.23	0.0200	1.000	0	123	67.5	129				
1,1,1-Trichloroethane (TCA)	1.22	0.0200	1.000	0	122	74.4	130				
1,1-Dichloropropene	1.21	0.0200	1.000	0	121	72.7	131				
Carbon tetrachloride	1.16	0.0200	1.000	0	116	73	136				
1,2-Dichloroethane (EDC)	1.23	0.0300	1.000	0	123	68.7	133				
Benzene	1.22	0.0200	1.000	0	122	74.6	124				
Trichloroethene (TCE)	1.24	0.0300	1.000	0	124	71.5	134				
1,2-Dichloropropane	1.22	0.0200	1.000	0	122	72.7	133				
Bromodichloromethane	1.21	0.0200	1.000	0	121	76.1	136				
Dibromomethane	1.21	0.0400	1.000	0	121	70	130				
cis-1,3-Dichloropropene	1.16	0.0200	1.000	0	116	59.1	143				
Toluene	1.22	0.0200	1.000	0	122	81.1	123				
trans-1,3-Dichloropropylene	1.16	0.0300	1.000	0	116	49.2	149				
1,1,2-Trichloroethane	1.22	0.0300	1.000	0	122	74.5	129				
1,3-Dichloropropane	1.19	0.0500	1.000	0	119	70	130				
Tetrachloroethene (PCE)	1.17	0.0200	1.000	0	117	64.4	150				
Dibromochloromethane	1.17	0.0300	1.000	0	117	70.6	144				
1,2-Dibromoethane (EDB)	1.20	0.00500	1.000	0	120	70	130				
Chlorobenzene	1.22	0.0200	1.000	0	122	76.1	123				
1,1,1,2-Tetrachloroethane	1.24	0.0300	1.000	0	124	74.8	131				
Ethylbenzene	1.22	0.0300	1.000	0	122	74	129				
m,p-Xylene	2.46	0.0200	2.000	0	123	79.8	128				
o-Xylene	1.24	0.0200	1.000	0	124	77.3	128				
Styrene	1.15	0.0200	1.000	0	115	76.8	130				

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3170</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/11/2012</b>			RunNo: <b>5691</b>		
Client ID: <b>LCSS</b>	Batch ID: <b>3170</b>					Analysis Date: <b>9/12/2012</b>			SeqNo: <b>112032</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	1.25	0.0800	1.000	0	125	70	130				
Bromoform	1.09	0.0200	1.000	0	109	67	154				
1,1,2,2-Tetrachloroethane	1.12	0.0200	1.000	0	112	61.9	139				
n-Propylbenzene	1.28	0.0200	1.000	0	128	78	130				
Bromobenzene	1.22	0.0300	1.000	0	122	49.2	144				
1,3,5-Trimethylbenzene	1.20	0.0200	1.000	0	120	79.7	128				
2-Chlorotoluene	1.22	0.0200	1.000	0	122	76.7	129				
4-Chlorotoluene	1.25	0.0200	1.000	0	125	77.5	125				
tert-Butylbenzene	1.25	0.0200	1.000	0	125	74.2	128				
1,2,3-Trichloropropane	1.25	0.0200	1.000	0	125	67.9	136				
1,2,4-Trichlorobenzene	1.17	0.0500	1.000	0	117	65.6	137				
sec-Butylbenzene	1.22	0.0200	1.000	0	122	75.6	133				
4-Isopropyltoluene	1.20	0.0200	1.000	0	120	76.8	131				
1,3-Dichlorobenzene	1.18	0.0200	1.000	0	118	72.8	128				
1,4-Dichlorobenzene	1.22	0.0200	1.000	0	122	72.6	126				
n-Butylbenzene	1.20	0.0200	1.000	0	120	65.3	136				
1,2-Dichlorobenzene	1.19	0.0200	1.000	0	119	72.8	126				
1,2-Dibromo-3-chloropropane	1.31	0.0300	1.000	0	131	64.3	135				
1,2,4-Trimethylbenzene	1.26	0.0200	1.000	0	126	77.5	129				
Hexachlorobutadiene	1.05	0.100	1.000	0	105	42	151				
Naphthalene	1.21	0.0300	1.000	0	121	64	130				
1,2,3-Trichlorobenzene	1.20	0.0200	1.000	0	120	62.1	140				
Surr: 1-Bromo-4-fluorobenzene	0.492		0.5000		98.5	63.1	141				
Surr: Dibromofluoromethane	0.505		0.5000		101	67.6	119				
Surr: Toluene-d8	0.492		0.5000		98.3	78.5	126				

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3170</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/11/2012</b>			RunNo: <b>5691</b>		
Client ID: <b>MBLKS</b>	Batch ID: <b>3170</b>					Analysis Date: <b>9/12/2012</b>			SeqNo: <b>112033</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0600									
Chloromethane	ND	0.0600									
Vinyl chloride	ND	0.00200									
Bromomethane	ND	0.0900									
Trichlorofluoromethane (CFC-11)	ND	0.0500									
Chloroethane	ND	0.0600									
1,1-Dichloroethene	ND	0.0500									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0500									
1,1-Dichloroethane	ND	0.0200									
2,2-Dichloropropane	ND	0.0500									
cis-1,2-Dichloroethene	ND	0.0200									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0200									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0200									
1,2-Dichloroethane (EDC)	ND	0.0300									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0300									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0400									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0300									
1,1,2-Trichloroethane	ND	0.0300									
1,3-Dichloropropane	ND	0.0500									
Tetrachloroethene (PCE)	ND	0.0200									

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3170</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/11/2012</b>			RunNo: <b>5691</b>		
Client ID: <b>MBLKS</b>	Batch ID: <b>3170</b>					Analysis Date: <b>9/12/2012</b>			SeqNo: <b>112033</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	0.0300									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0300									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0800									
Bromoform	ND	0.0200									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0300									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0200									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0200									
1,2,4-Trichlorobenzene	ND	0.0500									
sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.0300									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3170</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>			Prep Date: <b>9/11/2012</b>			RunNo: <b>5691</b>			
Client ID: <b>MBLKS</b>	Batch ID: <b>3170</b>				Analysis Date: <b>9/12/2012</b>			SeqNo: <b>112033</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: 1-Bromo-4-fluorobenzene	0.501		0.5000		100	63.1	141				
Surr: Dibromofluoromethane	0.483		0.5000		96.5	67.6	119				
Surr: Toluene-d8	0.518		0.5000		104	78.5	126				

Qualifiers:	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

**Work Order:** 1209024  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: 1209039-001ADUP		SampType: DUP		Units: µg/L		Prep Date: 9/12/2012			RunNo: 5663		
Client ID: BATCH		Batch ID: R5663					Analysis Date: 9/12/2012			SeqNo: 111367	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0	0	30	
Chloromethane	ND	0.500						0	0	30	
Vinyl chloride	ND	0.200						0	0	30	
Bromomethane	ND	0.500						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.500						0	0	30	
Chloroethane	ND	0.500						0	0	30	
1,1-Dichloroethene	ND	0.500						0	0	30	
Methylene chloride	ND	1.00						0	0	30	
trans-1,2-Dichloroethene	ND	0.500						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	0.500						0	0	30	
1,1-Dichloroethane	ND	1.00						0	0	30	
2,2-Dichloropropane	ND	1.00						0	0	30	
cis-1,2-Dichloroethene	ND	0.500						0	0	30	
Chloroform	ND	1.00						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.500						0	0	30	
1,1-Dichloropropene	ND	0.500						0	0	30	
Carbon tetrachloride	ND	0.500						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.500						0	0	30	
Benzene	ND	1.00						0	0	30	
Trichloroethene (TCE)	ND	0.500						0	0	30	
1,2-Dichloropropane	ND	0.500						0	0	30	
Bromodichloromethane	ND	0.500						0	0	30	
Dibromomethane	ND	0.500						0	0	30	
cis-1,3-Dichloropropene	ND	0.500						0	0	30	
Toluene	1.02	1.00						1.030	0.976	30	
trans-1,3-Dichloropropene	ND	0.500						0	0	30	
1,1,2-Trichloroethane	ND	0.500						0	0	30	
1,3-Dichloropropane	ND	0.500						0	0	30	
Tetrachloroethene (PCE)	ND	0.500						0	0	30	

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

**Work Order:** 1209024  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: 1209039-001ADUP		SampType: DUP		Units: µg/L		Prep Date: 9/12/2012			RunNo: 5663		
Client ID: BATCH		Batch ID: R5663					Analysis Date: 9/12/2012			SeqNo: 111367	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	0.500						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.200						0	0	30	
Chlorobenzene	ND	0.500						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.500						0	0	30	
Ethylbenzene	ND	1.00						0	0	30	
m,p-Xylene	ND	1.00						0	0	30	
o-Xylene	ND	1.00						0	0	30	
Styrene	ND	1.00						0	0	30	
Isopropylbenzene	ND	1.00						0	0	30	
Bromoform	ND	0.500						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.500						0	0	30	
n-Propylbenzene	ND	1.00						0	0	30	
Bromobenzene	ND	0.500						0	0	30	
1,3,5-Trimethylbenzene	ND	1.00						0	0	30	
2-Chlorotoluene	ND	0.500						0	0	30	
4-Chlorotoluene	ND	0.500						0	0	30	
tert-Butylbenzene	ND	1.00						0	0	30	
1,2,3-Trichloropropane	ND	0.500						0	0	30	
1,2,4-Trichlorobenzene	ND	1.00						0	0	30	
sec-Butylbenzene	ND	1.00						0	0	30	
4-Isopropyltoluene	ND	1.00						0	0	30	
1,3-Dichlorobenzene	ND	0.500						0	0	30	
1,4-Dichlorobenzene	ND	0.500						0	0	30	
n-Butylbenzene	ND	1.00						0	0	30	
1,2-Dichlorobenzene	ND	0.500						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.500						0	0	30	
1,2,4-Trimethylbenzene	ND	1.00						0	0	30	
Hexachlorobutadiene	ND	1.00						0	0	30	
Naphthalene	ND	1.00						0	0	30	

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209039-001ADUP	SampType: DUP	Units: µg/L				Prep Date: 9/12/2012			RunNo: 5663		
Client ID: BATCH	Batch ID: R5663					Analysis Date: 9/12/2012			SeqNo: 111367		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	ND	2.00						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	9.82		10.00		98.2	79.2	120		0		
Surr: Dibromofluoromethane	9.89		10.00		98.9	76	114		0		
Surr: Toluene-d8	10.5		10.00		105	86.8	119		0		

Sample ID: 1209039-001AMS	SampType: MS	Units: µg/L			Prep Date: 9/12/2012			RunNo: 5663			
Client ID: BATCH	Batch ID: R5663				Analysis Date: 9/12/2012			SeqNo: 111368			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.7	1.00	20.00	0	83.5	33.3	122				
Chloromethane	19.1	0.500	20.00	0	95.6	48.2	145				
Vinyl chloride	19.0	0.200	20.00	0	95.2	45.6	149				
Bromomethane	17.9	0.500	20.00	0	89.7	31.5	135				
Trichlorofluoromethane (CFC-11)	19.6	0.500	20.00	0	98.0	54.7	138				
Chloroethane	20.4	0.500	20.00	0	102	52.7	140				
1,1-Dichloroethene	19.4	0.500	20.00	0	96.8	58.2	146				
Methylene chloride	18.6	1.00	20.00	0	93.2	65.1	127				
trans-1,2-Dichloroethene	18.9	0.500	20.00	0	94.6	69	132				
Methyl tert-butyl ether (MTBE)	17.9	0.500	20.00	0	89.4	70	130				
1,1-Dichloroethane	19.6	1.00	20.00	0	97.9	74.7	133				
2,2-Dichloropropane	16.8	1.00	20.00	0	84.2	31.5	121				
cis-1,2-Dichloroethene	19.2	0.500	20.00	0	96.0	67.1	123				
Chloroform	18.5	1.00	20.00	0	92.6	58.6	123				
1,1,1-Trichloroethane (TCA)	19.8	0.500	20.00	0	99.0	64.2	146				
1,1-Dichloropropene	18.9	0.500	20.00	0	94.6	73.8	136				
Carbon tetrachloride	15.8	0.500	20.00	0	78.9	69.2	141				
1,2-Dichloroethane (EDC)	17.8	0.500	20.00	0	89.0	62.3	130				
Benzene	19.1	1.00	20.00	0	95.7	68.7	132				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209039-001AMS	SampType: MS	Units: µg/L				Prep Date: 9/12/2012			RunNo: 5663		
Client ID: BATCH	Batch ID: R5663	Analysis Date: 9/12/2012						SeqNo: 111368			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	18.8	0.500	20.00	0	94.2	65.7	133				
1,2-Dichloropropane	18.2	0.500	20.00	0	90.8	70	130				
Bromodichloromethane	17.1	0.500	20.00	0	85.3	59.4	139				
Dibromomethane	17.1	0.500	20.00	0	85.3	65.5	130				
cis-1,3-Dichloropropene	16.2	0.500	20.00	0	80.9	63.3	124				
Toluene	18.3	1.00	20.00	1.030	86.3	68.4	133				
trans-1,3-Dichloropropene	17.5	0.500	20.00	0	87.3	57.7	125				
1,1,2-Trichloroethane	17.5	0.500	20.00	0	87.7	59.4	127				
1,3-Dichloropropane	16.9	0.500	20.00	0	84.6	68.2	134				
Tetrachloroethene (PCE)	11.8	0.500	20.00	0	58.8	51.5	109				
Dibromochloromethane	17.4	0.500	20.00	0	86.8	66.2	138				
1,2-Dibromoethane (EDB)	17.2	0.200	20.00	0	86.1	68.9	124				
Chlorobenzene	18.1	0.500	20.00	0	90.4	68.9	128				
1,1,1,2-Tetrachloroethane	18.4	0.500	20.00	0	92.2	67.3	135				
Ethylbenzene	18.1	1.00	20.00	0	90.6	67.3	135				
m,p-Xylene	35.9	1.00	40.00	0	89.8	63.3	135				
o-Xylene	17.7	1.00	20.00	0	88.4	67.8	131				
Styrene	16.6	1.00	20.00	0	83.2	67.2	123				
Isopropylbenzene	18.6	1.00	20.00	0	92.8	56	147				
Bromoform	16.9	0.500	20.00	0	84.6	61.4	136				
1,1,2,2-Tetrachloroethane	17.9	0.500	20.00	0	89.4	59.1	137				
n-Propylbenzene	16.5	1.00	20.00	0	82.4	57.6	142				
Bromobenzene	17.0	0.500	20.00	0	85.2	63.6	130				
1,3,5-Trimethylbenzene	16.2	1.00	20.00	0	81.2	59.9	136				
2-Chlorotoluene	17.1	0.500	20.00	0	85.6	63.4	134				
4-Chlorotoluene	16.4	0.500	20.00	0	82.2	58.4	134				
tert-Butylbenzene	17.3	1.00	20.00	0	86.4	74.2	141				
1,2,3-Trichloropropane	17.9	0.500	20.00	0	89.5	62.4	129				
1,2,4-Trichlorobenzene	14.0	1.00	20.00	0	70.2	53.7	120				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209039-001AMS	SampType: MS	Units: µg/L				Prep Date: 9/12/2012			RunNo: 5663		
Client ID: BATCH	Batch ID: R5663	Analysis Date: 9/12/2012							SeqNo: 111368		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	14.8	1.00	20.00	0	74.0	56	146				
4-Isopropyltoluene	15.4	1.00	20.00	0	76.8	62.4	134				
1,3-Dichlorobenzene	15.8	0.500	20.00	0	79.0	58.2	128				
1,4-Dichlorobenzene	15.7	0.500	20.00	0	78.5	60.1	123				
n-Butylbenzene	13.3	1.00	20.00	0	66.7	54.6	135				
1,2-Dichlorobenzene	16.4	0.500	20.00	0	81.8	62.6	124				
1,2-Dibromo-3-chloropropane	16.8	0.500	20.00	0	84.2	51.8	142				
1,2,4-Trimethylbenzene	16.0	1.00	20.00	0	79.9	63.7	132				
Hexachlorobutadiene	9.36	1.00	20.00	0	46.8	62.1	121				S
Naphthalene	18.1	1.00	20.00	0	90.6	58.7	119				
1,2,3-Trichlorobenzene	14.8	2.00	20.00	0	74.2	50.7	113				
Surr: 1-Bromo-4-fluorobenzene	9.90		10.00		99.0	79.2	120				
Surr: Dibromofluoromethane	9.99		10.00		99.9	76	114				
Surr: Toluene-d8	10.2		10.00		102	86.8	119				

**NOTES:**

S - Outlying spike recovery(ies) observed.

Sample ID: <b>LCS-R5663</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>				Prep Date: <b>9/11/2012</b>			RunNo: <b>5663</b>		
Client ID: <b>LCSW</b>	Batch ID: <b>R5663</b>					Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111370</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.5	1.00	20.00	0	82.6	45.1	121				
Chloromethane	18.5	0.500	20.00	0	92.6	42.5	131				
Vinyl chloride	17.9	0.200	20.00	0	89.7	56.2	130				
Bromomethane	18.3	0.500	20.00	0	91.3	45.4	138				
Trichlorofluoromethane (CFC-11)	19.4	0.500	20.00	0	96.8	64.7	129				
Chloroethane	18.9	0.500	20.00	0	94.6	62.5	123				
1,1-Dichloroethene	18.6	0.500	20.00	0	93.3	60.7	146				
Methylene chloride	18.7	1.00	20.00	0	93.5	60.3	135				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

**Work Order:** 1209024  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: <b>LCS-R5663</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>				Prep Date: <b>9/11/2012</b>			RunNo: <b>5663</b>		
Client ID: <b>LCSW</b>	Batch ID: <b>R5663</b>	Analysis Date: <b>9/11/2012</b>						SeqNo: <b>111370</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	18.8	0.500	20.00	0	93.9	71.3	129				
1,1-Dichloroethane	19.0	1.00	20.00	0	94.8	71.3	129				
2,2-Dichloropropane	17.7	1.00	20.00	0	88.4	37.8	132				
cis-1,2-Dichloroethene	18.6	0.500	20.00	0	93.2	67.5	127				
Chloroform	18.8	1.00	20.00	0	94.0	70.3	123				
1,1,1-Trichloroethane (TCA)	18.9	0.500	20.00	0	94.4	67.9	134				
1,1-Dichloropropene	18.3	0.500	20.00	0	91.3	72.1	133				
Carbon tetrachloride	18.5	0.500	20.00	0	92.6	68	136				
1,2-Dichloroethane (EDC)	17.9	0.500	20.00	0	89.5	65.8	126				
Trichloroethene (TCE)	18.7	0.500	20.00	0	93.6	71.9	130				
1,2-Dichloropropane	18.6	0.500	20.00	0	92.8	71.9	131				
Bromodichloromethane	17.9	0.500	20.00	0	89.5	70	130				
Dibromomethane	17.1	0.500	20.00	0	85.4	74.2	125				
cis-1,3-Dichloropropene	16.9	0.500	20.00	0	84.4	62.8	135				
trans-1,3-Dichloropropene	16.8	0.500	20.00	0	84.2	58.1	138				
1,1,2-Trichloroethane	16.8	0.500	20.00	0	84.2	65.4	128				
1,3-Dichloropropane	16.9	0.500	20.00	0	84.4	71.9	131				
Tetrachloroethene (PCE)	19.3	0.500	20.00	0	96.3	52.4	140				
Dibromochloromethane	17.8	0.500	20.00	0	89.2	68.7	139				
1,2-Dibromoethane (EDB)	16.6	0.200	20.00	0	82.8	71.2	129				
Chlorobenzene	18.1	0.500	20.00	0	90.6	77.2	122				
1,1,1,2-Tetrachloroethane	18.4	0.500	20.00	0	91.8	76.2	130				
Bromoform	16.8	0.500	20.00	0	84.2	69.9	142				
1,1,2,2-Tetrachloroethane	17.6	0.500	20.00	0	88.1	68	134				
Bromobenzene	17.8	0.500	20.00	0	89.0	71.1	131				
2-Chlorotoluene	17.7	0.500	20.00	0	88.6	67.1	137				
4-Chlorotoluene	17.2	0.500	20.00	0	86.0	70.7	132				
1,2,3-Trichloropropane	17.9	0.500	20.00	0	89.4	70.8	132				
1,2,4-Trichlorobenzene	16.6	1.00	20.00	0	83.3	61.4	139				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-R5663</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>			Prep Date: <b>9/11/2012</b>			RunNo: <b>5663</b>			
Client ID: <b>LCSW</b>	Batch ID: <b>R5663</b>				Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111370</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	17.4	0.500	20.00	0	86.8	73.5	125				
1,4-Dichlorobenzene	17.2	0.500	20.00	0	86.0	71.4	125				
1,2-Dichlorobenzene	17.8	0.500	20.00	0	89.0	74.2	123				
1,2-Dibromo-3-chloropropane	16.4	0.500	20.00	0	82.2	66.1	138				
Hexachlorobutadiene	11.0	1.00	20.00	0	54.8	60.9	141				S
1,2,3-Trichlorobenzene	17.0	2.00	20.00	0	84.9	61.3	133				
Surr: 1-Bromo-4-fluorobenzene	9.92		10.00		99.2	79.2	120				
Surr: Dibromofluoromethane	10.1		10.00		101	76	114				
Surr: Toluene-d8	10.0		10.00		100	86.8	119				

Sample ID: <b>MB-R5663</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>				Prep Date: <b>9/11/2012</b>			RunNo: <b>5663</b>		
Client ID: <b>MBLKW</b>	Batch ID: <b>R5663</b>					Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111371</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									
Chloromethane	ND	0.500									
Vinyl chloride	ND	0.200									
Bromomethane	ND	0.500									
Trichlorofluoromethane (CFC-11)	ND	0.500									
Chloroethane	ND	0.500									
1,1-Dichloroethene	ND	0.500									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	0.500									
1,1-Dichloroethane	ND	1.00									
2,2-Dichloropropane	ND	1.00									
cis-1,2-Dichloroethene	ND	0.500									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	0.500									

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits





Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-R5663</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>				Prep Date: <b>9/11/2012</b>			RunNo: <b>5663</b>		
Client ID: <b>MBLKW</b>	Batch ID: <b>R5663</b>	Analysis Date: <b>9/11/2012</b>							SeqNo: <b>111371</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	0.500									
Carbon tetrachloride	ND	0.500									
1,2-Dichloroethane (EDC)	ND	0.500									
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	0.500									
Bromodichloromethane	ND	0.500									
Dibromomethane	ND	0.500									
cis-1,3-Dichloropropene	ND	0.500									
trans-1,3-Dichloropropene	ND	0.500									
1,1,2-Trichloroethane	ND	0.500									
1,3-Dichloropropane	ND	0.500									
Tetrachloroethene (PCE)	ND	0.500									
Dibromochloromethane	ND	0.500									
1,2-Dibromoethane (EDB)	ND	0.200									
Chlorobenzene	ND	0.500									
1,1,1,2-Tetrachloroethane	ND	0.500									
Bromoform	ND	0.500									
1,1,2,2-Tetrachloroethane	ND	0.500									
Bromobenzene	ND	0.500									
2-Chlorotoluene	ND	0.500									
4-Chlorotoluene	ND	0.500									
1,2,3-Trichloropropane	ND	0.500									
1,2,4-Trichlorobenzene	ND	1.00									
1,3-Dichlorobenzene	ND	0.500									
1,4-Dichlorobenzene	ND	0.500									
1,2-Dichlorobenzene	ND	0.500									
1,2-Dibromo-3-chloropropane	ND	0.500									
Hexachlorobutadiene	ND	1.00									
1,2,3-Trichlorobenzene	ND	2.00									

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/13/2012

Work Order: 1209024  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-R5663</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>				Prep Date: <b>9/11/2012</b>			RunNo: <b>5663</b>		
Client ID: <b>MBLKW</b>	Batch ID: <b>R5663</b>					Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111371</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	9.87		10.00		98.7	79.2	120				
Surr: Dibromofluoromethane	9.84		10.00		98.4	76	114				
Surr: Toluene-d8	10.2		10.00		102	86.8	119				

Qualifiers:	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Client Name: **URS**

 Work Order Number: **1209024**

 Logged by: **Troy Zehr**

 Date Received: **9/6/2012 3:45:00 PM**

## Chain of Custody

1. Were custodial seals present? Yes ☐ No ☐ Not Required ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Client

## Log In

4. Coolers are present? Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all coolers received at a temperature of >0° C to 10.0°C Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. Is there headspace present in VOA vials? Yes ☐ No ☐ NA ☒
12. Did all sample containers arrive in good condition?(unbroken) Yes ☒ No ☐
13. Does paperwork match bottle labels? Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met? Yes ☒ No ☐

## Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

18. Additional remarks/Discrepancies

## Item Information

Item #	Temp °C	Condition
Cooler	1.7	Good



Tel: 206-352-3790  
Fax: 206-352-7118

Product No.

Collected by

A12

## Chain of Custody Record

1209024

Belsham TPH Data Corp

A12

[illegible][illegible]

Common Name	Chemical Name	Chemical Structure	Chemical Formula	Chemical Weight	Chemical Density	Chemical Solubility	Chemical Stability	Chemical Toxicity	Chemical Hazards	Chemical Uses	Chemical Suppliers
Acetic Acid	Acetic Acid		$\text{CH}_3\text{COOH}$	60.05	1.05	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Anhydride	Acetic Anhydride		$(\text{CH}_3\text{CO})_2\text{O}$	102.09	1.08	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Chloride	Acetic Chloride		$\text{CH}_3\text{COCl}$	76.05	1.22	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Bromide	Acetic Bromide		$\text{CH}_3\text{COBr}$	122.97	1.48	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Iodide	Acetic Iodide		$\text{CH}_3\text{COI}$	228.07	1.83	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Nitrate	Acetic Nitrate		$\text{CH}_3\text{COONO}_2$	117.07	1.22	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Sulfate	Acetic Sulfate		$\text{CH}_3\text{COOSO}_3\text{H}$	154.09	1.48	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Phosphate	Acetic Phosphate		$\text{CH}_3\text{COOP(=O)}_3\text{H}$	192.07	1.83	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Silicate	Acetic Silicate		$\text{CH}_3\text{COOSi(=O)}_2\text{H}$	154.09	1.48	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Fluoride	Acetic Fluoride		$\text{CH}_3\text{COF}$	64.05	1.05	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Chloride	Acetic Chloride		$\text{CH}_3\text{COCl}$	76.05	1.22	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Bromide	Acetic Bromide		$\text{CH}_3\text{COBr}$	122.97	1.48	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Iodide	Acetic Iodide		$\text{CH}_3\text{COI}$	228.07	1.83	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Nitrate	Acetic Nitrate		$\text{CH}_3\text{COONO}_2$	117.07	1.22	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Sulfate	Acetic Sulfate		$\text{CH}_3\text{COOSO}_3\text{H}$	154.09	1.48	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Phosphate	Acetic Phosphate		$\text{CH}_3\text{COOP(=O)}_3\text{H}$	192.07	1.83	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Silicate	Acetic Silicate		$\text{CH}_3\text{COOSi(=O)}_2\text{H}$	154.09	1.48	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific
Acetic Fluoride	Acetic Fluoride		$\text{CH}_3\text{COF}$	64.05	1.05	100% (at 25°C)	Stable	Corrosive	Flammable	Food preservative, vinegar	Acros, Alfa Aesar, Fisher Scientific

~~Sample Disposal:~~

Received	Date/Time
From Zehn	9/6/12 15:45

Received	Date/Time
----------	-----------

Time	Next Day	7 Day	9 Day
10:00	10:00	10:00	10:00
11:00	11:00	11:00	11:00
12:00	12:00	12:00	12:00
13:00	13:00	13:00	13:00
14:00	14:00	14:00	14:00
15:00	15:00	15:00	15:00
16:00	16:00	16:00	16:00
17:00	17:00	17:00	17:00
18:00	18:00	18:00	18:00
19:00	19:00	19:00	19:00
20:00	20:00	20:00	20:00
21:00	21:00	21:00	21:00
22:00	22:00	22:00	22:00
23:00	23:00	23:00	23:00
24:00	24:00	24:00	24:00

Distribution: White • Lab., Yellow • File, Pink • Original

[www.fremontaiyi.com](http://www.fremontaiyi.com)







1311 N. 35th St.  
Seattle, WA 98103  
T: (206) 352-3790  
F: (206) 352-7178  
info@fremontanalytical.com

**URS Corporation**  
David Raubvogel  
1501 4th Ave., Suite 1400  
Seattle, Washington 98101

**RE: Belshaw TPH Data Gap**  
**Lab ID: 1209016**

September 12, 2012

**Attention David Raubvogel:**

Fremont Analytical, Inc. received 11 sample(s) on 9/5/2012 for the analyses presented in the following report.

***Gasoline by NWTPH-Gx***  
***Sample Moisture (Percent Moisture)***  
***Total Metals by EPA Method 200.8***  
***Total Metals by EPA Method 6020***  
***Volatile Organic Compounds by EPA Method 8260***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Dee".

Michael Dee  
Sr. Chemist / Principal



Date: 09/12/2012

**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap  
**Lab Order:** 1209016

## Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1209016-001	URS-SB-4-26	09/05/2012 8:45 AM	09/05/2012 4:30 PM
1209016-002	URS-SB-4-GW	09/05/2012 9:00 AM	09/05/2012 4:30 PM
1209016-003	URS-SB-4-31	09/05/2012 9:30 AM	09/05/2012 4:30 PM
1209016-004	URS-SB-4-41	09/05/2012 9:40 AM	09/05/2012 4:30 PM
1209016-005	URS-SB-5-26	09/05/2012 11:35 AM	09/05/2012 4:30 PM
1209016-006	URS-SB-5-41	09/05/2012 12:45 PM	09/05/2012 4:30 PM
1209016-007	URS-SB-5-56.5	09/05/2012 1:00 PM	09/05/2012 4:30 PM
1209016-008	URS-SB-6-21	09/05/2012 2:15 PM	09/05/2012 4:30 PM
1209016-009	URS-SB-6-GW	09/05/2012 2:35 PM	09/05/2012 4:30 PM
1209016-010	URS-SB-6-31	09/05/2012 2:50 PM	09/05/2012 4:30 PM
1209016-011	URS-SB-6-46	09/05/2012 3:05 PM	09/05/2012 4:30 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned



## Case Narrative

WO#: 1209016

Date: 9/12/2012

---

**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

---

### I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

### II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

### III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.





# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 8:45:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-001

Matrix: Soil

Client Sample ID: URS-SB-4-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Gasoline by NWTPH-Gx</b>			Batch ID: R5681		Analyst: EM	
Gasoline	16.2	9.56		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Surr: 1,2-Dichloroethane-d4	95.2	65-135		%REC	1	9/10/2012 10:27:00 PM
Surr: Fluorobenzene	104	65-135		%REC	1	9/10/2012 10:27:00 PM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.115		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Chloromethane	ND	0.115		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Vinyl chloride	ND	0.00382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Bromomethane	ND	0.172		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0956		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Chloroethane	ND	0.115		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,1-Dichloroethene	ND	0.0956		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Methylene chloride	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
trans-1,2-Dichloroethene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0956		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,1-Dichloroethane	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
2,2-Dichloropropane	ND	0.0956		mg/Kg-dry	1	9/10/2012 10:27:00 PM
cis-1,2-Dichloroethene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Chloroform	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,1-Dichloropropene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Carbon tetrachloride	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,2-Dichloroethane (EDC)	ND	0.0573		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Benzene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Trichloroethene (TCE)	ND	0.0573		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,2-Dichloropropane	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Bromodichloromethane	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Dibromomethane	ND	0.0765		mg/Kg-dry	1	9/10/2012 10:27:00 PM
cis-1,3-Dichloropropene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Toluene	2.22	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
trans-1,3-Dichloropropylene	ND	0.0573		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,1,2-Trichloroethane	ND	0.0573		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,3-Dichloropropane	ND	0.0956		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Tetrachloroethene (PCE)	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 8:45:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-001

Matrix: Soil

Client Sample ID: URS-SB-4-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>				Batch ID: 3164		Analyst: EM
Dibromochloromethane	ND	0.0573		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,2-Dibromoethane (EDB)	ND	0.00956		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Chlorobenzene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0573		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Ethylbenzene	0.473	0.0573		mg/Kg-dry	1	9/10/2012 10:27:00 PM
m,p-Xylene	1.79	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
o-Xylene	0.724	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Styrene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Isopropylbenzene	ND	0.153		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Bromoform	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
n-Propylbenzene	0.0745	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Bromobenzene	ND	0.0573		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,3,5-Trimethylbenzene	0.156	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
2-Chlorotoluene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
4-Chlorotoluene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
tert-Butylbenzene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,2,3-Trichloropropane	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,2,4-Trichlorobenzene	ND	0.0956		mg/Kg-dry	1	9/10/2012 10:27:00 PM
sec-Butylbenzene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
4-Isopropyltoluene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,3-Dichlorobenzene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,4-Dichlorobenzene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
n-Butylbenzene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,2-Dichlorobenzene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0573		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,2,4-Trimethylbenzene	0.581	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Hexachlorobutadiene	ND	0.191		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Naphthalene	0.157	0.0573		mg/Kg-dry	1	9/10/2012 10:27:00 PM
1,2,3-Trichlorobenzene	ND	0.0382		mg/Kg-dry	1	9/10/2012 10:27:00 PM
Surr: 1-Bromo-4-fluorobenzene	99.1	63.1-141		%REC	1	9/10/2012 10:27:00 PM
Surr: Dibromofluoromethane	103	67.6-119		%REC	1	9/10/2012 10:27:00 PM
Surr: Toluene-d8	104	78.5-126		%REC	1	9/10/2012 10:27:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

**Client:** URS Corporation

**Collection Date:** 9/5/2012 8:45:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209016-001

**Matrix:** Soil

**Client Sample ID:** URS-SB-4-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	1.51	0.192		mg/Kg-dry	1	9/11/2012 5:52:40 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5615

Analyst: AO

Percent Moisture	14.5			wt%	1	9/6/2012 1:13:15 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

**Client:** URS Corporation

**Collection Date:** 9/5/2012 9:00:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209016-002

**Matrix:** Water

**Client Sample ID:** URS-SB-4-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5666

Analyst: EM

Gasoline	35,200	2,500	D	µg/L	50	9/12/2012 11:34:00 AM
Surr: 1,2-Dichloroethane-d4	97.5	65-135		%REC	1	9/12/2012 3:42:00 AM
Surr: Fluorobenzene	99.9	65-135		%REC	1	9/12/2012 3:42:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5663

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
Chloromethane	1.07	1.00		µg/L	1	9/12/2012 3:42:00 AM
Vinyl chloride	ND	0.200		µg/L	1	9/12/2012 3:42:00 AM
Bromomethane	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
Chloroethane	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
Methylene chloride	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	9/12/2012 3:42:00 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
Chloroform	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
Carbon tetrachloride	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
Benzene	187	50.0	D	µg/L	50	9/12/2012 11:34:00 AM
Trichloroethene (TCE)	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
Bromodichloromethane	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
Dibromomethane	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
Toluene	1,020	1,000	D	µg/L	1000	9/12/2012 1:05:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 9:00:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-002

Matrix: Water

Client Sample ID: URS-SB-4-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>				Batch ID: R5663		Analyst: EM
Dibromochloromethane	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	9/12/2012 3:42:00 AM
Chlorobenzene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
Ethylbenzene	996	50.0	D	µg/L	50	9/12/2012 11:34:00 AM
m,p-Xylene	1,600	1,000	D	µg/L	1000	9/12/2012 1:05:00 PM
o-Xylene	1,750	50.0	D	µg/L	50	9/12/2012 11:34:00 AM
Styrene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
Isopropylbenzene	84.5	50.0	D	µg/L	50	9/12/2012 11:34:00 AM
Bromoform	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
n-Propylbenzene	111	50.0	D	µg/L	50	9/12/2012 11:34:00 AM
Bromobenzene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,3,5-Trimethylbenzene	274	50.0	D	µg/L	50	9/12/2012 11:34:00 AM
2-Chlorotoluene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
4-Chlorotoluene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
tert-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	9/12/2012 3:42:00 AM
sec-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
4-Isopropyltoluene	3.35	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
n-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/12/2012 3:42:00 AM
1,2,4-Trimethylbenzene	1,030	50.0	D	µg/L	50	9/12/2012 11:34:00 AM
Hexachlorobutadiene	ND	4.00		µg/L	1	9/12/2012 3:42:00 AM
Naphthalene	305	50.0	D	µg/L	50	9/12/2012 11:34:00 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	9/12/2012 3:42:00 AM
Surr: 1-Bromo-4-fluorobenzene	92.7	79.2-120		%REC	1	9/12/2012 3:42:00 AM
Surr: Dibromofluoromethane	88.3	76-114		%REC	1	9/12/2012 3:42:00 AM
Surr: Toluene-d8	110	86.8-119		%REC	1	9/12/2012 3:42:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

**Client:** URS Corporation

**Collection Date:** 9/5/2012 9:00:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209016-002

**Matrix:** Water

**Client Sample ID:** URS-SB-4-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 200.8**

Batch ID: 3133

Analyst: SG

Lead	2.37	1.00		µg/L	1	9/7/2012 7:29:37 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 9:30:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-003

Matrix: Soil

Client Sample ID: URS-SB-4-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Gasoline by NWTPH-Gx</b>				Batch ID: R5681		Analyst: EM
Gasoline	ND	4.73		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Surr: 1,2-Dichloroethane-d4	95.2	65-135		%REC	1	9/10/2012 11:27:00 PM
Surr: Fluorobenzene	104	65-135		%REC	1	9/10/2012 11:27:00 PM

## **Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3164 Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0567		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Chloromethane	ND	0.0567		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Vinyl chloride	ND	0.00189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Bromomethane	ND	0.0851		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0473		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Chloroethane	ND	0.0567		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,1-Dichloroethene	ND	0.0473		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Methylene chloride	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
trans-1,2-Dichloroethene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0473		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,1-Dichloroethane	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
2,2-Dichloropropane	ND	0.0473		mg/Kg-dry	1	9/10/2012 11:27:00 PM
cis-1,2-Dichloroethene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Chloroform	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,1-Dichloropropene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Carbon tetrachloride	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,2-Dichloroethane (EDC)	ND	0.0284		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Benzene	0.0345	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Trichloroethene (TCE)	ND	0.0284		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,2-Dichloropropane	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Bromodichloromethane	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Dibromomethane	ND	0.0378		mg/Kg-dry	1	9/10/2012 11:27:00 PM
cis-1,3-Dichloropropene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Toluene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
trans-1,3-Dichloropropylene	ND	0.0284		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,1,2-Trichloroethane	ND	0.0284		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,3-Dichloropropane	ND	0.0473		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Tetrachloroethene (PCE)	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 9:30:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-003

Matrix: Soil

Client Sample ID: URS-SB-4-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dibromochloromethane	ND	0.0284		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,2-Dibromoethane (EDB)	ND	0.00473		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Chlorobenzene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0284		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Ethylbenzene	ND	0.0284		mg/Kg-dry	1	9/10/2012 11:27:00 PM
m,p-Xylene	0.171	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
o-Xylene	0.0591	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Styrene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Isopropylbenzene	ND	0.0756		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Bromoform	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
n-Propylbenzene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Bromobenzene	ND	0.0284		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,3,5-Trimethylbenzene	0.0416	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
2-Chlorotoluene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
4-Chlorotoluene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
tert-Butylbenzene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,2,3-Trichloropropane	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,2,4-Trichlorobenzene	ND	0.0473		mg/Kg-dry	1	9/10/2012 11:27:00 PM
sec-Butylbenzene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
4-Isopropyltoluene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,3-Dichlorobenzene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,4-Dichlorobenzene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
n-Butylbenzene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,2-Dichlorobenzene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0284		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,2,4-Trimethylbenzene	0.132	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Hexachlorobutadiene	ND	0.0945		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Naphthalene	0.0326	0.0284		mg/Kg-dry	1	9/10/2012 11:27:00 PM
1,2,3-Trichlorobenzene	ND	0.0189		mg/Kg-dry	1	9/10/2012 11:27:00 PM
Surr: 1-Bromo-4-fluorobenzene	102	63.1-141		%REC	1	9/10/2012 11:27:00 PM
Surr: Dibromofluoromethane	104	67.6-119		%REC	1	9/10/2012 11:27:00 PM
Surr: Toluene-d8	104	78.5-126		%REC	1	9/10/2012 11:27:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





## Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

**Client:** URS Corporation

**Collection Date:** 9/5/2012 9:30:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209016-003

**Matrix:** Soil

**Client Sample ID:** URS-SB-4-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	1.78	0.176		mg/Kg-dry	1	9/11/2012 7:14:23 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5615

Analyst: AO

Percent Moisture	11.1			wt%	1	9/6/2012 1:13:15 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 9:40:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-004

Matrix: Soil

Client Sample ID: URS-SB-4-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Gasoline by NWTPH-Gx</b>				Batch ID: R5681		Analyst: EM
Gasoline	ND	4.76		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Surr: 1,2-Dichloroethane-d4	98.5	65-135		%REC	1	9/10/2012 11:57:00 PM
Surr: Fluorobenzene	106	65-135		%REC	1	9/10/2012 11:57:00 PM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164 Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0572		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Chloromethane	ND	0.0572		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Vinyl chloride	ND	0.00191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Bromomethane	ND	0.0858		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0476		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Chloroethane	ND	0.0572		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,1-Dichloroethene	ND	0.0476		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Methylene chloride	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
trans-1,2-Dichloroethene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0476		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,1-Dichloroethane	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
2,2-Dichloropropane	ND	0.0476		mg/Kg-dry	1	9/10/2012 11:57:00 PM
cis-1,2-Dichloroethene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Chloroform	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,1-Dichloropropene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Carbon tetrachloride	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,2-Dichloroethane (EDC)	ND	0.0286		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Benzene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Trichloroethene (TCE)	ND	0.0286		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,2-Dichloropropane	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Bromodichloromethane	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Dibromomethane	ND	0.0381		mg/Kg-dry	1	9/10/2012 11:57:00 PM
cis-1,3-Dichloropropene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Toluene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
trans-1,3-Dichloropropylene	ND	0.0286		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,1,2-Trichloroethane	ND	0.0286		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,3-Dichloropropane	ND	0.0476		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Tetrachloroethene (PCE)	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 9:40:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-004

Matrix: Soil

Client Sample ID: URS-SB-4-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dibromochloromethane	ND	0.0286		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,2-Dibromoethane (EDB)	ND	0.00476		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Chlorobenzene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0286		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Ethylbenzene	ND	0.0286		mg/Kg-dry	1	9/10/2012 11:57:00 PM
m,p-Xylene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
o-Xylene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Styrene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Isopropylbenzene	ND	0.0762		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Bromoform	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
n-Propylbenzene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Bromobenzene	ND	0.0286		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,3,5-Trimethylbenzene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
2-Chlorotoluene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
4-Chlorotoluene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
tert-Butylbenzene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,2,3-Trichloropropane	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,2,4-Trichlorobenzene	ND	0.0476		mg/Kg-dry	1	9/10/2012 11:57:00 PM
sec-Butylbenzene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
4-Isopropyltoluene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,3-Dichlorobenzene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,4-Dichlorobenzene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
n-Butylbenzene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,2-Dichlorobenzene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,2-Dibromo-3-chloropropane	ND	0.0286		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,2,4-Trimethylbenzene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Hexachlorobutadiene	ND	0.0953		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Naphthalene	ND	0.0286		mg/Kg-dry	1	9/10/2012 11:57:00 PM
1,2,3-Trichlorobenzene	ND	0.0191		mg/Kg-dry	1	9/10/2012 11:57:00 PM
Surr: 1-Bromo-4-fluorobenzene	103	63.1-141		%REC	1	9/10/2012 11:57:00 PM
Surr: Dibromofluoromethane	102	67.6-119		%REC	1	9/10/2012 11:57:00 PM
Surr: Toluene-d8	103	78.5-126		%REC	1	9/10/2012 11:57:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

**Client:** URS Corporation

**Collection Date:** 9/5/2012 9:40:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209016-004

**Matrix:** Soil

**Client Sample ID:** URS-SB-4-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	1.57	0.177		mg/Kg-dry	1	9/11/2012 7:43:12 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5615

Analyst: AO

Percent Moisture	13.7			wt%	1	9/6/2012 1:13:15 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 11:35:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-005

Matrix: Soil

Client Sample ID: URS-SB-5-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5681

Analyst: EM

Gasoline	ND	4.49		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Surr: 1,2-Dichloroethane-d4	96.0	65-135		%REC	1	9/11/2012 1:25:00 AM
Surr: Fluorobenzene	109	65-135		%REC	1	9/11/2012 1:25:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0538		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Chloromethane	ND	0.0538		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Vinyl chloride	ND	0.00179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Bromomethane	ND	0.0808		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0449		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Chloroethane	ND	0.0538		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,1-Dichloroethene	ND	0.0449		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Methylene chloride	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
trans-1,2-Dichloroethene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0449		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,1-Dichloroethane	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
2,2-Dichloropropane	ND	0.0449		mg/Kg-dry	1	9/11/2012 1:25:00 AM
cis-1,2-Dichloroethene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Chloroform	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,1-Dichloropropene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Carbon tetrachloride	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,2-Dichloroethane (EDC)	ND	0.0269		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Benzene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Trichloroethene (TCE)	ND	0.0269		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,2-Dichloropropane	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Bromodichloromethane	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Dibromomethane	ND	0.0359		mg/Kg-dry	1	9/11/2012 1:25:00 AM
cis-1,3-Dichloropropene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Toluene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
trans-1,3-Dichloropropylene	ND	0.0269		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,1,2-Trichloroethane	ND	0.0269		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,3-Dichloropropane	ND	0.0449		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Tetrachloroethene (PCE)	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 11:35:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-005

Matrix: Soil

Client Sample ID: URS-SB-5-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dibromochloromethane	ND	0.0269		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,2-Dibromoethane (EDB)	ND	0.00449		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Chlorobenzene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0269		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Ethylbenzene	ND	0.0269		mg/Kg-dry	1	9/11/2012 1:25:00 AM
m,p-Xylene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
o-Xylene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Styrene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Isopropylbenzene	ND	0.0718		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Bromoform	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
n-Propylbenzene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Bromobenzene	ND	0.0269		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,3,5-Trimethylbenzene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
2-Chlorotoluene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
4-Chlorotoluene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
tert-Butylbenzene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,2,3-Trichloropropane	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,2,4-Trichlorobenzene	ND	0.0449		mg/Kg-dry	1	9/11/2012 1:25:00 AM
sec-Butylbenzene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
4-Isopropyltoluene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,3-Dichlorobenzene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,4-Dichlorobenzene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
n-Butylbenzene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,2-Dichlorobenzene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0269		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,2,4-Trimethylbenzene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Hexachlorobutadiene	ND	0.0897		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Naphthalene	ND	0.0269		mg/Kg-dry	1	9/11/2012 1:25:00 AM
1,2,3-Trichlorobenzene	ND	0.0179		mg/Kg-dry	1	9/11/2012 1:25:00 AM
Surr: 1-Bromo-4-fluorobenzene	102	63.1-141		%REC	1	9/11/2012 1:25:00 AM
Surr: Dibromofluoromethane	100	67.6-119		%REC	1	9/11/2012 1:25:00 AM
Surr: Toluene-d8	101	78.5-126		%REC	1	9/11/2012 1:25:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

**Client:** URS Corporation

**Collection Date:** 9/5/2012 11:35:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209016-005

**Matrix:** Soil

**Client Sample ID:** URS-SB-5-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	2.14	0.166		mg/Kg-dry	1	9/11/2012 7:52:49 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5615

Analyst: AO

Percent Moisture	10.1			wt%	1	9/6/2012 1:13:15 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 12:45:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-006

Matrix: Soil

Client Sample ID: URS-SB-5-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5681

Analyst: EM

Gasoline	ND	7.23		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Surr: 1,2-Dichloroethane-d4	95.4	65-135		%REC	1	9/11/2012 1:55:00 AM
Surr: Fluorobenzene	102	65-135		%REC	1	9/11/2012 1:55:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0868		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Chloromethane	ND	0.0868		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Vinyl chloride	ND	0.00289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Bromomethane	ND	0.130		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0723		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Chloroethane	ND	0.0868		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,1-Dichloroethene	ND	0.0723		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Methylene chloride	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
trans-1,2-Dichloroethene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0723		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,1-Dichloroethane	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
2,2-Dichloropropane	ND	0.0723		mg/Kg-dry	1	9/11/2012 1:55:00 AM
cis-1,2-Dichloroethene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Chloroform	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,1-Dichloropropene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Carbon tetrachloride	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,2-Dichloroethane (EDC)	ND	0.0434		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Benzene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Trichloroethene (TCE)	ND	0.0434		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,2-Dichloropropane	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Bromodichloromethane	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Dibromomethane	ND	0.0578		mg/Kg-dry	1	9/11/2012 1:55:00 AM
cis-1,3-Dichloropropene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Toluene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
trans-1,3-Dichloropropylene	ND	0.0434		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,1,2-Trichloroethane	ND	0.0434		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,3-Dichloropropane	ND	0.0723		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Tetrachloroethene (PCE)	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 12:45:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-006

Matrix: Soil

Client Sample ID: URS-SB-5-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dibromochloromethane	ND	0.0434		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,2-Dibromoethane (EDB)	ND	0.00723		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Chlorobenzene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0434		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Ethylbenzene	ND	0.0434		mg/Kg-dry	1	9/11/2012 1:55:00 AM
m,p-Xylene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
o-Xylene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Styrene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Isopropylbenzene	ND	0.116		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Bromoform	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
n-Propylbenzene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Bromobenzene	ND	0.0434		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,3,5-Trimethylbenzene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
2-Chlorotoluene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
4-Chlorotoluene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
tert-Butylbenzene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,2,3-Trichloropropane	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,2,4-Trichlorobenzene	ND	0.0723		mg/Kg-dry	1	9/11/2012 1:55:00 AM
sec-Butylbenzene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
4-Isopropyltoluene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,3-Dichlorobenzene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,4-Dichlorobenzene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
n-Butylbenzene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,2-Dichlorobenzene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0434		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,2,4-Trimethylbenzene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Hexachlorobutadiene	ND	0.145		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Naphthalene	ND	0.0434		mg/Kg-dry	1	9/11/2012 1:55:00 AM
1,2,3-Trichlorobenzene	ND	0.0289		mg/Kg-dry	1	9/11/2012 1:55:00 AM
Surr: 1-Bromo-4-fluorobenzene	101	63.1-141		%REC	1	9/11/2012 1:55:00 AM
Surr: Dibromofluoromethane	103	67.6-119		%REC	1	9/11/2012 1:55:00 AM
Surr: Toluene-d8	109	78.5-126		%REC	1	9/11/2012 1:55:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

**Client:** URS Corporation

**Collection Date:** 9/5/2012 12:45:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209016-006

**Matrix:** Soil

**Client Sample ID:** URS-SB-5-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	2.57	0.175		mg/Kg-dry	1	9/11/2012 8:02:26 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5615

Analyst: AO

Percent Moisture	8.78			wt%	1	9/6/2012 1:13:15 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 1:00:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-007

Matrix: Soil

Client Sample ID: URS-SB-5-56.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5681

Analyst: EM

Gasoline	ND	6.17		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Surr: 1,2-Dichloroethane-d4	96.5	65-135		%REC	1	9/11/2012 2:24:00 AM
Surr: Fluorobenzene	105	65-135		%REC	1	9/11/2012 2:24:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0740		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Chloromethane	ND	0.0740		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Vinyl chloride	ND	0.00247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Bromomethane	ND	0.111		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0617		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Chloroethane	ND	0.0740		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,1-Dichloroethene	ND	0.0617		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Methylene chloride	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
trans-1,2-Dichloroethene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0617		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,1-Dichloroethane	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
2,2-Dichloropropane	ND	0.0617		mg/Kg-dry	1	9/11/2012 2:24:00 AM
cis-1,2-Dichloroethene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Chloroform	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,1-Dichloropropene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Carbon tetrachloride	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,2-Dichloroethane (EDC)	ND	0.0370		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Benzene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Trichloroethene (TCE)	ND	0.0370		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,2-Dichloropropane	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Bromodichloromethane	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Dibromomethane	ND	0.0493		mg/Kg-dry	1	9/11/2012 2:24:00 AM
cis-1,3-Dichloropropene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Toluene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
trans-1,3-Dichloropropylene	ND	0.0370		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,1,2-Trichloroethane	ND	0.0370		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,3-Dichloropropane	ND	0.0617		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Tetrachloroethene (PCE)	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 1:00:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-007

Matrix: Soil

Client Sample ID: URS-SB-5-56.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dibromochloromethane	ND	0.0370		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,2-Dibromoethane (EDB)	ND	0.00617		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Chlorobenzene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0370		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Ethylbenzene	ND	0.0370		mg/Kg-dry	1	9/11/2012 2:24:00 AM
m,p-Xylene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
o-Xylene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Styrene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Isopropylbenzene	ND	0.0986		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Bromoform	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
n-Propylbenzene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Bromobenzene	ND	0.0370		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,3,5-Trimethylbenzene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
2-Chlorotoluene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
4-Chlorotoluene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
tert-Butylbenzene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,2,3-Trichloropropane	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,2,4-Trichlorobenzene	ND	0.0617		mg/Kg-dry	1	9/11/2012 2:24:00 AM
sec-Butylbenzene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
4-Isopropyltoluene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,3-Dichlorobenzene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,4-Dichlorobenzene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
n-Butylbenzene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,2-Dichlorobenzene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0370		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,2,4-Trimethylbenzene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Hexachlorobutadiene	ND	0.123		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Naphthalene	ND	0.0370		mg/Kg-dry	1	9/11/2012 2:24:00 AM
1,2,3-Trichlorobenzene	ND	0.0247		mg/Kg-dry	1	9/11/2012 2:24:00 AM
Surr: 1-Bromo-4-fluorobenzene	102	63.1-141		%REC	1	9/11/2012 2:24:00 AM
Surr: Dibromofluoromethane	99.7	67.6-119		%REC	1	9/11/2012 2:24:00 AM
Surr: Toluene-d8	102	78.5-126		%REC	1	9/11/2012 2:24:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

**Client:** URS Corporation

**Collection Date:** 9/5/2012 1:00:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209016-007

**Matrix:** Soil

**Client Sample ID:** URS-SB-5-56.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	3.54	0.157		mg/Kg-dry	1	9/11/2012 8:12:03 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5615

Analyst: AO

Percent Moisture	13.7			wt%	1	9/6/2012 1:13:15 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 2:15:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-008

Matrix: Soil

Client Sample ID: URS-SB-6-21

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5681

Analyst: EM

Gasoline	ND	6.89		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Surr: 1,2-Dichloroethane-d4	94.8	65-135		%REC	1	9/11/2012 2:53:00 AM
Surr: Fluorobenzene	105	65-135		%REC	1	9/11/2012 2:53:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0827		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Chloromethane	ND	0.0827		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Vinyl chloride	ND	0.00276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Bromomethane	ND	0.124		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0689		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Chloroethane	ND	0.0827		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,1-Dichloroethene	ND	0.0689		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Methylene chloride	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
trans-1,2-Dichloroethene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0689		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,1-Dichloroethane	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
2,2-Dichloropropane	ND	0.0689		mg/Kg-dry	1	9/11/2012 2:53:00 AM
cis-1,2-Dichloroethene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Chloroform	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,1-Dichloropropene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Carbon tetrachloride	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,2-Dichloroethane (EDC)	ND	0.0414		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Benzene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Trichloroethene (TCE)	ND	0.0414		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,2-Dichloropropane	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Bromodichloromethane	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Dibromomethane	ND	0.0552		mg/Kg-dry	1	9/11/2012 2:53:00 AM
cis-1,3-Dichloropropene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Toluene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
trans-1,3-Dichloropropylene	ND	0.0414		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,1,2-Trichloroethane	ND	0.0414		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,3-Dichloropropane	ND	0.0689		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Tetrachloroethene (PCE)	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 2:15:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-008

Matrix: Soil

Client Sample ID: URS-SB-6-21

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dibromochloromethane	ND	0.0414		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,2-Dibromoethane (EDB)	ND	0.00689		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Chlorobenzene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0414		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Ethylbenzene	ND	0.0414		mg/Kg-dry	1	9/11/2012 2:53:00 AM
m,p-Xylene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
o-Xylene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Styrene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Isopropylbenzene	ND	0.110		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Bromoform	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
n-Propylbenzene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Bromobenzene	ND	0.0414		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,3,5-Trimethylbenzene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
2-Chlorotoluene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
4-Chlorotoluene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
tert-Butylbenzene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,2,3-Trichloropropane	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,2,4-Trichlorobenzene	ND	0.0689		mg/Kg-dry	1	9/11/2012 2:53:00 AM
sec-Butylbenzene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
4-Isopropyltoluene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,3-Dichlorobenzene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,4-Dichlorobenzene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
n-Butylbenzene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,2-Dichlorobenzene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0414		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,2,4-Trimethylbenzene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Hexachlorobutadiene	ND	0.138		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Naphthalene	ND	0.0414		mg/Kg-dry	1	9/11/2012 2:53:00 AM
1,2,3-Trichlorobenzene	ND	0.0276		mg/Kg-dry	1	9/11/2012 2:53:00 AM
Surr: 1-Bromo-4-fluorobenzene	99.7	63.1-141		%REC	1	9/11/2012 2:53:00 AM
Surr: Dibromofluoromethane	99.4	67.6-119		%REC	1	9/11/2012 2:53:00 AM
Surr: Toluene-d8	101	78.5-126		%REC	1	9/11/2012 2:53:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

**Client:** URS Corporation

**Collection Date:** 9/5/2012 2:15:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209016-008

**Matrix:** Soil

**Client Sample ID:** URS-SB-6-21

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	3.57	0.205		mg/Kg-dry	1	9/11/2012 8:21:40 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5615

Analyst: AO

Percent Moisture	18.9			wt%	1	9/6/2012 1:13:15 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 2:35:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-009

Matrix: Water

Client Sample ID: URS-SB-6-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5666

Analyst: EM

Gasoline	ND	50.0		µg/L	1	9/12/2012 4:11:00 AM
Surr: 1,2-Dichloroethane-d4	103	65-135		%REC	1	9/12/2012 4:11:00 AM
Surr: Fluorobenzene	106	65-135		%REC	1	9/12/2012 4:11:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5663

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Chloromethane	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Vinyl chloride	ND	0.200		µg/L	1	9/12/2012 4:11:00 AM
Bromomethane	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Chloroethane	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Methylene chloride	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	9/12/2012 4:11:00 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Chloroform	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Carbon tetrachloride	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Benzene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Trichloroethene (TCE)	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Bromodichloromethane	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Dibromomethane	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Toluene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 2:35:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-009

Matrix: Water

Client Sample ID: URS-SB-6-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5663

Analyst: EM

Dibromochloromethane	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	9/12/2012 4:11:00 AM
Chlorobenzene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Ethylbenzene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
m,p-Xylene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
o-Xylene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Styrene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Isopropylbenzene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Bromoform	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
n-Propylbenzene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Bromobenzene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
2-Chlorotoluene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
4-Chlorotoluene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
tert-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	9/12/2012 4:11:00 AM
sec-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
n-Butylbenzene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
Hexachlorobutadiene	ND	4.00		µg/L	1	9/12/2012 4:11:00 AM
Naphthalene	ND	1.00		µg/L	1	9/12/2012 4:11:00 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	9/12/2012 4:11:00 AM
Surr: 1-Bromo-4-fluorobenzene	97.3	79.2-120		%REC	1	9/12/2012 4:11:00 AM
Surr: Dibromofluoromethane	98.1	76-114		%REC	1	9/12/2012 4:11:00 AM
Surr: Toluene-d8	104	86.8-119		%REC	1	9/12/2012 4:11:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

**Client:** URS Corporation

**Collection Date:** 9/5/2012 2:35:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209016-009

**Matrix:** Water

**Client Sample ID:** URS-SB-6-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 200.8**

Batch ID: 3133

Analyst: SG

Lead	19.8	1.00		µg/L	1	9/7/2012 7:39:16 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 2:50:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-010

Matrix: Soil

Client Sample ID: URS-SB-6-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5681

Analyst: EM

Gasoline	ND	5.58		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Surr: 1,2-Dichloroethane-d4	93.8	65-135		%REC	1	9/11/2012 3:23:00 AM
Surr: Fluorobenzene	103	65-135		%REC	1	9/11/2012 3:23:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0670		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Chloromethane	ND	0.0670		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Vinyl chloride	ND	0.00223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Bromomethane	ND	0.100		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0558		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Chloroethane	ND	0.0670		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,1-Dichloroethene	ND	0.0558		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Methylene chloride	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
trans-1,2-Dichloroethene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0558		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,1-Dichloroethane	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
2,2-Dichloropropane	ND	0.0558		mg/Kg-dry	1	9/11/2012 3:23:00 AM
cis-1,2-Dichloroethene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Chloroform	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,1-Dichloropropene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Carbon tetrachloride	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,2-Dichloroethane (EDC)	ND	0.0335		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Benzene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Trichloroethene (TCE)	ND	0.0335		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,2-Dichloropropane	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Bromodichloromethane	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Dibromomethane	ND	0.0446		mg/Kg-dry	1	9/11/2012 3:23:00 AM
cis-1,3-Dichloropropene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Toluene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
trans-1,3-Dichloropropylene	ND	0.0335		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,1,2-Trichloroethane	ND	0.0335		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,3-Dichloropropane	ND	0.0558		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Tetrachloroethene (PCE)	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 2:50:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-010

Matrix: Soil

Client Sample ID: URS-SB-6-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dibromochloromethane	ND	0.0335		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,2-Dibromoethane (EDB)	ND	0.00558		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Chlorobenzene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0335		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Ethylbenzene	ND	0.0335		mg/Kg-dry	1	9/11/2012 3:23:00 AM
m,p-Xylene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
o-Xylene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Styrene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Isopropylbenzene	ND	0.0893		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Bromoform	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
n-Propylbenzene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Bromobenzene	ND	0.0335		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,3,5-Trimethylbenzene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
2-Chlorotoluene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
4-Chlorotoluene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
tert-Butylbenzene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,2,3-Trichloropropane	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,2,4-Trichlorobenzene	ND	0.0558		mg/Kg-dry	1	9/11/2012 3:23:00 AM
sec-Butylbenzene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
4-Isopropyltoluene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,3-Dichlorobenzene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,4-Dichlorobenzene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
n-Butylbenzene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,2-Dichlorobenzene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0335		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,2,4-Trimethylbenzene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Hexachlorobutadiene	ND	0.112		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Naphthalene	ND	0.0335		mg/Kg-dry	1	9/11/2012 3:23:00 AM
1,2,3-Trichlorobenzene	ND	0.0223		mg/Kg-dry	1	9/11/2012 3:23:00 AM
Surr: 1-Bromo-4-fluorobenzene	104	63.1-141		%REC	1	9/11/2012 3:23:00 AM
Surr: Dibromofluoromethane	100	67.6-119		%REC	1	9/11/2012 3:23:00 AM
Surr: Toluene-d8	103	78.5-126		%REC	1	9/11/2012 3:23:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

**Client:** URS Corporation

**Collection Date:** 9/5/2012 2:50:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209016-010

**Matrix:** Soil

**Client Sample ID:** URS-SB-6-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	1.42	0.164		mg/Kg-dry	1	9/11/2012 8:31:17 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5615

Analyst: AO

Percent Moisture	6.65			wt%	1	9/6/2012 1:13:15 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 3:05:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-011

Matrix: Soil

Client Sample ID: URS-SB-6-46

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5681

Analyst: EM

Gasoline	ND	7.16		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Surr: 1,2-Dichloroethane-d4	97.5	65-135		%REC	1	9/11/2012 3:52:00 AM
Surr: Fluorobenzene	107	65-135		%REC	1	9/11/2012 3:52:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0859		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Chloromethane	ND	0.0859		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Vinyl chloride	ND	0.00286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Bromomethane	ND	0.129		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0716		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Chloroethane	ND	0.0859		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,1-Dichloroethene	ND	0.0716		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Methylene chloride	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
trans-1,2-Dichloroethene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0716		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,1-Dichloroethane	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
2,2-Dichloropropane	ND	0.0716		mg/Kg-dry	1	9/11/2012 3:52:00 AM
cis-1,2-Dichloroethene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Chloroform	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,1-Dichloropropene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Carbon tetrachloride	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,2-Dichloroethane (EDC)	ND	0.0429		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Benzene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Trichloroethene (TCE)	ND	0.0429		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,2-Dichloropropane	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Bromodichloromethane	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Dibromomethane	ND	0.0572		mg/Kg-dry	1	9/11/2012 3:52:00 AM
cis-1,3-Dichloropropene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Toluene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
trans-1,3-Dichloropropylene	ND	0.0429		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,1,2-Trichloroethane	ND	0.0429		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,3-Dichloropropane	ND	0.0716		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Tetrachloroethene (PCE)	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

Client: URS Corporation

Collection Date: 9/5/2012 3:05:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209016-011

Matrix: Soil

Client Sample ID: URS-SB-6-46

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3164

Analyst: EM

Dibromochloromethane	ND	0.0429		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,2-Dibromoethane (EDB)	ND	0.00716		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Chlorobenzene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0429		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Ethylbenzene	ND	0.0429		mg/Kg-dry	1	9/11/2012 3:52:00 AM
m,p-Xylene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
o-Xylene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Styrene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Isopropylbenzene	ND	0.114		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Bromoform	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
n-Propylbenzene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Bromobenzene	ND	0.0429		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,3,5-Trimethylbenzene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
2-Chlorotoluene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
4-Chlorotoluene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
tert-Butylbenzene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,2,3-Trichloropropane	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,2,4-Trichlorobenzene	ND	0.0716		mg/Kg-dry	1	9/11/2012 3:52:00 AM
sec-Butylbenzene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
4-Isopropyltoluene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,3-Dichlorobenzene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,4-Dichlorobenzene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
n-Butylbenzene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,2-Dichlorobenzene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0429		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,2,4-Trimethylbenzene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Hexachlorobutadiene	ND	0.143		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Naphthalene	ND	0.0429		mg/Kg-dry	1	9/11/2012 3:52:00 AM
1,2,3-Trichlorobenzene	ND	0.0286		mg/Kg-dry	1	9/11/2012 3:52:00 AM
Surr: 1-Bromo-4-fluorobenzene	101	63.1-141		%REC	1	9/11/2012 3:52:00 AM
Surr: Dibromofluoromethane	101	67.6-119		%REC	1	9/11/2012 3:52:00 AM
Surr: Toluene-d8	102	78.5-126		%REC	1	9/11/2012 3:52:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





## Analytical Report

WO#: 1209016

Date Reported: 9/12/2012

**Client:** URS Corporation

**Collection Date:** 9/5/2012 3:05:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209016-011

**Matrix:** Soil

**Client Sample ID:** URS-SB-6-46

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3145

Analyst: SG

Lead	1.75	0.158		mg/Kg-dry	1	9/11/2012 8:40:55 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5615

Analyst: AO

Percent Moisture	10.6			wt%	1	9/6/2012 1:13:15 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



Date: 9/12/2012

**Work Order:** 1209016  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Total Metals by EPA Method 200.8

Sample ID: <b>MB-3133</b>		SampType: <b>MBLK</b>		Units: <b>µg/L</b>		Prep Date: <b>9/6/2012</b>			RunNo: <b>5631</b>		
Client ID: <b>MBLKW</b>		Batch ID: <b>3133</b>					Analysis Date: <b>9/7/2012</b>			SeqNo: <b>110771</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	ND	1.00									
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Sample ID: <b>LCS-3133</b>		SampType: <b>LCS</b>		Units: <b>µg/L</b>		Prep Date: <b>9/6/2012</b>			RunNo: <b>5631</b>		
Client ID: <b>LCSW</b>		Batch ID: <b>3133</b>					Analysis Date: <b>9/7/2012</b>			SeqNo: <b>110772</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	45.9	1.00	50.00	0	91.8	85	115				
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Sample ID: 1209010-003BDUP		SampType: DUP		Units: µg/L		Prep Date: 9/6/2012			RunNo: 5631			
Client ID: BATCH		Batch ID: 3133					Analysis Date: 9/7/2012			SeqNo: 110774		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	14.6	1.00						16.34	11.1	30	
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Sample ID: 1209010-003BMS	SampType: MS	Units: µg/L				Prep Date: 9/6/2012				RunNo: 5631		
Client ID: BATCH	Batch ID: 3133					Analysis Date: 9/7/2012				SeqNo: 110775		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	208	1.00	250.0	16.34	76.5	70	130				
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Sample ID: 1209010-003BMSD		SampType: MSD			Units: µg/L		Prep Date: 9/6/2012			RunNo: 5631		
Client ID: BATCH		Batch ID: 3133			Analysis Date: 9/7/2012					SeqNo: 110776		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	196	1.00	250.0	16.34	71.8	70	130	207.6	5.83	30	
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**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/12/2012

**Work Order:** 1209016  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Total Metals by EPA Method 6020

Sample ID: <b>MB-3145</b>		SampType: <b>MBLK</b>		Units: <b>mg/Kg</b>		Prep Date: <b>9/7/2012</b>			RunNo: <b>5665</b>		
Client ID: <b>MBLKS</b>		Batch ID: <b>3145</b>					Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111390</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	ND	0.200									
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Sample ID: <b>LCS-3145</b>		SampType: <b>LCS</b>		Units: <b>mg/Kg</b>		Prep Date: <b>9/7/2012</b>			RunNo: <b>5665</b>		
Client ID: <b>LCSS</b>		Batch ID: <b>3145</b>					Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111391</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	63.9	0.200	56.70	0	113	65.26	134.57				
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Sample ID: 1209016-001BDUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 9/7/2012			RunNo: 5665			
Client ID: URS-SB-4-26		Batch ID: 3145					Analysis Date: 9/11/2012			SeqNo: 111393		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	1.79	0.186						1.515	16.5	30	
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Sample ID: 1209016-001BMS		SampType: MS		Units: mg/Kg-dry		Prep Date: 9/7/2012			RunNo: 5665			
Client ID: URS-SB-4-26		Batch ID: 3145					Analysis Date: 9/11/2012			SeqNo: 111395		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	25.3	0.189	23.58	1.515	101	75	125				
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Sample ID: 1209016-001BMSD	SampType: MSD	Units: mg/Kg-dry				Prep Date: 9/7/2012			RunNo: 5665		
Client ID: URS-SB-4-26	Batch ID: 3145					Analysis Date: 9/11/2012			SeqNo: 111396		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	24.0	0.172	21.50	1.515	105	75	125	25.32	5.20	30	
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**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Gasoline by NWTPH-Gx

Sample ID: 1209016-001ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 9/10/2012			RunNo: 5681			
Client ID: URS-SB-4-26		Batch ID: R5681					Analysis Date: 9/10/2012			SeqNo: 111926		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Gasoline	16.0	9.56						16.18	0.842	30	
Surr: 1,2-Dichloroethane-d4	0.943		0.9557		98.7	65	135		0		
Surr: Fluorobenzene	1.04		0.9557		108	65	135		0		

Sample ID: <b>LCS-R5681</b>		SampType: <b>LCS</b>			Units: <b>mg/Kg</b>		Prep Date: <b>9/10/2012</b>			RunNo: <b>5681</b>		
Client ID: <b>LCSS</b>		Batch ID: <b>R5681</b>			Analysis Date: <b>9/10/2012</b>			SeqNo: <b>111937</b>				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Gasoline	21.6	5.00	25.00	0	86.4	65	135				
Surr: 1,2-Dichloroethane-d4	0.504		0.5000		101	65	135				
Surr: Fluorobenzene	0.559		0.5000		112	65	135				

Sample ID: <b>MB-R5681</b>		SampType: <b>MBLK</b>		Units: <b>mg/Kg</b>		Prep Date: <b>9/10/2012</b>			RunNo: <b>5681</b>		
Client ID: <b>MBLKS</b>		Batch ID: <b>R5681</b>					Analysis Date: <b>9/10/2012</b>			SeqNo: <b>111938</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	5.00									
Surr: 1,2-Dichloroethane-d4	0.496		0.5000		99.3	65	135				
Surr: Fluorobenzene	0.525		0.5000		105	65	135				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Gasoline by NWTPH-Gx

Sample ID: <b>MB-R5666</b>		SampType: <b>MBLK</b>		Units: <b>µg/L</b>		Prep Date: <b>9/11/2012</b>			RunNo: <b>5666</b>		
Client ID: <b>MBLKW</b>		Batch ID: <b>R5666</b>					Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111435</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	50.0									
Surr: 1,2-Dichloroethane-d4	10.7		10.00		107	65	135				
Surr: Fluorobenzene	11.0		10.00		110	65	135				

Sample ID: 1209024-003ADUP		SampType: DUP			Units: µg/L		Prep Date: 9/12/2012			RunNo: 5666		
Client ID: BATCH		Batch ID: R5666			Analysis Date: 9/12/2012			SeqNo: 111437				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Gasoline	ND	50.0						0	0	30	
Surr: 1,2-Dichloroethane-d4	10.6		10.00		106	65	135		0		
Surr: Fluorobenzene	10.9		10.00		109	65	135		0		

Sample ID: <b>LCS-R5666</b>		SampType: <b>LCS</b>			Units: <b>µg/L</b>		Prep Date: <b>9/11/2012</b>			RunNo: <b>5666</b>		
Client ID: <b>LCSW</b>		Batch ID: <b>R5666</b>			Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111445</b>				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Gasoline	438	50.0	500.0	0	87.6	65	135				
Surr: 1,2-Dichloroethane-d4	10.3		10.00		103	65	135				
Surr: Fluorobenzene	10.4		10.00		104	65	135				

**Qualifiers:**

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
R	RPD outside accepted recovery limits

D	Dilution was required
J	Analyte detected below quantitation limits
RL	Reporting Limit

E	Value above quantitation range
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209016-001ADUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 9/10/2012			RunNo: 5680		
Client ID: URS-SB-4-26	Batch ID: 3164					Analysis Date: 9/10/2012			SeqNo: 111910		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.115						0	0	30	
Chloromethane	ND	0.115						0	0	30	
Vinyl chloride	ND	0.00382						0	0	30	
Bromomethane	ND	0.172						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	0.0956						0	0	30	
Chloroethane	ND	0.115						0	0	30	
1,1-Dichloroethene	ND	0.0956						0	0	30	
Methylene chloride	ND	0.0382						0	0	30	
trans-1,2-Dichloroethene	ND	0.0382						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	0.0956						0	0	30	
1,1-Dichloroethane	ND	0.0382						0	0	30	
2,2-Dichloropropane	ND	0.0956						0	0	30	
cis-1,2-Dichloroethene	ND	0.0382						0	0	30	
Chloroform	ND	0.0382						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0382						0	0	30	
1,1-Dichloropropene	ND	0.0382						0	0	30	
Carbon tetrachloride	ND	0.0382						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.0573						0	0	30	
Benzene	ND	0.0382						0	0	30	
Trichloroethene (TCE)	ND	0.0573						0	0	30	
1,2-Dichloropropane	ND	0.0382						0	0	30	
Bromodichloromethane	ND	0.0382						0	0	30	
Dibromomethane	ND	0.0765						0	0	30	
cis-1,3-Dichloropropene	ND	0.0382						0	0	30	
Toluene	2.19	0.0382						2.218	1.30	30	
trans-1,3-Dichloropropylene	ND	0.0573						0	0	30	
1,1,2-Trichloroethane	ND	0.0573						0	0	30	
1,3-Dichloropropane	ND	0.0956						0	0	30	
Tetrachloroethene (PCE)	ND	0.0382						0	0	30	

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209016-001ADUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 9/10/2012			RunNo: 5680		
Client ID: URS-SB-4-26	Batch ID: 3164					Analysis Date: 9/10/2012			SeqNo: 111910		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	0.0573						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.00956						0	0	30	
Chlorobenzene	ND	0.0382						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.0573						0	0	30	
Ethylbenzene	0.499	0.0573						0.4731	5.31	30	
m,p-Xylene	1.93	0.0382						1.794	7.29	30	
o-Xylene	0.770	0.0382						0.7244	6.14	30	
Styrene	ND	0.0382						0	0	30	
Isopropylbenzene	ND	0.153						0	0	30	
Bromoform	ND	0.0382						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.0382						0	0	30	
n-Propylbenzene	0.0755	0.0382						0.07455	1.27	30	
Bromobenzene	ND	0.0573						0	0	30	
1,3,5-Trimethylbenzene	0.164	0.0382						0.1558	5.37	30	
2-Chlorotoluene	ND	0.0382						0	0	30	
4-Chlorotoluene	ND	0.0382						0	0	30	
tert-Butylbenzene	ND	0.0382						0	0	30	
1,2,3-Trichloropropane	ND	0.0382						0	0	30	
1,2,4-Trichlorobenzene	ND	0.0956						0	0	30	
sec-Butylbenzene	ND	0.0382						0	0	30	
4-Isopropyltoluene	ND	0.0382						0	0	30	
1,3-Dichlorobenzene	ND	0.0382						0	0	30	
1,4-Dichlorobenzene	ND	0.0382						0	0	30	
n-Butylbenzene	ND	0.0382						0	0	30	
1,2-Dichlorobenzene	ND	0.0382						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.0573						0	0	30	
1,2,4-Trimethylbenzene	0.605	0.0382						0.5811	4.03	30	
Hexachlorobutadiene	ND	0.191						0	0	30	
Naphthalene	0.154	0.0573						0.1567	1.85	30	

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209016-001ADUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 9/10/2012			RunNo: 5680		
Client ID: URS-SB-4-26	Batch ID: 3164					Analysis Date: 9/10/2012			SeqNo: 111910		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	ND	0.0382						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	0.963		0.9557		101	63.1	141		0		
Surr: Dibromofluoromethane	0.961		0.9557		101	67.6	119		0		
Surr: Toluene-d8	0.944		0.9557		98.8	78.5	126		0		

Sample ID: 1209016-004AMS	SampType: MS	Units: mg/Kg-dry			Prep Date: 9/10/2012			RunNo: 5680			
Client ID: URS-SB-4-41	Batch ID: 3164	Analysis Date: 9/11/2012						SeqNo: 111913			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.948	0.0572	0.9528	0	99.5	43.5	121				
Chloromethane	0.769	0.0572	0.9528	0	80.7	45	130				
Vinyl chloride	1.08	0.00191	0.9528	0	113	51.2	146				
Bromomethane	0.372	0.0858	0.9528	0	39.0	70	130				S
Trichlorofluoromethane (CFC-11)	0.886	0.0476	0.9528	0	93.0	52.2	132				
Chloroethane	0.307	0.0572	0.9528	0	32.2	43.8	117				S
1,1-Dichloroethene	1.06	0.0476	0.9528	0	111	61.9	141				
Methylene chloride	1.03	0.0191	0.9528	0	108	54.7	142				
trans-1,2-Dichloroethene	1.09	0.0191	0.9528	0	114	52	136				
Methyl tert-butyl ether (MTBE)	0.928	0.0476	0.9528	0	97.4	54.4	132				
1,1-Dichloroethane	1.02	0.0191	0.9528	0	107	51.8	141				
2,2-Dichloropropane	0.957	0.0476	0.9528	0	100	36	123				
cis-1,2-Dichloroethene	1.06	0.0191	0.9528	0	111	58.6	136				
Chloroform	1.05	0.0191	0.9528	0	110	53.2	129				B
1,1,1-Trichloroethane (TCA)	1.04	0.0191	0.9528	0	109	58.3	145				
1,1-Dichloropropene	1.07	0.0191	0.9528	0	113	55.1	138				
Carbon tetrachloride	0.944	0.0191	0.9528	0	99.1	53.3	144				
1,2-Dichloroethane (EDC)	0.990	0.0286	0.9528	0	104	51.3	139				
Benzene	1.02	0.0191	0.9528	0	107	63.5	133				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits





Date: 9/12/2012

**Work Order:** 1209016  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: <b>1209016-004AMS</b>		SampType: <b>MS</b>		Units: <b>mg/Kg-dry</b>		Prep Date: <b>9/10/2012</b>		RunNo: <b>5680</b>			
Client ID: <b>URS-SB-4-41</b>		Batch ID: <b>3164</b>				Analysis Date: <b>9/11/2012</b>		SeqNo: <b>111913</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	1.00	0.0286	0.9528	0	105	68.6	132				
1,2-Dichloropropane	0.985	0.0191	0.9528	0	103	59	136				
Bromodichloromethane	0.983	0.0191	0.9528	0	103	50.7	141				
Dibromomethane	0.968	0.0381	0.9528	0	102	50.6	137				
cis-1,3-Dichloropropene	1.03	0.0191	0.9528	0	108	52.3	129				
Toluene	1.07	0.0191	0.9528	0	113	67.8	129				
trans-1,3-Dichloropropylene	0.991	0.0286	0.9528	0	104	52.2	138				
1,1,2-Trichloroethane	1.03	0.0286	0.9528	0	108	51.6	137				
1,3-Dichloropropane	1.03	0.0476	0.9528	0	108	53.1	134				
Tetrachloroethene (PCE)	0.976	0.0191	0.9528	0	102	44.1	141				
Dibromochloromethane	0.554	0.0286	0.9528	0	58.1	55.3	140				
1,2-Dibromoethane (EDB)	1.01	0.00476	0.9528	0	106	50.4	136				
Chlorobenzene	0.924	0.0191	0.9528	0	97.0	60	133				
1,1,1,2-Tetrachloroethane	0.961	0.0286	0.9528	0	101	53.1	142				
Ethylbenzene	0.989	0.0286	0.9528	0	104	54.5	134				
m,p-Xylene	1.96	0.0191	1.906	0	103	53.1	132				
o-Xylene	0.982	0.0191	0.9528	0	103	53.3	139				
Styrene	0.955	0.0191	0.9528	0	100	51.1	132				
Isopropylbenzene	0.980	0.0762	0.9528	0	103	58.9	138				
Bromoform	0.911	0.0191	0.9528	0	95.6	57.9	130				
1,1,2,2-Tetrachloroethane	0.956	0.0191	0.9528	0	100	51.9	131				
n-Propylbenzene	0.992	0.0191	0.9528	0	104	53.6	140				
Bromobenzene	0.989	0.0286	0.9528	0	104	54.2	140				
1,3,5-Trimethylbenzene	0.968	0.0191	0.9528	0	102	51.8	136				
2-Chlorotoluene	0.995	0.0191	0.9528	0	104	51.6	136				
4-Chlorotoluene	0.981	0.0191	0.9528	0	103	50.1	139				
tert-Butylbenzene	1.02	0.0191	0.9528	0	107	50.5	135				
1,2,3-Trichloropropane	0.938	0.0191	0.9528	0	98.5	50.5	131				
1,2,4-Trichlorobenzene	0.957	0.0476	0.9528	0	100	50.8	130				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209016-004AMS	SampType: MS	Units: mg/Kg-dry				Prep Date: 9/10/2012			RunNo: 5680		
Client ID: URS-SB-4-41	Batch ID: 3164	Analysis Date: 9/11/2012							SeqNo: 111913		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	0.992	0.0191	0.9528	0	104	52.6	141				
4-Isopropyltoluene	0.986	0.0191	0.9528	0	104	52.9	134				
1,3-Dichlorobenzene	0.950	0.0191	0.9528	0	99.8	52.6	131				
1,4-Dichlorobenzene	0.845	0.0191	0.9528	0	88.7	52.9	129				
n-Butylbenzene	0.999	0.0191	0.9528	0	105	52.6	130				
1,2-Dichlorobenzene	0.951	0.0191	0.9528	0	99.8	55.8	129				
1,2-Dibromo-3-chloropropane	0.773	0.0286	0.9528	0	81.2	53	129				
1,2,4-Trimethylbenzene	0.970	0.0191	0.9528	0	102	50.6	137				
Hexachlorobutadiene	1.03	0.0953	0.9528	0	108	51.5	130				
Naphthalene	0.901	0.0286	0.9528	0	94.6	52.3	124				
1,2,3-Trichlorobenzene	0.931	0.0191	0.9528	0	97.8	54.4	124				
Surr: 1-Bromo-4-fluorobenzene	0.489		0.4764		103	63.1	141				
Surr: Dibromofluoromethane	0.509		0.4764		107	67.6	119				
Surr: Toluene-d8	0.545		0.4764		115	78.5	126				

**NOTES:**

S - Outlying QC recoveries were associated with this sample.

Sample ID: <b>LCS-3164</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/10/2012</b>			RunNo: <b>5680</b>		
Client ID: <b>LCSS</b>	Batch ID: <b>3164</b>	Analysis Date: <b>9/10/2012</b>						SeqNo: <b>111920</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.983	0.0600	1.000	0	98.2	37.7	136				
Chloromethane	0.708	0.0600	1.000	0	70.8	38.8	132				
Vinyl chloride	1.03	0.00200	1.000	0	103	56.1	130				
Bromomethane	1.04	0.0900	1.000	0	104	44.3	149				
Trichlorofluoromethane (CFC-11)	0.938	0.0500	1.000	0	93.8	61.8	130				
Chloroethane	1.03	0.0600	1.000	0	103	52.2	131				
1,1-Dichloroethene	0.991	0.0500	1.000	0	99.1	64.6	134				
Methylene chloride	1.06	0.0200	1.000	0	106	60.6	140				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3164</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/10/2012</b>			RunNo: <b>5680</b>		
Client ID: <b>LCSS</b>	Batch ID: <b>3164</b>	Analysis Date: <b>9/10/2012</b>						SeqNo: <b>111920</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	1.03	0.0200	1.000	0	103	68.7	127				
Methyl tert-butyl ether (MTBE)	1.13	0.0500	1.000	0	113	73.4	128				
1,1-Dichloroethane	1.03	0.0200	1.000	0	103	65.5	132				
2,2-Dichloropropane	0.930	0.0500	1.000	0	93.0	28.1	149				
cis-1,2-Dichloroethene	1.04	0.0200	1.000	0	104	71.6	123				
Chloroform	1.04	0.0200	1.000	0	104	67.5	129				B
1,1,1-Trichloroethane (TCA)	1.00	0.0200	1.000	0	100	74.4	130				
1,1-Dichloropropene	1.03	0.0200	1.000	0	103	72.7	131				
Carbon tetrachloride	0.996	0.0200	1.000	0	99.6	73	136				
1,2-Dichloroethane (EDC)	1.09	0.0300	1.000	0	109	68.7	133				
Benzene	1.01	0.0200	1.000	0	101	74.6	124				
Trichloroethene (TCE)	1.00	0.0300	1.000	0	100	71.5	134				
1,2-Dichloropropane	0.977	0.0200	1.000	0	97.7	72.7	133				
Bromodichloromethane	1.02	0.0200	1.000	0	102	76.1	136				
Dibromomethane	1.04	0.0400	1.000	0	104	70	130				
cis-1,3-Dichloropropene	1.01	0.0200	1.000	0	101	59.1	143				
Toluene	0.972	0.0200	1.000	0	97.2	81.1	123				
trans-1,3-Dichloropropylene	1.01	0.0300	1.000	0	101	49.2	149				
1,1,2-Trichloroethane	1.11	0.0300	1.000	0	111	74.5	129				
1,3-Dichloropropane	1.12	0.0500	1.000	0	112	70	130				
Tetrachloroethene (PCE)	1.15	0.0200	1.000	0	115	64.4	150				
Dibromochloromethane	0.986	0.0300	1.000	0	98.6	70.6	144				
1,2-Dibromoethane (EDB)	1.09	0.00500	1.000	0	109	70	130				
Chlorobenzene	1.01	0.0200	1.000	0	101	76.1	123				
1,1,1,2-Tetrachloroethane	1.06	0.0300	1.000	0	106	74.8	131				
Ethylbenzene	1.02	0.0300	1.000	0	102	74	129				
m,p-Xylene	2.02	0.0200	2.000	0	101	79.8	128				
o-Xylene	1.04	0.0200	1.000	0	104	77.3	128				
Styrene	1.04	0.0200	1.000	0	104	76.8	130				

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3164</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/10/2012</b>			RunNo: <b>5680</b>		
Client ID: <b>LCSS</b>	Batch ID: <b>3164</b>					Analysis Date: <b>9/10/2012</b>			SeqNo: <b>111920</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	1.01	0.0800	1.000	0	101	70	130				
Bromoform	1.09	0.0200	1.000	0	109	67	154				
1,1,2,2-Tetrachloroethane	1.07	0.0200	1.000	0	107	61.9	139				
n-Propylbenzene	0.994	0.0200	1.000	0	99.4	78	130				
Bromobenzene	1.06	0.0300	1.000	0	106	49.2	144				
1,3,5-Trimethylbenzene	1.04	0.0200	1.000	0	104	79.7	128				
2-Chlorotoluene	1.06	0.0200	1.000	0	106	76.7	129				
4-Chlorotoluene	1.03	0.0200	1.000	0	103	77.5	125				
tert-Butylbenzene	1.00	0.0200	1.000	0	100	74.2	128				
1,2,3-Trichloropropane	1.07	0.0200	1.000	0	107	67.9	136				
1,2,4-Trichlorobenzene	1.25	0.0500	1.000	0	125	65.6	137				
sec-Butylbenzene	1.04	0.0200	1.000	0	104	75.6	133				
4-Isopropyltoluene	1.09	0.0200	1.000	0	109	76.8	131				
1,3-Dichlorobenzene	1.07	0.0200	1.000	0	107	72.8	128				
1,4-Dichlorobenzene	0.954	0.0200	1.000	0	95.4	72.6	126				
n-Butylbenzene	1.15	0.0200	1.000	0	115	65.3	136				
1,2-Dichlorobenzene	1.13	0.0200	1.000	0	113	72.8	126				
1,2-Dibromo-3-chloropropane	1.11	0.0300	1.000	0	111	64.3	135				
1,2,4-Trimethylbenzene	1.04	0.0200	1.000	0	104	77.5	129				
Hexachlorobutadiene	1.79	0.100	1.000	0	179	42	151				S
Naphthalene	1.11	0.0300	1.000	0	111	64	130				
1,2,3-Trichlorobenzene	1.26	0.0200	1.000	0	126	62.1	140				
Surr: 1-Bromo-4-fluorobenzene	0.507		0.5000		101	63.1	141				
Surr: Dibromofluoromethane	0.500		0.5000		100	67.6	119				
Surr: Toluene-d8	0.491		0.5000		98.2	78.5	126				

**NOTES:**

S - Outlying spike recovery observed for Hexachlorobutadiene (high bias). There were no detections of Hexachlorobutadiene in the samples.

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/12/2012

**Work Order:** 1209016  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3164</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/10/2012</b>			RunNo: <b>5680</b>		
Client ID: <b>MBLKS</b>	Batch ID: <b>3164</b>					Analysis Date: <b>9/10/2012</b>			SeqNo: <b>111921</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0600									
Chloromethane	ND	0.0600									
Vinyl chloride	ND	0.00200									
Bromomethane	ND	0.0900									
Trichlorofluoromethane (CFC-11)	ND	0.0500									
Chloroethane	ND	0.0600									
1,1-Dichloroethene	ND	0.0500									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0500									
1,1-Dichloroethane	ND	0.0200									
2,2-Dichloropropane	ND	0.0500									
cis-1,2-Dichloroethene	ND	0.0200									
Chloroform	0.0240	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0200									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0200									
1,2-Dichloroethane (EDC)	ND	0.0300									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0300									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0400									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0300									
1,1,2-Trichloroethane	ND	0.0300									
1,3-Dichloropropane	ND	0.0500									
Tetrachloroethene (PCE)	ND	0.0200									

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3164</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>			Prep Date: <b>9/10/2012</b>			RunNo: <b>5680</b>			
Client ID: <b>MBLKS</b>	Batch ID: <b>3164</b>	Analysis Date: <b>9/10/2012</b>						SeqNo: <b>111921</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	0.0300									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0300									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0800									
Bromoform	ND	0.0200									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0300									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0200									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0200									
1,2,4-Trichlorobenzene	ND	0.0500									
sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.0300									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3164</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/10/2012</b>			RunNo: <b>5680</b>		
Client ID: <b>MBLKS</b>	Batch ID: <b>3164</b>					Analysis Date: <b>9/10/2012</b>			SeqNo: <b>111921</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: 1-Bromo-4-fluorobenzene	0.511		0.5000		102	63.1	141				
Surr: Dibromofluoromethane	0.518		0.5000		104	67.6	119				
Surr: Toluene-d8	0.518		0.5000		104	78.5	126				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209039-001ADUP	SampType: DUP	Units: µg/L			Prep Date: 9/12/2012			RunNo: 5663			
Client ID: BATCH	Batch ID: R5663				Analysis Date: 9/12/2012			SeqNo: 111367			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0	0	30	
Chloromethane	ND	1.00						0	0	30	
Vinyl chloride	ND	0.200						0	0	30	
Bromomethane	ND	1.00						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0	0	30	
Chloroethane	ND	1.00						0	0	30	
1,1-Dichloroethene	ND	1.00						0	0	30	
Methylene chloride	ND	1.00						0	0	30	
trans-1,2-Dichloroethene	ND	1.00						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0	0	30	
1,1-Dichloroethane	ND	1.00						0	0	30	
2,2-Dichloropropane	ND	2.00						0	0	30	
cis-1,2-Dichloroethene	ND	1.00						0	0	30	
Chloroform	ND	1.00						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0	0	30	
1,1-Dichloropropene	ND	1.00						0	0	30	
Carbon tetrachloride	ND	1.00						0	0	30	
1,2-Dichloroethane (EDC)	ND	1.00						0	0	30	
Benzene	ND	1.00						0	0	30	
Trichloroethene (TCE)	ND	1.00						0	0	30	
1,2-Dichloropropane	ND	1.00						0	0	30	
Bromodichloromethane	ND	1.00						0	0	30	
Dibromomethane	ND	1.00						0	0	30	
cis-1,3-Dichloropropene	ND	1.00						0	0	30	
Toluene	1.02	1.00						1.030	0.976	30	
trans-1,3-Dichloropropene	ND	1.00						0	0	30	
1,1,2-Trichloroethane	ND	1.00						0	0	30	
1,3-Dichloropropane	ND	1.00						0	0	30	
Tetrachloroethene (PCE)	ND	1.00						0	0	30	

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209039-001ADUP	SampType: DUP	Units: µg/L				Prep Date: 9/12/2012			RunNo: 5663		
Client ID: BATCH	Batch ID: R5663					Analysis Date: 9/12/2012			SeqNo: 111367		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.00						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.0100						0	0	30	
Chlorobenzene	ND	1.00						0	0	30	
1,1,1,2-Tetrachloroethane	ND	1.00						0	0	30	
Ethylbenzene	ND	1.00						0	0	30	
m,p-Xylene	ND	1.00						0	0	30	
o-Xylene	ND	1.00						0	0	30	
Styrene	ND	1.00						0	0	30	
Isopropylbenzene	ND	1.00						0	0	30	
Bromoform	ND	1.00						0	0	30	
1,1,2,2-Tetrachloroethane	ND	1.00						0	0	30	
n-Propylbenzene	ND	1.00						0	0	30	
Bromobenzene	ND	1.00						0	0	30	
1,3,5-Trimethylbenzene	ND	1.00						0	0	30	
2-Chlorotoluene	ND	1.00						0	0	30	
4-Chlorotoluene	ND	1.00						0	0	30	
tert-Butylbenzene	ND	1.00						0	0	30	
1,2,3-Trichloropropane	ND	1.00						0	0	30	
1,2,4-Trichlorobenzene	ND	2.00						0	0	30	
sec-Butylbenzene	ND	1.00						0	0	30	
4-Isopropyltoluene	ND	1.00						0	0	30	
1,3-Dichlorobenzene	ND	1.00						0	0	30	
1,4-Dichlorobenzene	ND	1.00						0	0	30	
n-Butylbenzene	ND	1.00						0	0	30	
1,2-Dichlorobenzene	ND	1.00						0	0	30	
1,2-Dibromo-3-chloropropane	ND	1.00						0	0	30	
1,2,4-Trimethylbenzene	ND	1.00						0	0	30	
Hexachlorobutadiene	ND	4.00						0	0	30	
Naphthalene	ND	1.00						0	0	30	

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209039-001ADUP	SampType: DUP	Units: µg/L			Prep Date: 9/12/2012			RunNo: 5663			
Client ID: BATCH	Batch ID: R5663				Analysis Date: 9/12/2012			SeqNo: 111367			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	ND	4.00						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	9.82		10.00		98.2	79.2	120		0		
Surr: Dibromofluoromethane	9.89		10.00		98.9	76	114		0		
Surr: Toluene-d8	10.5		10.00		105	86.8	119		0		

Sample ID: 1209039-001AMS	SampType: MS	Units: µg/L			Prep Date: 9/12/2012			RunNo: 5663			
Client ID: BATCH	Batch ID: R5663				Analysis Date: 9/12/2012			SeqNo: 111368			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.7	1.00	20.00	0	83.5	33.3	122				
Chloromethane	19.1	1.00	20.00	0	95.6	48.2	145				
Vinyl chloride	19.0	0.200	20.00	0	95.2	45.6	149				
Bromomethane	17.9	1.00	20.00	0	89.7	31.5	135				
Trichlorofluoromethane (CFC-11)	19.6	1.00	20.00	0	98.0	54.7	138				
Chloroethane	20.4	1.00	20.00	0	102	52.7	140				
1,1-Dichloroethene	19.4	1.00	20.00	0	96.8	58.2	146				
Methylene chloride	18.6	1.00	20.00	0	93.2	65.1	127				
trans-1,2-Dichloroethene	18.9	1.00	20.00	0	94.6	69	132				
Methyl tert-butyl ether (MTBE)	17.9	1.00	20.00	0	89.4	70	130				
1,1-Dichloroethane	19.6	1.00	20.00	0	97.9	74.7	133				
2,2-Dichloropropane	16.8	2.00	20.00	0	84.2	31.5	121				
cis-1,2-Dichloroethene	19.2	1.00	20.00	0	96.0	67.1	123				
Chloroform	18.5	1.00	20.00	0	92.6	58.6	123				
1,1,1-Trichloroethane (TCA)	19.8	1.00	20.00	0	99.0	64.2	146				
1,1-Dichloropropene	18.9	1.00	20.00	0	94.6	73.8	136				
Carbon tetrachloride	15.8	1.00	20.00	0	78.9	69.2	141				
1,2-Dichloroethane (EDC)	17.8	1.00	20.00	0	89.0	62.3	130				
Benzene	19.1	1.00	20.00	0	95.7	68.7	132				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/12/2012

**Work Order:** 1209016  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: 1209039-001AMS	SampType: MS	Units: µg/L				Prep Date: 9/12/2012			RunNo: 5663		
Client ID: BATCH	Batch ID: R5663	Analysis Date: 9/12/2012							SeqNo: 111368		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	18.8	1.00	20.00	0	94.2	65.7	133				
1,2-Dichloropropane	18.2	1.00	20.00	0	90.8	70	130				
Bromodichloromethane	17.1	1.00	20.00	0	85.3	59.4	139				
Dibromomethane	17.1	1.00	20.00	0	85.3	65.5	130				
cis-1,3-Dichloropropene	16.2	1.00	20.00	0	80.9	63.3	124				
Toluene	18.3	1.00	20.00	1.030	86.3	68.4	133				
trans-1,3-Dichloropropene	17.5	1.00	20.00	0	87.3	57.7	125				
1,1,2-Trichloroethane	17.5	1.00	20.00	0	87.7	59.4	127				
1,3-Dichloropropane	16.9	1.00	20.00	0	84.6	68.2	134				
Tetrachloroethene (PCE)	11.8	1.00	20.00	0	58.8	51.5	109				
Dibromochloromethane	17.4	1.00	20.00	0	86.8	66.2	138				
1,2-Dibromoethane (EDB)	17.2	0.0100	20.00	0	86.1	68.9	124				
Chlorobenzene	18.1	1.00	20.00	0	90.4	68.9	128				
1,1,1,2-Tetrachloroethane	18.4	1.00	20.00	0	92.2	67.3	135				
Ethylbenzene	18.1	1.00	20.00	0	90.6	67.3	135				
m,p-Xylene	35.9	1.00	40.00	0	89.8	63.3	135				
o-Xylene	17.7	1.00	20.00	0	88.4	67.8	131				
Styrene	16.6	1.00	20.00	0	83.2	67.2	123				
Isopropylbenzene	18.6	1.00	20.00	0	92.8	56	147				
Bromoform	16.9	1.00	20.00	0	84.6	61.4	136				
1,1,2,2-Tetrachloroethane	17.9	1.00	20.00	0	89.4	59.1	137				
n-Propylbenzene	16.5	1.00	20.00	0	82.4	57.6	142				
Bromobenzene	17.0	1.00	20.00	0	85.2	63.6	130				
1,3,5-Trimethylbenzene	16.2	1.00	20.00	0	81.2	59.9	136				
2-Chlorotoluene	17.1	1.00	20.00	0	85.6	63.4	134				
4-Chlorotoluene	16.4	1.00	20.00	0	82.2	58.4	134				
tert-Butylbenzene	17.3	1.00	20.00	0	86.4	74.2	141				
1,2,3-Trichloropropane	17.9	1.00	20.00	0	89.5	62.4	129				
1,2,4-Trichlorobenzene	14.0	2.00	20.00	0	70.2	53.7	120				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/12/2012

**Work Order:** 1209016  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: <b>1209039-001AMS</b>		SampType: <b>MS</b>		Units: <b>µg/L</b>		Prep Date: <b>9/12/2012</b>		RunNo: <b>5663</b>			
Client ID: <b>BATCH</b>		Batch ID: <b>R5663</b>				Analysis Date: <b>9/12/2012</b>		SeqNo: <b>111368</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	14.8	1.00	20.00	0	74.0	56	146				
4-Isopropyltoluene	15.4	1.00	20.00	0	76.8	62.4	134				
1,3-Dichlorobenzene	15.8	1.00	20.00	0	79.0	58.2	128				
1,4-Dichlorobenzene	15.7	1.00	20.00	0	78.5	60.1	123				
n-Butylbenzene	13.3	1.00	20.00	0	66.7	54.6	135				
1,2-Dichlorobenzene	16.4	1.00	20.00	0	81.8	62.6	124				
1,2-Dibromo-3-chloropropane	16.8	1.00	20.00	0	84.2	51.8	142				
1,2,4-Trimethylbenzene	16.0	1.00	20.00	0	79.9	63.7	132				
Hexachlorobutadiene	9.36	4.00	20.00	0	46.8	62.1	121				S
Naphthalene	18.1	1.00	20.00	0	90.6	58.7	119				
1,2,3-Trichlorobenzene	14.8	4.00	20.00	0	74.2	50.7	113				
Surr: 1-Bromo-4-fluorobenzene	9.90		10.00		99.0	79.2	120				
Surr: Dibromofluoromethane	9.99		10.00		99.9	76	114				
Surr: Toluene-d8	10.2		10.00		102	86.8	119				

**NOTES:**

S - Outlying spike recovery(ies) observed.

Sample ID: <b>LCS-R5663</b>		SampType: <b>LCS</b>		Units: <b>µg/L</b>		Prep Date: <b>9/11/2012</b>		RunNo: <b>5663</b>			
Client ID: <b>LCSW</b>		Batch ID: <b>R5663</b>				Analysis Date: <b>9/11/2012</b>		SeqNo: <b>111370</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.5	1.00	20.00	0	82.6	45.1	121				
Chloromethane	18.5	1.00	20.00	0	92.6	42.5	131				
Vinyl chloride	17.9	0.200	20.00	0	89.7	56.2	130				
Bromomethane	18.3	1.00	20.00	0	91.3	45.4	138				
Trichlorofluoromethane (CFC-11)	19.4	1.00	20.00	0	96.8	64.7	129				
Chloroethane	18.9	1.00	20.00	0	94.6	62.5	123				
1,1-Dichloroethene	18.6	1.00	20.00	0	93.3	60.7	146				
Methylene chloride	18.7	1.00	20.00	0	93.5	60.3	135				

**Qualifiers:**

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-R5663</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>				Prep Date: <b>9/11/2012</b>			RunNo: <b>5663</b>		
Client ID: <b>LCSW</b>	Batch ID: <b>R5663</b>					Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111370</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	18.8	1.00	20.00	0	93.9	71.3	129				
Methyl tert-butyl ether (MTBE)	18.3	1.00	20.00	0	91.6	75.4	123				
1,1-Dichloroethane	19.0	1.00	20.00	0	94.8	71.3	129				
2,2-Dichloropropane	17.7	2.00	20.00	0	88.4	37.8	132				
cis-1,2-Dichloroethene	18.6	1.00	20.00	0	93.2	67.5	127				
Chloroform	18.8	1.00	20.00	0	94.0	70.3	123				
1,1,1-Trichloroethane (TCA)	18.9	1.00	20.00	0	94.4	67.9	134				
1,1-Dichloropropene	18.3	1.00	20.00	0	91.3	72.1	133				
Carbon tetrachloride	18.5	1.00	20.00	0	92.6	68	136				
1,2-Dichloroethane (EDC)	17.9	1.00	20.00	0	89.5	65.8	126				
Benzene	19.0	1.00	20.00	0	95.2	75.2	124				
Trichloroethene (TCE)	18.7	1.00	20.00	0	93.6	71.9	130				
1,2-Dichloropropane	18.6	1.00	20.00	0	92.8	71.9	131				
Bromodichloromethane	17.9	1.00	20.00	0	89.5	70	130				
Dibromomethane	17.1	1.00	20.00	0	85.4	74.2	125				
cis-1,3-Dichloropropene	16.9	1.00	20.00	0	84.4	62.8	135				
Toluene	17.8	1.00	20.00	0	88.8	75.2	129				
trans-1,3-Dichloropropene	16.8	1.00	20.00	0	84.2	58.1	138				
1,1,2-Trichloroethane	16.8	1.00	20.00	0	84.2	65.4	128				
1,3-Dichloropropane	16.9	1.00	20.00	0	84.4	71.9	131				
Tetrachloroethene (PCE)	19.3	1.00	20.00	0	96.3	52.4	140				
Dibromochloromethane	17.8	1.00	20.00	0	89.2	68.7	139				
1,2-Dibromoethane (EDB)	16.6	0.0100	20.00	0	82.8	71.2	129				
Chlorobenzene	18.1	1.00	20.00	0	90.6	77.2	122				
1,1,1,2-Tetrachloroethane	18.4	1.00	20.00	0	91.8	76.2	130				
Ethylbenzene	18.2	1.00	20.00	0	91.2	78	127				
m,p-Xylene	36.9	1.00	40.00	0	92.2	77.5	130				
o-Xylene	18.2	1.00	20.00	0	90.9	77.6	126				
Styrene	17.8	1.00	20.00	0	89.2	66.8	137				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-R5663</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>				Prep Date: <b>9/11/2012</b>			RunNo: <b>5663</b>		
Client ID: <b>LCSW</b>	Batch ID: <b>R5663</b>	Analysis Date: <b>9/11/2012</b>						SeqNo: <b>111370</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	17.6	1.00	20.00	0	87.9	75.9	133				
Bromoform	16.8	1.00	20.00	0	84.2	69.9	142				
1,1,2,2-Tetrachloroethane	17.6	1.00	20.00	0	88.1	68	134				
n-Propylbenzene	17.4	1.00	20.00	0	86.8	77.1	133				
Bromobenzene	17.8	1.00	20.00	0	89.0	71.1	131				
1,3,5-Trimethylbenzene	17.2	1.00	20.00	0	86.1	76.2	133				
2-Chlorotoluene	17.7	1.00	20.00	0	88.6	67.1	137				
4-Chlorotoluene	17.2	1.00	20.00	0	86.0	70.7	132				
tert-Butylbenzene	15.8	1.00	20.00	0	79.2	71.3	139				
1,2,3-Trichloropropane	17.9	1.00	20.00	0	89.4	70.8	132				
1,2,4-Trichlorobenzene	16.6	2.00	20.00	0	83.3	61.4	139				
sec-Butylbenzene	15.6	1.00	20.00	0	78.0	77.4	136				
4-Isopropyltoluene	16.4	1.00	20.00	0	82.0	78.1	131				
1,3-Dichlorobenzene	17.4	1.00	20.00	0	86.8	73.5	125				
1,4-Dichlorobenzene	17.2	1.00	20.00	0	86.0	71.4	125				
n-Butylbenzene	16.1	1.00	20.00	0	80.4	69.8	138				
1,2-Dichlorobenzene	17.8	1.00	20.00	0	89.0	74.2	123				
1,2-Dibromo-3-chloropropane	16.4	1.00	20.00	0	82.2	66.1	138				
1,2,4-Trimethylbenzene	16.8	1.00	20.00	0	84.2	72.3	133				
Hexachlorobutadiene	11.0	4.00	20.00	0	54.8	60.9	141				S
Naphthalene	19.0	1.00	20.00	0	95.1	58.2	140				
1,2,3-Trichlorobenzene	17.0	4.00	20.00	0	84.9	61.3	133				
Surr: 1-Bromo-4-fluorobenzene	9.92		10.00		99.2	79.2	120				
Surr: Dibromofluoromethane	10.1		10.00		101	76	114				
Surr: Toluene-d8	10.0		10.00		100	86.8	119				

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/12/2012

**Work Order:** 1209016  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-R5663</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>				Prep Date: <b>9/11/2012</b>			RunNo: <b>5663</b>		
Client ID: <b>MBLKW</b>	Batch ID: <b>R5663</b>					Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111371</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									
Chloromethane	ND	1.00									
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	1.00									
2,2-Dichloropropane	ND	2.00									
cis-1,2-Dichloroethene	ND	1.00									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									
Benzene	ND	1.00									
Trichloroethene (TCE)	ND	1.00									
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									
Dibromomethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
Toluene	ND	1.00									
trans-1,3-Dichloropropene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/12/2012

Work Order: 1209016  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-R5663</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>				Prep Date: <b>9/11/2012</b>			RunNo: <b>5663</b>		
Client ID: <b>MBLKW</b>	Batch ID: <b>R5663</b>					Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111371</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.0100									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									
4-Isopropyltoluene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2,4-Trimethylbenzene	ND	1.00									
Hexachlorobutadiene	ND	4.00									
Naphthalene	ND	1.00									

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





Date: 9/12/2012

**Work Order:** 1209016  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-R5663</b>		SampType: <b>MBLK</b>		Units: <b>µg/L</b>		Prep Date: <b>9/11/2012</b>			RunNo: <b>5663</b>		
Client ID: <b>MBLKW</b>		Batch ID: <b>R5663</b>					Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111371</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	ND	4.00									
Surr: 1-Bromo-4-fluorobenzene	9.87		10.00		98.7	79.2	120				
Surr: Dibromofluoromethane	9.84		10.00		98.4	76	114				
Surr: Toluene-d8	10.2		10.00		102	86.8	119				

Sample ID: <b>ICV-R5663</b>		SampType: <b>ICV</b>			Units: <b>µg/L</b>		Prep Date: <b>9/11/2012</b>			RunNo: <b>5663</b>		
Client ID: <b>ICV</b>		Batch ID: <b>R5663</b>			Analysis Date: <b>9/11/2012</b>			SeqNo: <b>111373</b>				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Hexachlorobutadiene	17.4	2.00	20.00	0	86.8	70	130				
Surr: 1-Bromo-4-fluorobenzene	9.89		10.00		98.9	79.2	120				
Surr: Dibromofluoromethane	9.94		10.00		99.4	76	114				
Surr: Toluene-d8	10.6		10.00		106	86.8	119				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Client Name: **URS**

 Work Order Number: **1209016**

 Logged by: **Troy Zehr**

 Date Received: **9/5/2012 4:30:00 PM**

## Chain of Custody

1. Were custodial seals present? Yes ☐ No ☐ Not Required ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Client

## Log In

4. Coolers are present? Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all coolers received at a temperature of >0° C to 10.0°C Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. Is there headspace present in VOA vials? Yes ☐ No ☒ NA ☐
12. Did all sample containers arrive in good condition?(unbroken) Yes ☒ No ☐
13. Does paperwork match bottle labels? Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met? Yes ☒ No ☐

## Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

18. Additional remarks/Discrepancies

## Item Information

Item #	Temp °C	Condition
Cooler	1.9	Good



Tel: 206-352-3790  
Fax: 206-352-7178

5117

Address:

1771

FAX:

210

Project No.:

### Chain of Custody Record

Examination/Project No. (internal)

Figure 2

9.5.12

## Index

Project Name:

Location

Collected by:

Belgian T74 Data Co

1753 Knicker Ave E. Seattle, Wash

Autism Polio!

[illegible]

Metal Analysis (Circle)	NIC-3
EPA8	PRIORITY POLLUTANT:
TAL	individual Ag Al As B Ba Be Ca Cd Co Cr Cu Hg K Mg Mn Ni Pb Se Sn Sr Ti U V Zn Pb Bi Br C Cl F Ga Ge I In Ir Li Lu Os Pd Pt Rh S Sb Sc Si Sm Ta Te W Xe Y Zr

**Anions (Circle):	Nitrate	Nitrite	Sulfate	Bromide	O-Phosphate	Fluoride	(Molar) Weight =

☐ Return to Client ☐ Discard/By Lab (A few days sooner if window is installed after 30 days)

Date/Time 11/11/2019 11:11:11 AM

124

Time /

Rebecca Gibbard Date/Time

Receiver

Date / Time

titl	next day	1700
------	----------	------



Tel: 206-352-3790  
Fax: 206-352-7178

521

Rel:

Raubvogel

12345678910111213141516171819202122232425262728293031323334353637383940414243444546474849505152535455565758596061626364656667686970717273747576777879808182838485868788899091929394959697989910010110210310410510610710810911011111211311411511611711811912012112212312412512612712812913013113213313413513613713813914014114214314414514614714814915015115215315415515615715815916016116216316416516616716816917017117217317417517617717817918018118218318418518618718818919019119219319419519619719819920020120220320420520620720820921021121221321421521621721821922022122222322422522622722822923023123223323423523623723823924024124224324424524624724824925025125225325425525625725825926026126226326426526626726826927027127227327427527627727827928028128228328428528628728828929029129229329429529629729829930030130230330430530630730830931031131231331431531631731831932032132232332432532632732832933033133233333433533633733833934034134234334434534634734834935035135235335435535635735835936036136236336436536636736836937037137237337437537637737837938038138238338438538638738838939039139239339439539639739839940040140240340440540640740840941041141241341441541641741841942042142242342442542642742842943043143243343443543643743843944044144244344444544644744844945045145245345445545645745845946046146246346446546646746846947047147247347447547647747847948048148248348448548648748848949049149249349449549649749849950050150250350450550650750850951051151251351451551651751851952052152252352452552652752852953053153253353453553653753853954054154254354454554654754854955055155255355455555655755855956056156256356456556656756856957057157257357457557657757857958058158258358458558658758858959059159259359459559659759859960060160260360460560660760860961061161261361461561661761861962062162262362462562662762862963063163263363463563663763863964064164264364464564664764864965065165265365465565665765865966066166266366466566666766866967067167267367467567667767867968068168268368468568668768868969069169269369469569669769869970070170270370470570670770870971071171271371471571671771871972072172272372472572672772872973073173273373473573673773873974074174274374474574674774874975075175275375475575675775875976076176276376476576676776876977077177277377477577677777877978078178278378478578678778878979079179279379479579679779879980080180280380480580680780880981081181281381481581681781881982082182282382482582682782882983083183283383483583683783883984084184284384484584684784884985085185285385485585685785885986086186286386486586686786886987087187287387487587687787887988088188288388488588688788888989089189289389489589689789889990090190290390490590690790890991091191291391491591691791891992092192292392492592692792892993093193293393493593693793893994094194294394494594694794894995095195295395495595695795895996096196296396496596696796896997097197297397497597697797897998098198298398498598698798898999099199299399499599699799899910001001100210031004100510061007100810091010101110121013101410151016101710181019102010211022102310241025102610271028102910301031103210331034103510361037103810391040104110421043104410451046104710481049105010511052105310541055105610571058105910601061106210631064106510661067106810691070107110721073107410751076107710781079108010811082108310841085108610871088108910901091109210931094109510961097109810991100110111021103110411051106110711081109111011111112111311141115111611171118111911201121112211231124112511261127112811291130113111321133113411351136113711381139114011411142114311441145114611471148114911501151115211531154115511561157115811591160116111621163116411651166116711681169117011711172117311741175117611771178117911801181118211831184118511861187118811891190119111921193119411951196119711981199120012011202120312041205120612071208120912101211121212131214121512161217121812191220122112221223122412251226122712281229123012311232123312341235123612371238123912401241124212431244124512461247124812491250125112521253125412551256125712581259126012611262126312641265126612671268126912701271127212731274127512761277127812791280128112821283128412851286128712881289129012911292129312941295129612971298129913001

Regulation 11

Project No.:

### Chain of Custody Record

Laboratory Project No. (Internet)

2388

21.5.12

Date:

**Fax: 206-352-7178**

Seattle, WA 98103

Seattle

Project Name:

**Location:**

Collected by:

Belknap TPH Ink Cap

1752  
AD

[illegible]

Distribution: White - Lab, Yellow - File, Pink - Originator?

[www.fremontanalytical.com](http://www.fremontanalytical.com)



1311 N. 35th St.  
Seattle, WA 98103  
T: (206) 352-3790  
F: (206) 352-7178  
info@fremontanalytical.com

**URS Corporation**  
David Raubvogel  
1501 4th Ave., Suite 1400  
Seattle, Washington 98101

**RE: Belshaw TPH Data Gap**  
**Lab ID: 1209010**

September 07, 2012

**Attention David Raubvogel:**

Fremont Analytical, Inc. received 14 sample(s) on 9/4/2012 for the analyses presented in the following report.

***Gasoline by NWTPH-Gx***  
***Sample Moisture (Percent Moisture)***  
***Total Metals by EPA Method 200.8***  
***Total Metals by EPA Method 6020***  
***Volatile Organic Compounds by EPA Method 8260***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Michael Dee  
Sr. Chemist / Principal





Date: 09/07/2012

**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap  
**Lab Order:** 1209010

## Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1209010-001	URS-SB-1-26	09/04/2012 8:40 AM	09/04/2012 5:15 PM
1209010-002	URS-SB-1-31	09/04/2012 9:20 AM	09/04/2012 5:15 PM
1209010-003	URS-SB-1-GW	09/04/2012 8:50 AM	09/04/2012 5:15 PM
1209010-004	URS-SB-1-41	09/04/2012 9:40 AM	09/04/2012 5:15 PM
1209010-005	URS-SB-1-45.5	09/04/2012 9:45 AM	09/04/2012 5:15 PM
1209010-006	URS-SB-2-25.5	09/04/2012 11:10 AM	09/04/2012 5:15 PM
1209010-007	URS-SB-2-GW	09/04/2012 11:20 AM	09/04/2012 5:15 PM
1209010-008	URS-SB-2-36	09/04/2012 12:00 PM	09/04/2012 5:15 PM
1209010-009	URS-SB-2-46	09/04/2012 12:10 PM	09/04/2012 5:15 PM
1209010-010	URS-SB-3-20.5	09/04/2012 2:15 PM	09/04/2012 5:15 PM
1209010-011	URS-SB-3-31	09/04/2012 2:25 PM	09/04/2012 5:15 PM
1209010-012	URS-SB-3-GW	09/04/2012 2:50 PM	09/04/2012 5:15 PM
1209010-013	URS-SB-3-36	09/04/2012 3:25 PM	09/04/2012 5:15 PM
1209010-014	URS-SB-3-46.5	09/04/2012 3:45 PM	09/04/2012 5:15 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

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**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

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**I. SAMPLE RECEIPT:**

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

**II. GENERAL REPORTING COMMENTS:**

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

**III. ANALYSES AND EXCEPTIONS:**

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 8:40:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-001

Matrix: Soil

Client Sample ID: URS-SB-1-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Gasoline by NWTPH-Gx**

Batch ID: R5616

Analyst: EM

Gasoline	ND	3.99		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Gasoline Range Organics C6-C12	4,300	399	D	mg/Kg-dry	100	9/6/2012 11:25:00 AM
Surr: 1,2-Dichloroethane-d4	91.3	65-135		%REC	1	9/6/2012 4:33:00 AM
Surr: Fluorobenzene	94.4	65-135		%REC	1	9/6/2012 4:33:00 AM

**NOTES:**

GRO - Indicates the presence of unresolved compounds eluting from toluene to dodecane (~C7-&gt;C12).

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3132

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0479		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Chloromethane	0.0503	0.0479	B	mg/Kg-dry	1	9/6/2012 4:33:00 AM
Vinyl chloride	ND	0.00160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Bromomethane	ND	0.0719		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0399		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Chloroethane	ND	0.0479		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,1-Dichloroethene	ND	0.0399		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Methylene chloride	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
trans-1,2-Dichloroethene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0399		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,1-Dichloroethane	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
2,2-Dichloropropane	ND	0.0399		mg/Kg-dry	1	9/6/2012 4:33:00 AM
cis-1,2-Dichloroethene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Chloroform	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,1-Dichloropropene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Carbon tetrachloride	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,2-Dichloroethane (EDC)	ND	0.0240		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Benzene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Trichloroethene (TCE)	ND	0.0240		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,2-Dichloropropane	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Bromodichloromethane	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Dibromomethane	ND	0.0319		mg/Kg-dry	1	9/6/2012 4:33:00 AM
cis-1,3-Dichloropropene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Toluene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
trans-1,3-Dichloropropylene	ND	0.0240		mg/Kg-dry	1	9/6/2012 4:33:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 8:40:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-001

Matrix: Soil

Client Sample ID: URS-SB-1-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

1,1,2-Trichloroethane	ND	0.0240		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,3-Dichloropropane	ND	0.0399		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Tetrachloroethene (PCE)	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Dibromochloromethane	ND	0.0240		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,2-Dibromoethane (EDB)	ND	0.00399		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Chlorobenzene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0240		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Ethylbenzene	ND	0.0240		mg/Kg-dry	1	9/6/2012 4:33:00 AM
m,p-Xylene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
o-Xylene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Styrene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Isopropylbenzene	0.744	0.0639		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Bromoform	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
n-Propylbenzene	7.83	0.160	D	mg/Kg-dry	10	9/6/2012 4:03:00 AM
Bromobenzene	ND	0.0240		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,3,5-Trimethylbenzene	8.42	0.160	D	mg/Kg-dry	10	9/6/2012 4:03:00 AM
2-Chlorotoluene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
4-Chlorotoluene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
tert-Butylbenzene	0.334	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,2,3-Trichloropropane	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,2,4-Trichlorobenzene	ND	0.0399		mg/Kg-dry	1	9/6/2012 4:33:00 AM
sec-Butylbenzene	4.80	0.160	D	mg/Kg-dry	10	9/6/2012 4:03:00 AM
4-Isopropyltoluene	3.93	0.160	D	mg/Kg-dry	10	9/6/2012 4:03:00 AM
1,3-Dichlorobenzene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,4-Dichlorobenzene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
n-Butylbenzene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,2-Dichlorobenzene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0240		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,2,4-Trimethylbenzene	8.35	0.160	D	mg/Kg-dry	10	9/6/2012 4:03:00 AM
Hexachlorobutadiene	ND	0.0798		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Naphthalene	ND	0.0240		mg/Kg-dry	1	9/6/2012 4:33:00 AM
1,2,3-Trichlorobenzene	ND	0.0160		mg/Kg-dry	1	9/6/2012 4:33:00 AM
Surr: 1-Bromo-4-fluorobenzene	102	63.1-141		%REC	1	9/6/2012 4:33:00 AM
Surr: Dibromofluoromethane	88.4	67.6-119		%REC	1	9/6/2012 4:33:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

**Client:** URS Corporation

**Collection Date:** 9/4/2012 8:40:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209010-001

**Matrix:** Soil

**Client Sample ID:** URS-SB-1-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3132

Analyst: EM

Surr: Toluene-d8

115

78.5-126

%REC

1

9/6/2012 4:33:00 AM

**Total Metals by EPA Method 6020**

Batch ID: 3121

Analyst: SG

Lead

2.94

0.180

mg/Kg-dry

1

9/7/2012 1:41:15 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R5588

Analyst: AO

Percent Moisture

14.7

wt%

1

9/5/2012 12:04:47 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 9:20:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-002

Matrix: Soil

Client Sample ID: URS-SB-1-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Gasoline by NWTPH-Gx**

Batch ID: R5616

Analyst: EM

Gasoline	ND	3.17		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Gasoline Range Organics C6-C12	30.2	3.17		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Surr: 1,2-Dichloroethane-d4	94.6	65-135		%REC	1	9/6/2012 6:30:00 AM
Surr: Fluorobenzene	95.3	65-135		%REC	1	9/6/2012 6:30:00 AM

**NOTES:**

GRO - Indicates the presence of unresolved compounds eluting from toluene to dodecane (~C7-&gt;C12).

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3132

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0380		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Chloromethane	0.0506	0.0380	B	mg/Kg-dry	1	9/6/2012 6:30:00 AM
Vinyl chloride	ND	0.00127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Bromomethane	ND	0.0570		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0317		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Chloroethane	ND	0.0380		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,1-Dichloroethene	ND	0.0317		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Methylene chloride	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
trans-1,2-Dichloroethene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0317		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,1-Dichloroethane	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
2,2-Dichloropropane	ND	0.0317		mg/Kg-dry	1	9/6/2012 6:30:00 AM
cis-1,2-Dichloroethene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Chloroform	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,1-Dichloropropene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Carbon tetrachloride	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,2-Dichloroethane (EDC)	ND	0.0190		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Benzene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Trichloroethene (TCE)	ND	0.0190		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,2-Dichloropropane	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Bromodichloromethane	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Dibromomethane	ND	0.0253		mg/Kg-dry	1	9/6/2012 6:30:00 AM
cis-1,3-Dichloropropene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Toluene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
trans-1,3-Dichloropropylene	ND	0.0190		mg/Kg-dry	1	9/6/2012 6:30:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 9:20:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-002

Matrix: Soil

Client Sample ID: URS-SB-1-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

1,1,2-Trichloroethane	ND	0.0190		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,3-Dichloropropane	ND	0.0317		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Tetrachloroethene (PCE)	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Dibromochloromethane	ND	0.0190		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,2-Dibromoethane (EDB)	ND	0.00317		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Chlorobenzene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0190		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Ethylbenzene	ND	0.0190		mg/Kg-dry	1	9/6/2012 6:30:00 AM
m,p-Xylene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
o-Xylene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Styrene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Isopropylbenzene	ND	0.0506		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Bromoform	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
n-Propylbenzene	0.112	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Bromobenzene	ND	0.0190		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,3,5-Trimethylbenzene	0.242	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
2-Chlorotoluene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
4-Chlorotoluene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
tert-Butylbenzene	0.112	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,2,3-Trichloropropane	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,2,4-Trichlorobenzene	ND	0.0317		mg/Kg-dry	1	9/6/2012 6:30:00 AM
sec-Butylbenzene	0.0320	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
4-Isopropyltoluene	0.0231	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,3-Dichlorobenzene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,4-Dichlorobenzene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
n-Butylbenzene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,2-Dichlorobenzene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0190		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,2,4-Trimethylbenzene	0.697	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Hexachlorobutadiene	ND	0.0633		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Naphthalene	ND	0.0190		mg/Kg-dry	1	9/6/2012 6:30:00 AM
1,2,3-Trichlorobenzene	ND	0.0127		mg/Kg-dry	1	9/6/2012 6:30:00 AM
Surr: 1-Bromo-4-fluorobenzene	105	63.1-141		%REC	1	9/6/2012 6:30:00 AM
Surr: Dibromofluoromethane	97.2	67.6-119		%REC	1	9/6/2012 6:30:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 9:20:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-002

Matrix: Soil

Client Sample ID: URS-SB-1-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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### Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

Surr: Toluene-d8

99.7

78.5-126

%REC

1

9/6/2012 6:30:00 AM

### Total Metals by EPA Method 6020

Batch ID: 3121

Analyst: SG

Lead

1.31

0.164

mg/Kg-dry

1

9/7/2012 1:50:54 PM

### Sample Moisture (Percent Moisture)

Batch ID: R5588

Analyst: AO

Percent Moisture

13.9

wt%

1

9/5/2012 12:04:47 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 8:50:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-003

Matrix: Water

Client Sample ID: URS-SB-1-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5633

Analyst: PH

Gasoline	13,300	50.0	E	µg/L	1	9/7/2012 6:24:00 AM
Surr: 1,2-Dichloroethane-d4	94.2	65-135		%REC	1	9/7/2012 6:24:00 AM
Surr: Fluorobenzene	99.4	65-135		%REC	1	9/7/2012 6:24:00 AM

### NOTES:

Sample was decanted and homogenized due to the large volume of solids in 40mL VOAs. Insufficient sample to perform dilution.

## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5632

Analyst: PH

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Chloromethane	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Vinyl chloride	ND	0.200		µg/L	1	9/7/2012 6:24:00 AM
Bromomethane	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Chloroethane	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Methylene chloride	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	9/7/2012 6:24:00 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Chloroform	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Carbon tetrachloride	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Benzene	57.0	1.00	E	µg/L	1	9/7/2012 6:24:00 AM
Trichloroethene (TCE)	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Bromodichloromethane	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Dibromomethane	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Toluene	15.0	1.00		µg/L	1	9/7/2012 6:24:00 AM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 8:50:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-003

Matrix: Water

Client Sample ID: URS-SB-1-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5632

Analyst: PH

1,3-Dichloropropane	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Dibromochloromethane	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	9/7/2012 6:24:00 AM
Chlorobenzene	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Ethylbenzene	15.1	1.00		µg/L	1	9/7/2012 6:24:00 AM
m,p-Xylene	42.8	1.00		µg/L	1	9/7/2012 6:24:00 AM
o-Xylene	10.2	1.00		µg/L	1	9/7/2012 6:24:00 AM
Styrene	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
Isopropylbenzene	28.7	1.00		µg/L	1	9/7/2012 6:24:00 AM
Bromoform	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
n-Propylbenzene	93.0	1.00	E	µg/L	1	9/7/2012 6:24:00 AM
Bromobenzene	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,3,5-Trimethylbenzene	191	1.00	E	µg/L	1	9/7/2012 6:24:00 AM
2-Chlorotoluene	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
4-Chlorotoluene	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
tert-Butylbenzene	1.55	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	9/7/2012 6:24:00 AM
sec-Butylbenzene	19.6	1.00		µg/L	1	9/7/2012 6:24:00 AM
4-Isopropyltoluene	19.9	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
n-Butylbenzene	91.3	1.00	E	µg/L	1	9/7/2012 6:24:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,2,4-Trimethylbenzene	621	1.00	E	µg/L	1	9/7/2012 6:24:00 AM
Hexachlorobutadiene	ND	4.00		µg/L	1	9/7/2012 6:24:00 AM
Naphthalene	9.37	1.00		µg/L	1	9/7/2012 6:24:00 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	9/7/2012 6:24:00 AM
Surr: 1-Bromo-4-fluorobenzene	115	79.2-120		%REC	1	9/7/2012 6:24:00 AM
Surr: Dibromofluoromethane	97.1	76-114		%REC	1	9/7/2012 6:24:00 AM
Surr: Toluene-d8	98.1	86.8-119		%REC	1	9/7/2012 6:24:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





## Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

**Client:** URS Corporation

**Collection Date:** 9/4/2012 8:50:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209010-003

**Matrix:** Water

**Client Sample ID:** URS-SB-1-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: R5632

Analyst: PH

**NOTES:**

Sample was decanted and homogenized due to the large volume of solids in 40mL VOAs. Insufficient sample to perform dilution.

**Total Metals by EPA Method 200.8**

Batch ID: 3133

Analyst: SG

Lead	16.3	1.00		µg/L	1	9/7/2012 3:58:36 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 9:40:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-004

Matrix: Soil

Client Sample ID: URS-SB-1-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5616

Analyst: EM

Gasoline	ND	3.09		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Gasoline Range Organics C6-C12	10.2	3.09		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Surr: 1,2-Dichloroethane-d4	99.1	65-135		%REC	1	9/6/2012 7:59:00 AM
Surr: Fluorobenzene	98.8	65-135		%REC	1	9/6/2012 7:59:00 AM

### NOTES:

GRO - Indicates the presence of unresolved compounds eluting from toluene to dodecane (~C7->C12).

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0371		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Chloromethane	ND	0.0371		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Vinyl chloride	ND	0.00124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Bromomethane	ND	0.0557		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0309		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Chloroethane	ND	0.0371		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,1-Dichloroethene	ND	0.0309		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Methylene chloride	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
trans-1,2-Dichloroethene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0309		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,1-Dichloroethane	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
2,2-Dichloropropane	ND	0.0309		mg/Kg-dry	1	9/6/2012 7:59:00 AM
cis-1,2-Dichloroethene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Chloroform	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,1-Dichloropropene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Carbon tetrachloride	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,2-Dichloroethane (EDC)	ND	0.0186		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Benzene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Trichloroethene (TCE)	ND	0.0186		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,2-Dichloropropane	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Bromodichloromethane	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Dibromomethane	ND	0.0247		mg/Kg-dry	1	9/6/2012 7:59:00 AM
cis-1,3-Dichloropropene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Toluene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
trans-1,3-Dichloropropylene	ND	0.0186		mg/Kg-dry	1	9/6/2012 7:59:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 9:40:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-004

Matrix: Soil

Client Sample ID: URS-SB-1-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

1,1,2-Trichloroethane	ND	0.0186		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,3-Dichloropropane	ND	0.0309		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Tetrachloroethene (PCE)	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Dibromochloromethane	ND	0.0186		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,2-Dibromoethane (EDB)	ND	0.00309		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Chlorobenzene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0186		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Ethylbenzene	ND	0.0186		mg/Kg-dry	1	9/6/2012 7:59:00 AM
m,p-Xylene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
o-Xylene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Styrene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Isopropylbenzene	ND	0.0495		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Bromoform	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
n-Propylbenzene	0.0529	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Bromobenzene	ND	0.0186		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,3,5-Trimethylbenzene	0.112	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
2-Chlorotoluene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
4-Chlorotoluene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
tert-Butylbenzene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,2,3-Trichloropropane	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,2,4-Trichlorobenzene	ND	0.0309		mg/Kg-dry	1	9/6/2012 7:59:00 AM
sec-Butylbenzene	0.0238	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
4-Isopropyltoluene	0.0148	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,3-Dichlorobenzene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,4-Dichlorobenzene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
n-Butylbenzene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,2-Dichlorobenzene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0186		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,2,4-Trimethylbenzene	0.283	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Hexachlorobutadiene	ND	0.0618		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Naphthalene	ND	0.0186		mg/Kg-dry	1	9/6/2012 7:59:00 AM
1,2,3-Trichlorobenzene	ND	0.0124		mg/Kg-dry	1	9/6/2012 7:59:00 AM
Surr: 1-Bromo-4-fluorobenzene	101	63.1-141		%REC	1	9/6/2012 7:59:00 AM
Surr: Dibromofluoromethane	98.8	67.6-119		%REC	1	9/6/2012 7:59:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 9:40:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-004

Matrix: Soil

Client Sample ID: URS-SB-1-41

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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### Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

Surr: Toluene-d8

102

78.5-126

%REC

1

9/6/2012 7:59:00 AM

### Total Metals by EPA Method 6020

Batch ID: 3121

Analyst: SG

Lead

1.88

0.166

mg/Kg-dry

1

9/7/2012 2:00:33 PM

### Sample Moisture (Percent Moisture)

Batch ID: R5588

Analyst: AO

Percent Moisture

12.7

wt%

1

9/5/2012 12:04:47 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 11:10:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-006

Matrix: Soil

Client Sample ID: URS-SB-2-25.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5616

Analyst: EM

Gasoline	ND	5.07		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Surr: 1,2-Dichloroethane-d4	98.4	65-135		%REC	1	9/6/2012 8:28:00 AM
Surr: Fluorobenzene	97.0	65-135		%REC	1	9/6/2012 8:28:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0609		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Chloromethane	ND	0.0609		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Vinyl chloride	ND	0.00203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Bromomethane	ND	0.0913		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0507		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Chloroethane	ND	0.0609		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,1-Dichloroethene	ND	0.0507		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Methylene chloride	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
trans-1,2-Dichloroethene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0507		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,1-Dichloroethane	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
2,2-Dichloropropane	ND	0.0507		mg/Kg-dry	1	9/6/2012 8:28:00 AM
cis-1,2-Dichloroethene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Chloroform	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,1-Dichloropropene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Carbon tetrachloride	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,2-Dichloroethane (EDC)	ND	0.0304		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Benzene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Trichloroethene (TCE)	ND	0.0304		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,2-Dichloropropane	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Bromodichloromethane	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Dibromomethane	ND	0.0406		mg/Kg-dry	1	9/6/2012 8:28:00 AM
cis-1,3-Dichloropropene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Toluene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
trans-1,3-Dichloropropylene	ND	0.0304		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,1,2-Trichloroethane	ND	0.0304		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,3-Dichloropropane	ND	0.0507		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Tetrachloroethene (PCE)	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 11:10:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-006

Matrix: Soil

Client Sample ID: URS-SB-2-25.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

Dibromochloromethane	ND	0.0304		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,2-Dibromoethane (EDB)	ND	0.00507		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Chlorobenzene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0304		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Ethylbenzene	ND	0.0304		mg/Kg-dry	1	9/6/2012 8:28:00 AM
m,p-Xylene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
o-Xylene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Styrene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Isopropylbenzene	ND	0.0812		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Bromoform	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
n-Propylbenzene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Bromobenzene	ND	0.0304		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,3,5-Trimethylbenzene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
2-Chlorotoluene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
4-Chlorotoluene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
tert-Butylbenzene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,2,3-Trichloropropane	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,2,4-Trichlorobenzene	ND	0.0507		mg/Kg-dry	1	9/6/2012 8:28:00 AM
sec-Butylbenzene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
4-Isopropyltoluene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,3-Dichlorobenzene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,4-Dichlorobenzene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
n-Butylbenzene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,2-Dichlorobenzene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0304		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,2,4-Trimethylbenzene	0.0386	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Hexachlorobutadiene	ND	0.101		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Naphthalene	ND	0.0304		mg/Kg-dry	1	9/6/2012 8:28:00 AM
1,2,3-Trichlorobenzene	ND	0.0203		mg/Kg-dry	1	9/6/2012 8:28:00 AM
Surr: 1-Bromo-4-fluorobenzene	101	63.1-141		%REC	1	9/6/2012 8:28:00 AM
Surr: Dibromofluoromethane	98.2	67.6-119		%REC	1	9/6/2012 8:28:00 AM
Surr: Toluene-d8	101	78.5-126		%REC	1	9/6/2012 8:28:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

**Client:** URS Corporation

**Collection Date:** 9/4/2012 11:10:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209010-006

**Matrix:** Soil

**Client Sample ID:** URS-SB-2-25.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3121

Analyst: SG

Lead	1.15	0.183		mg/Kg-dry	1	9/7/2012 2:10:12 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5588

Analyst: AO

Percent Moisture	14.7			wt%	1	9/5/2012 12:04:47 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 11:20:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-007

Matrix: Water

Client Sample ID: URS-SB-2-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Gasoline by NWTPH-Gx**

Batch ID: R5633

Analyst: PH

Gasoline	ND	50.0		µg/L	1	9/7/2012 6:55:00 AM
Surr: 1,2-Dichloroethane-d4	97.1	65-135		%REC	1	9/7/2012 6:55:00 AM
Surr: Fluorobenzene	106	65-135		%REC	1	9/7/2012 6:55:00 AM

**NOTES:**

Sample was decanted and homogenized due to the large volume of solids in 40mL VOAs.

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: R5632

Analyst: PH

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Chloromethane	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Vinyl chloride	ND	0.200		µg/L	1	9/7/2012 6:55:00 AM
Bromomethane	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Chloroethane	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Methylene chloride	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	9/7/2012 6:55:00 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Chloroform	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Carbon tetrachloride	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Benzene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Trichloroethene (TCE)	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Bromodichloromethane	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Dibromomethane	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Toluene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 11:20:00 AM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-007

Matrix: Water

Client Sample ID: URS-SB-2-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5632

Analyst: PH

1,3-Dichloropropane	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Dibromochloromethane	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	9/7/2012 6:55:00 AM
Chlorobenzene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Ethylbenzene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
m,p-Xylene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
o-Xylene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Styrene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Isopropylbenzene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Bromoform	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
n-Propylbenzene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Bromobenzene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
2-Chlorotoluene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
4-Chlorotoluene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
tert-Butylbenzene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	9/7/2012 6:55:00 AM
sec-Butylbenzene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
n-Butylbenzene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
Hexachlorobutadiene	ND	4.00		µg/L	1	9/7/2012 6:55:00 AM
Naphthalene	ND	1.00		µg/L	1	9/7/2012 6:55:00 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	9/7/2012 6:55:00 AM
Surr: 1-Bromo-4-fluorobenzene	99.2	79.2-120		%REC	1	9/7/2012 6:55:00 AM
Surr: Dibromofluoromethane	96.6	76-114		%REC	1	9/7/2012 6:55:00 AM
Surr: Toluene-d8	98.9	86.8-119		%REC	1	9/7/2012 6:55:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





## Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

**Client:** URS Corporation

**Collection Date:** 9/4/2012 11:20:00 AM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209010-007

**Matrix:** Water

**Client Sample ID:** URS-SB-2-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: R5632

Analyst: PH

**NOTES:**

Sample was decanted and homogenized due to the large volume of solids in 40mL VOAs.

**Total Metals by EPA Method 200.8**

Batch ID: 3133

Analyst: SG

Lead	4.49	1.00		µg/L	1	9/7/2012 4:36:52 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 12:00:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-008

Matrix: Soil

Client Sample ID: URS-SB-2-36

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Gasoline by NWTPH-Gx**

Batch ID: R5616

Analyst: EM

Gasoline	ND	4.21		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Surr: 1,2-Dichloroethane-d4	96.8	65-135		%REC	1	9/6/2012 8:58:00 AM
Surr: Fluorobenzene	94.9	65-135		%REC	1	9/6/2012 8:58:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3132

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0505		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Chloromethane	ND	0.0505		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Vinyl chloride	ND	0.00168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Bromomethane	ND	0.0758		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0421		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Chloroethane	ND	0.0505		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,1-Dichloroethene	ND	0.0421		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Methylene chloride	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
trans-1,2-Dichloroethene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0421		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,1-Dichloroethane	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
2,2-Dichloropropane	ND	0.0421		mg/Kg-dry	1	9/6/2012 8:58:00 AM
cis-1,2-Dichloroethene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Chloroform	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,1-Dichloropropene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Carbon tetrachloride	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,2-Dichloroethane (EDC)	ND	0.0253		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Benzene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Trichloroethene (TCE)	ND	0.0253		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,2-Dichloropropane	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Bromodichloromethane	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Dibromomethane	ND	0.0337		mg/Kg-dry	1	9/6/2012 8:58:00 AM
cis-1,3-Dichloropropene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Toluene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
trans-1,3-Dichloropropylene	ND	0.0253		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,1,2-Trichloroethane	ND	0.0253		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,3-Dichloropropane	ND	0.0421		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Tetrachloroethene (PCE)	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 12:00:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-008

Matrix: Soil

Client Sample ID: URS-SB-2-36

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

Dibromochloromethane	ND	0.0253		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,2-Dibromoethane (EDB)	ND	0.00421		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Chlorobenzene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0253		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Ethylbenzene	ND	0.0253		mg/Kg-dry	1	9/6/2012 8:58:00 AM
m,p-Xylene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
o-Xylene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Styrene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Isopropylbenzene	ND	0.0674		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Bromoform	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
n-Propylbenzene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Bromobenzene	ND	0.0253		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,3,5-Trimethylbenzene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
2-Chlorotoluene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
4-Chlorotoluene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
tert-Butylbenzene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,2,3-Trichloropropane	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,2,4-Trichlorobenzene	ND	0.0421		mg/Kg-dry	1	9/6/2012 8:58:00 AM
sec-Butylbenzene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
4-Isopropyltoluene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,3-Dichlorobenzene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,4-Dichlorobenzene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
n-Butylbenzene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,2-Dichlorobenzene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0253		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,2,4-Trimethylbenzene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Hexachlorobutadiene	ND	0.0842		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Naphthalene	ND	0.0253		mg/Kg-dry	1	9/6/2012 8:58:00 AM
1,2,3-Trichlorobenzene	ND	0.0168		mg/Kg-dry	1	9/6/2012 8:58:00 AM
Surr: 1-Bromo-4-fluorobenzene	99.8	63.1-141		%REC	1	9/6/2012 8:58:00 AM
Surr: Dibromofluoromethane	99.3	67.6-119		%REC	1	9/6/2012 8:58:00 AM
Surr: Toluene-d8	102	78.5-126		%REC	1	9/6/2012 8:58:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

**Client:** URS Corporation

**Collection Date:** 9/4/2012 12:00:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209010-008

**Matrix:** Soil

**Client Sample ID:** URS-SB-2-36

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3121

Analyst: SG

Lead	1.65	0.176		mg/Kg-dry	1	9/7/2012 2:19:51 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5588

Analyst: AO

Percent Moisture	11.3			wt%	1	9/5/2012 12:04:47 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 12:10:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-009

Matrix: Soil

Client Sample ID: URS-SB-2-46

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5616

Analyst: EM

Gasoline	ND	5.16		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Surr: 1,2-Dichloroethane-d4	93.6	65-135		%REC	1	9/6/2012 9:27:00 AM
Surr: Fluorobenzene	96.0	65-135		%REC	1	9/6/2012 9:27:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0619		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Chloromethane	ND	0.0619		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Vinyl chloride	ND	0.00206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Bromomethane	ND	0.0929		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0516		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Chloroethane	ND	0.0619		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,1-Dichloroethene	ND	0.0516		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Methylene chloride	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
trans-1,2-Dichloroethene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0516		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,1-Dichloroethane	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
2,2-Dichloropropane	ND	0.0516		mg/Kg-dry	1	9/6/2012 9:27:00 AM
cis-1,2-Dichloroethene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Chloroform	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,1-Dichloropropene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Carbon tetrachloride	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,2-Dichloroethane (EDC)	ND	0.0310		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Benzene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Trichloroethene (TCE)	ND	0.0310		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,2-Dichloropropane	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Bromodichloromethane	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Dibromomethane	ND	0.0413		mg/Kg-dry	1	9/6/2012 9:27:00 AM
cis-1,3-Dichloropropene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Toluene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
trans-1,3-Dichloropropylene	ND	0.0310		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,1,2-Trichloroethane	ND	0.0310		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,3-Dichloropropane	ND	0.0516		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Tetrachloroethene (PCE)	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 12:10:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-009

Matrix: Soil

Client Sample ID: URS-SB-2-46

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

Dibromochloromethane	ND	0.0310		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,2-Dibromoethane (EDB)	ND	0.00516		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Chlorobenzene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0310		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Ethylbenzene	ND	0.0310		mg/Kg-dry	1	9/6/2012 9:27:00 AM
m,p-Xylene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
o-Xylene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Styrene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Isopropylbenzene	ND	0.0825		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Bromoform	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
n-Propylbenzene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Bromobenzene	ND	0.0310		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,3,5-Trimethylbenzene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
2-Chlorotoluene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
4-Chlorotoluene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
tert-Butylbenzene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,2,3-Trichloropropane	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,2,4-Trichlorobenzene	ND	0.0516		mg/Kg-dry	1	9/6/2012 9:27:00 AM
sec-Butylbenzene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
4-Isopropyltoluene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,3-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,4-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
n-Butylbenzene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,2-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0310		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,2,4-Trimethylbenzene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Hexachlorobutadiene	ND	0.103		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Naphthalene	ND	0.0310		mg/Kg-dry	1	9/6/2012 9:27:00 AM
1,2,3-Trichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/6/2012 9:27:00 AM
Surr: 1-Bromo-4-fluorobenzene	98.8	63.1-141		%REC	1	9/6/2012 9:27:00 AM
Surr: Dibromofluoromethane	99.4	67.6-119		%REC	1	9/6/2012 9:27:00 AM
Surr: Toluene-d8	103	78.5-126		%REC	1	9/6/2012 9:27:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 12:10:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-009

Matrix: Soil

Client Sample ID: URS-SB-2-46

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3121

Analyst: SG

Lead	1.95	0.170		mg/Kg-dry	1	9/7/2012 2:29:30 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5588

Analyst: AO

Percent Moisture	12.4			wt%	1	9/5/2012 12:04:47 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 2:15:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-010

Matrix: Soil

Client Sample ID: URS-SB-3-20.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5616

Analyst: EM

Gasoline	ND	3.89		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Surr: 1,2-Dichloroethane-d4	96.7	65-135		%REC	1	9/6/2012 9:57:00 AM
Surr: Fluorobenzene	96.1	65-135		%REC	1	9/6/2012 9:57:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0466		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Chloromethane	ND	0.0466		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Vinyl chloride	ND	0.00155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Bromomethane	ND	0.0699		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0389		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Chloroethane	ND	0.0466		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,1-Dichloroethene	ND	0.0389		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Methylene chloride	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
trans-1,2-Dichloroethene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0389		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,1-Dichloroethane	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
2,2-Dichloropropane	ND	0.0389		mg/Kg-dry	1	9/6/2012 9:57:00 AM
cis-1,2-Dichloroethene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Chloroform	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,1-Dichloropropene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Carbon tetrachloride	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,2-Dichloroethane (EDC)	ND	0.0233		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Benzene	0.0455	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Trichloroethene (TCE)	ND	0.0233		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,2-Dichloropropane	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Bromodichloromethane	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Dibromomethane	ND	0.0311		mg/Kg-dry	1	9/6/2012 9:57:00 AM
cis-1,3-Dichloropropene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Toluene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
trans-1,3-Dichloropropylene	ND	0.0233		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,1,2-Trichloroethane	ND	0.0233		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,3-Dichloropropane	ND	0.0389		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Tetrachloroethene (PCE)	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 2:15:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-010

Matrix: Soil

Client Sample ID: URS-SB-3-20.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

Dibromochloromethane	ND	0.0233		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,2-Dibromoethane (EDB)	ND	0.00389		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Chlorobenzene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0233		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Ethylbenzene	ND	0.0233		mg/Kg-dry	1	9/6/2012 9:57:00 AM
m,p-Xylene	0.131	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
o-Xylene	0.0525	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Styrene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Isopropylbenzene	ND	0.0622		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Bromoform	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
n-Propylbenzene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Bromobenzene	ND	0.0233		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,3,5-Trimethylbenzene	0.0509	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
2-Chlorotoluene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
4-Chlorotoluene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
tert-Butylbenzene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,2,3-Trichloropropane	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,2,4-Trichlorobenzene	ND	0.0389		mg/Kg-dry	1	9/6/2012 9:57:00 AM
sec-Butylbenzene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
4-Isopropyltoluene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,3-Dichlorobenzene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,4-Dichlorobenzene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
n-Butylbenzene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,2-Dichlorobenzene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0233		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,2,4-Trimethylbenzene	0.0952	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Hexachlorobutadiene	ND	0.0777		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Naphthalene	0.0385	0.0233		mg/Kg-dry	1	9/6/2012 9:57:00 AM
1,2,3-Trichlorobenzene	ND	0.0155		mg/Kg-dry	1	9/6/2012 9:57:00 AM
Surr: 1-Bromo-4-fluorobenzene	99.4	63.1-141		%REC	1	9/6/2012 9:57:00 AM
Surr: Dibromofluoromethane	97.1	67.6-119		%REC	1	9/6/2012 9:57:00 AM
Surr: Toluene-d8	100	78.5-126		%REC	1	9/6/2012 9:57:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

**Client:** URS Corporation

**Collection Date:** 9/4/2012 2:15:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209010-010

**Matrix:** Soil

**Client Sample ID:** URS-SB-3-20.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3121

Analyst: SG

Lead	1.53	0.161		mg/Kg-dry	1	9/7/2012 2:48:48 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5588

Analyst: AO

Percent Moisture	7.31			wt%	1	9/5/2012 12:04:47 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 2:25:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-011

Matrix: Soil

Client Sample ID: URS-SB-3-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Gasoline by NWTPH-Gx**

Batch ID: R5616

Analyst: EM

Gasoline	ND	4.03		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Gasoline Range Organics C6-C12	5.15	4.03		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Surr: 1,2-Dichloroethane-d4	95.6	65-135		%REC	1	9/6/2012 10:26:00 AM
Surr: Fluorobenzene	95.1	65-135		%REC	1	9/6/2012 10:26:00 AM

**NOTES:**

GRO - Indicates the presence of unresolved compounds eluting from toluene to dodecane (~C7-&gt;C12).

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: 3132

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0483		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Chloromethane	ND	0.0483		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Vinyl chloride	ND	0.00161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Bromomethane	ND	0.0725		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0403		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Chloroethane	ND	0.0483		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,1-Dichloroethene	ND	0.0403		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Methylene chloride	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
trans-1,2-Dichloroethene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0403		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,1-Dichloroethane	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
2,2-Dichloropropane	ND	0.0403		mg/Kg-dry	1	9/6/2012 10:26:00 AM
cis-1,2-Dichloroethene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Chloroform	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,1-Dichloropropene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Carbon tetrachloride	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,2-Dichloroethane (EDC)	ND	0.0242		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Benzene	0.586	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Trichloroethene (TCE)	ND	0.0242		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,2-Dichloropropane	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Bromodichloromethane	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Dibromomethane	ND	0.0322		mg/Kg-dry	1	9/6/2012 10:26:00 AM
cis-1,3-Dichloropropene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Toluene	0.318	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
trans-1,3-Dichloropropylene	ND	0.0242		mg/Kg-dry	1	9/6/2012 10:26:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 2:25:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-011

Matrix: Soil

Client Sample ID: URS-SB-3-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

1,1,2-Trichloroethane	ND	0.0242		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,3-Dichloropropane	ND	0.0403		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Tetrachloroethene (PCE)	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Dibromochloromethane	ND	0.0242		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,2-Dibromoethane (EDB)	ND	0.00403		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Chlorobenzene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0242		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Ethylbenzene	0.232	0.0242		mg/Kg-dry	1	9/6/2012 10:26:00 AM
m,p-Xylene	0.721	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
o-Xylene	0.226	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Styrene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Isopropylbenzene	ND	0.0644		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Bromoform	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
n-Propylbenzene	0.0471	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Bromobenzene	ND	0.0242		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,3,5-Trimethylbenzene	0.0834	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
2-Chlorotoluene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
4-Chlorotoluene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
tert-Butylbenzene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,2,3-Trichloropropane	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,2,4-Trichlorobenzene	ND	0.0403		mg/Kg-dry	1	9/6/2012 10:26:00 AM
sec-Butylbenzene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
4-Isopropyltoluene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,3-Dichlorobenzene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,4-Dichlorobenzene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
n-Butylbenzene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,2-Dichlorobenzene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0242		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,2,4-Trimethylbenzene	0.321	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Hexachlorobutadiene	ND	0.0806		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Naphthalene	0.0834	0.0242		mg/Kg-dry	1	9/6/2012 10:26:00 AM
1,2,3-Trichlorobenzene	ND	0.0161		mg/Kg-dry	1	9/6/2012 10:26:00 AM
Surr: 1-Bromo-4-fluorobenzene	102	63.1-141		%REC	1	9/6/2012 10:26:00 AM
Surr: Dibromofluoromethane	99.0	67.6-119		%REC	1	9/6/2012 10:26:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 2:25:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-011

Matrix: Soil

Client Sample ID: URS-SB-3-31

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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### Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

Surr: Toluene-d8

101

78.5-126

%REC

1

9/6/2012 10:26:00 AM

### Total Metals by EPA Method 6020

Batch ID: 3121

Analyst: SG

Lead

1.28

0.160

mg/Kg-dry

1

9/7/2012 2:58:26 PM

### Sample Moisture (Percent Moisture)

Batch ID: R5588

Analyst: AO

Percent Moisture

13.2

wt%

1

9/5/2012 12:04:47 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 2:50:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-012

Matrix: Water

Client Sample ID: URS-SB-3-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Gasoline by NWTPH-Gx**

Batch ID: R5633

Analyst: PH

Gasoline	25,600	50.0	E	µg/L	1	9/7/2012 7:25:00 AM
Surr: 1,2-Dichloroethane-d4	94.2	65-135		%REC	1	9/7/2012 7:25:00 AM
Surr: Fluorobenzene	97.3	65-135		%REC	1	9/7/2012 7:25:00 AM

**NOTES:**

Sample was decanted and homogenized due to the large volume of solids in 40mL VOAs. Insufficient sample to perform dilution.

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: R5632

Analyst: PH

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Chloromethane	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Vinyl chloride	ND	0.200		µg/L	1	9/7/2012 7:25:00 AM
Bromomethane	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Chloroethane	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Methylene chloride	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	9/7/2012 7:25:00 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Chloroform	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Carbon tetrachloride	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Benzene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Trichloroethene (TCE)	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Bromodichloromethane	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Dibromomethane	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Toluene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 2:50:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-012

Matrix: Water

Client Sample ID: URS-SB-3-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5632

Analyst: PH

1,3-Dichloropropane	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Dibromochloromethane	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	9/7/2012 7:25:00 AM
Chlorobenzene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Ethylbenzene	5.41	1.00		µg/L	1	9/7/2012 7:25:00 AM
m,p-Xylene	12.2	1.00		µg/L	1	9/7/2012 7:25:00 AM
o-Xylene	1.12	1.00		µg/L	1	9/7/2012 7:25:00 AM
Styrene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
Isopropylbenzene	37.6	1.00		µg/L	1	9/7/2012 7:25:00 AM
Bromoform	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
n-Propylbenzene	123	1.00	E	µg/L	1	9/7/2012 7:25:00 AM
Bromobenzene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,3,5-Trimethylbenzene	245	1.00	E	µg/L	1	9/7/2012 7:25:00 AM
2-Chlorotoluene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
4-Chlorotoluene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
tert-Butylbenzene	1.72	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	9/7/2012 7:25:00 AM
sec-Butylbenzene	23.4	1.00		µg/L	1	9/7/2012 7:25:00 AM
4-Isopropyltoluene	14.9	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
n-Butylbenzene	120	1.00	E	µg/L	1	9/7/2012 7:25:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,2,4-Trimethylbenzene	816	1.00	E	µg/L	1	9/7/2012 7:25:00 AM
Hexachlorobutadiene	ND	4.00		µg/L	1	9/7/2012 7:25:00 AM
Naphthalene	10.1	1.00		µg/L	1	9/7/2012 7:25:00 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	9/7/2012 7:25:00 AM
Surr: 1-Bromo-4-fluorobenzene	123	79.2-120	S	%REC	1	9/7/2012 7:25:00 AM
Surr: Dibromofluoromethane	97.7	76-114		%REC	1	9/7/2012 7:25:00 AM
Surr: Toluene-d8	103	86.8-119		%REC	1	9/7/2012 7:25:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

**Client:** URS Corporation

**Collection Date:** 9/4/2012 2:50:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209010-012

**Matrix:** Water

**Client Sample ID:** URS-SB-3-GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: R5632

Analyst: PH

**NOTES:**

S - High surrogate recovery attributed to TPH interference. The method is in control as indicated by the Method Blank (MB) & Laboratory Control Sample (LCS).

Sample was decanted and homogenized due to the large volume of solids in 40mL VOAs. Insufficient sample to perform dilution.

**Total Metals by EPA Method 200.8**

Batch ID: 3133

Analyst: SG

Lead	23.0	1.00		µg/L	1	9/7/2012 4:46:32 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

**Client:** URS Corporation

**Collection Date:** 9/4/2012 3:25:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209010-013

**Matrix:** Soil

**Client Sample ID:** URS-SB-3-36

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5616

Analyst: EM

Gasoline	ND	4.92		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Surr: 1,2-Dichloroethane-d4	94.9	65-135		%REC	1	9/6/2012 10:55:00 AM
Surr: Fluorobenzene	95.0	65-135		%REC	1	9/6/2012 10:55:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	0.0590		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Chloromethane	ND	0.0590		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Vinyl chloride	ND	0.00197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Bromomethane	ND	0.0886		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Trichlorofluoromethane (CFC-11)	ND	0.0492		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Chloroethane	ND	0.0590		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,1-Dichloroethene	ND	0.0492		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Methylene chloride	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
trans-1,2-Dichloroethene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.0492		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,1-Dichloroethane	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
2,2-Dichloropropane	ND	0.0492		mg/Kg-dry	1	9/6/2012 10:55:00 AM
cis-1,2-Dichloroethene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Chloroform	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,1,1-Trichloroethane (TCA)	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,1-Dichloropropene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Carbon tetrachloride	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,2-Dichloroethane (EDC)	ND	0.0295		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Benzene	0.0379	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Trichloroethene (TCE)	ND	0.0295		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,2-Dichloropropane	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Bromodichloromethane	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Dibromomethane	ND	0.0394		mg/Kg-dry	1	9/6/2012 10:55:00 AM
cis-1,3-Dichloropropene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Toluene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
trans-1,3-Dichloropropylene	ND	0.0295		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,1,2-Trichloroethane	ND	0.0295		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,3-Dichloropropane	ND	0.0492		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Tetrachloroethene (PCE)	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

Client: URS Corporation

Collection Date: 9/4/2012 3:25:00 PM

Project: Belshaw TPH Data Gap

Lab ID: 1209010-013

Matrix: Soil

Client Sample ID: URS-SB-3-36

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: 3132

Analyst: EM

Dibromochloromethane	ND	0.0295		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,2-Dibromoethane (EDB)	ND	0.00492		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Chlorobenzene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,1,1,2-Tetrachloroethane	ND	0.0295		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Ethylbenzene	ND	0.0295		mg/Kg-dry	1	9/6/2012 10:55:00 AM
m,p-Xylene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
o-Xylene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Styrene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Isopropylbenzene	ND	0.0787		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Bromoform	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,1,2,2-Tetrachloroethane	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
n-Propylbenzene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Bromobenzene	ND	0.0295		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,3,5-Trimethylbenzene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
2-Chlorotoluene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
4-Chlorotoluene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
tert-Butylbenzene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,2,3-Trichloropropane	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,2,4-Trichlorobenzene	ND	0.0492		mg/Kg-dry	1	9/6/2012 10:55:00 AM
sec-Butylbenzene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
4-Isopropyltoluene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,3-Dichlorobenzene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,4-Dichlorobenzene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
n-Butylbenzene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,2-Dichlorobenzene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,2-Dibromo-3-chloropropane	ND	0.0295		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,2,4-Trimethylbenzene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Hexachlorobutadiene	ND	0.0984		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Naphthalene	ND	0.0295		mg/Kg-dry	1	9/6/2012 10:55:00 AM
1,2,3-Trichlorobenzene	ND	0.0197		mg/Kg-dry	1	9/6/2012 10:55:00 AM
Surr: 1-Bromo-4-fluorobenzene	99.4	63.1-141		%REC	1	9/6/2012 10:55:00 AM
Surr: Dibromofluoromethane	97.6	67.6-119		%REC	1	9/6/2012 10:55:00 AM
Surr: Toluene-d8	102	78.5-126		%REC	1	9/6/2012 10:55:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1209010

Date Reported: 9/7/2012

**Client:** URS Corporation

**Collection Date:** 9/4/2012 3:25:00 PM

**Project:** Belshaw TPH Data Gap

**Lab ID:** 1209010-013

**Matrix:** Soil

**Client Sample ID:** URS-SB-3-36

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 3121

Analyst: SG

Lead	1.93	0.175		mg/Kg-dry	1	9/7/2012 3:08:05 PM
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**Sample Moisture (Percent Moisture)**

Batch ID: R5588

Analyst: AO

Percent Moisture	15.9			wt%	1	9/5/2012 12:04:47 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Total Metals by EPA Method 200.8

Sample ID: <b>MB-3133</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>		Prep Date: <b>9/6/2012</b>	RunNo: <b>5631</b>
Client ID: <b>MBLKW</b>	Batch ID: <b>3133</b>	Analysis Date: <b>9/7/2012</b>		SeqNo: <b>110771</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead	ND	1.00			
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Sample ID: <b>LCS-3133</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>		Prep Date: <b>9/6/2012</b>	RunNo: <b>5631</b>
Client ID: <b>LCSW</b>	Batch ID: <b>3133</b>	Analysis Date: <b>9/7/2012</b>		SeqNo: <b>110772</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead	45.9	1.00	50.00	0	91.8	85	115			
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Sample ID: <b>1209010-003BDUP</b>	SampType: <b>DUP</b>	Units: <b>µg/L</b>		Prep Date: <b>9/6/2012</b>	RunNo: <b>5631</b>
Client ID: <b>URS-SB-1-GW</b>	Batch ID: <b>3133</b>	Analysis Date: <b>9/7/2012</b>		SeqNo: <b>110774</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead	14.6	1.00					16.34	11.1	30	
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Sample ID: <b>1209010-003BMS</b>	SampType: <b>MS</b>	Units: <b>µg/L</b>		Prep Date: <b>9/6/2012</b>	RunNo: <b>5631</b>
Client ID: <b>URS-SB-1-GW</b>	Batch ID: <b>3133</b>	Analysis Date: <b>9/7/2012</b>		SeqNo: <b>110775</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead	208	1.00	250.0	16.34	76.5	70	130			
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Sample ID: <b>1209010-003BMSD</b>	SampType: <b>MSD</b>	Units: <b>µg/L</b>		Prep Date: <b>9/6/2012</b>	RunNo: <b>5631</b>
Client ID: <b>URS-SB-1-GW</b>	Batch ID: <b>3133</b>	Analysis Date: <b>9/7/2012</b>		SeqNo: <b>110776</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead	196	1.00	250.0	16.34	71.8	70	130	207.6	5.83	30
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**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Total Metals by EPA Method 6020**

Sample ID: <b>MB-3121</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>		Prep Date: <b>9/6/2012</b>	RunNo: <b>5627</b>
Client ID: <b>MBLKS</b>	Batch ID: <b>3121</b>	Analysis Date: <b>9/7/2012</b>		SeqNo: <b>110676</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead ND 0.200

Sample ID: <b>LCS-3121</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>		Prep Date: <b>9/6/2012</b>	RunNo: <b>5627</b>
Client ID: <b>LCSS</b>	Batch ID: <b>3121</b>	Analysis Date: <b>9/7/2012</b>		SeqNo: <b>110677</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead 43.3 0.200 56.70 0 76.3 65.26 134.57

Sample ID: <b>1208209-001BMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>		Prep Date: <b>9/6/2012</b>	RunNo: <b>5627</b>
Client ID: <b>BATCH</b>	Batch ID: <b>3121</b>	Analysis Date: <b>9/7/2012</b>		SeqNo: <b>110681</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead 17.7 0.164 20.49 1.433 79.2 75 125

Sample ID: <b>1208209-001BMSD</b>	SampType: <b>MSD</b>	Units: <b>mg/Kg-dry</b>		Prep Date: <b>9/6/2012</b>	RunNo: <b>5627</b>
Client ID: <b>BATCH</b>	Batch ID: <b>3121</b>	Analysis Date: <b>9/7/2012</b>		SeqNo: <b>110682</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead 16.2 0.157 19.62 1.433 75.4 75 125 17.67 8.54 30

Sample ID: <b>1209010-009BDUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>		Prep Date: <b>9/6/2012</b>	RunNo: <b>5627</b>
Client ID: <b>URS-SB-2-46</b>	Batch ID: <b>3121</b>	Analysis Date: <b>9/7/2012</b>		SeqNo: <b>110731</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Lead 1.48 0.169 1.947 27.1 30

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Gasoline by NWTPH-Gx

Sample ID: <b>1209010-001ADUP</b>	SampType: <b>DUP</b>	Units: <b>mg/Kg-dry</b>				Prep Date: <b>9/5/2012</b>			RunNo: <b>5616</b>		
Client ID: <b>URS-SB-1-26</b>	Batch ID: <b>R5616</b>					Analysis Date: <b>9/6/2012</b>			SeqNo: <b>110451</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	3.99						0	0	30	
Gasoline Range Organics C6-C12	2,380	3.99						2,378	0.0430	30	E
Surr: 1,2-Dichloroethane-d4	0.353		0.3992		88.4	65	135		0		
Surr: Fluorobenzene	0.375		0.3992		93.9	65	135		0		

**NOTES:**

GRO - Indicates the presence of unresolved compounds eluting from toluene to dodecane (~C7-&gt;C12).

Sample ID: <b>LCS-R5616</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/5/2012</b>			RunNo: <b>5616</b>		
Client ID: <b>LCSS</b>	Batch ID: <b>R5616</b>					Analysis Date: <b>9/6/2012</b>			SeqNo: <b>110462</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	19.0	5.00	25.00	0	76.1	65	135				
Surr: 1,2-Dichloroethane-d4	0.506		0.5000		101	65	135				
Surr: Fluorobenzene	0.497		0.5000		99.4	65	135				

Sample ID: <b>MB-R5616</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/5/2012</b>			RunNo: <b>5616</b>		
Client ID: <b>MBLKS</b>	Batch ID: <b>R5616</b>					Analysis Date: <b>9/6/2012</b>			SeqNo: <b>110463</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	5.00									
Surr: 1,2-Dichloroethane-d4	0.490		0.5000		98.0	65	135				
Surr: Fluorobenzene	0.480		0.5000		96.0	65	135				

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Gasoline by NWTPH-Gx

Sample ID: <b>MB-R5633</b>		SampType: <b>MBLK</b>		Units: <b>µg/L</b>		Prep Date: <b>9/7/2012</b>			RunNo: <b>5633</b>			
Client ID: <b>MBLKW</b>		Batch ID: <b>R5633</b>					Analysis Date: <b>9/7/2012</b>			SeqNo: <b>110852</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Gasoline	ND	50.0									
Surr: 1,2-Dichloroethane-d4	9.89		10.00		98.9	65	135				
Surr: Fluorobenzene	10.3		10.00		103	65	135				

Sample ID: <b>LCS-R5633</b>		SampType: <b>LCS</b>			Units: <b>µg/L</b>		Prep Date: <b>9/7/2012</b>			RunNo: <b>5633</b>		
Client ID: <b>LCSW</b>		Batch ID: <b>R5633</b>			Analysis Date: <b>9/7/2012</b>					SeqNo: <b>110853</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Gasoline	380	50.0	500.0	0	75.9	65	135				
Surr: 1,2-Dichloroethane-d4	9.74		10.00		97.4	65	135				
Surr: Fluorobenzene	10.2		10.00		102	65	135				

Sample ID: 1209002-024ADUP		SampType: DUP			Units: µg/L		Prep Date: 9/7/2012			RunNo: 5633		
Client ID: BATCH		Batch ID: R5633			Analysis Date: 9/7/2012					SeqNo: 110855		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Gasoline	ND	50.0						0	0	30	
Surr: 1,2-Dichloroethane-d4	10.1		10.00		101	65	135		0		
Surr: Fluorobenzene	10.2		10.00		102	65	135		0		

**Qualifiers:**

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
R	RPD outside accepted recovery limits

D	Dilution was required
J	Analyte detected below quantitation limits
RL	Reporting Limit

E	Value above quantitation range
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3132</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/5/2012</b>			RunNo: <b>5613</b>		
Client ID: <b>LCSS</b>	Batch ID: <b>3132</b>	Analysis Date: <b>9/6/2012</b>							SeqNo: <b>110364</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.859	0.0600	1.000	0	85.9	37.7	136				B
Chloromethane	0.963	0.0600	1.000	0	96.3	38.8	132				
Vinyl chloride	0.975	0.00200	1.000	0	97.5	56.1	130				
Bromomethane	1.14	0.0900	1.000	0	114	44.3	149				
Trichlorofluoromethane (CFC-11)	0.937	0.0500	1.000	0	93.7	61.8	130				
Chloroethane	0.987	0.0600	1.000	0	98.7	52.2	131				
1,1-Dichloroethene	0.955	0.0500	1.000	0	95.5	64.6	134				
Methylene chloride	0.975	0.0200	1.000	0	97.5	60.6	140				
trans-1,2-Dichloroethene	1.01	0.0200	1.000	0	101	68.7	127				
Methyl tert-butyl ether (MTBE)	1.03	0.0500	1.000	0	103	73.4	128				
1,1-Dichloroethane	1.04	0.0200	1.000	0	104	65.5	132				
2,2-Dichloropropane	0.856	0.0500	1.000	0	85.6	28.1	149				
cis-1,2-Dichloroethene	0.981	0.0200	1.000	0	98.1	71.6	123				
Chloroform	1.06	0.0200	1.000	0	106	67.5	129				
1,1,1-Trichloroethane (TCA)	1.01	0.0200	1.000	0	101	74.4	130				
1,1-Dichloropropene	1.00	0.0200	1.000	0	100	72.7	131				
Carbon tetrachloride	1.01	0.0200	1.000	0	101	73	136				
1,2-Dichloroethane (EDC)	1.07	0.0300	1.000	0	107	68.7	133				
Benzene	1.04	0.0200	1.000	0	104	74.6	124				
Trichloroethene (TCE)	1.06	0.0300	1.000	0	106	71.5	134				
1,2-Dichloropropane	0.968	0.0200	1.000	0	96.8	72.7	133				
Bromodichloromethane	1.05	0.0200	1.000	0	105	76.1	136				
Dibromomethane	1.06	0.0400	1.000	0	106	70	130				
cis-1,3-Dichloropropene	1.03	0.0200	1.000	0	103	59.1	143				
Toluene	1.03	0.0200	1.000	0	103	81.1	123				
trans-1,3-Dichloropropylene	1.03	0.0300	1.000	0	103	49.2	149				
1,1,2-Trichloroethane	1.04	0.0300	1.000	0	104	74.5	129				
1,3-Dichloropropane	1.05	0.0500	1.000	0	105	70	130				
Tetrachloroethene (PCE)	1.10	0.0200	1.000	0	110	64.4	150				

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3132</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/5/2012</b>			RunNo: <b>5613</b>		
Client ID: <b>LCSS</b>	Batch ID: <b>3132</b>	Analysis Date: <b>9/6/2012</b>							SeqNo: <b>110364</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	0.699	0.0300	1.000	0	69.9	70.6	144				S
1,2-Dibromoethane (EDB)	1.03	0.00500	1.000	0	103	70	130				
Chlorobenzene	1.05	0.0200	1.000	0	105	76.1	123				
1,1,1,2-Tetrachloroethane	1.09	0.0300	1.000	0	109	74.8	131				
Ethylbenzene	1.04	0.0300	1.000	0	104	74	129				
m,p-Xylene	2.04	0.0200	2.000	0	102	79.8	128				
o-Xylene	1.04	0.0200	1.000	0	104	77.3	128				
Styrene	1.04	0.0200	1.000	0	104	76.8	130				
Isopropylbenzene	1.02	0.0800	1.000	0	102	70	130				
Bromoform	1.03	0.0200	1.000	0	103	67	154				
1,1,2,2-Tetrachloroethane	0.982	0.0200	1.000	0	98.2	61.9	139				
n-Propylbenzene	1.01	0.0200	1.000	0	101	78	130				
Bromobenzene	1.03	0.0300	1.000	0	103	49.2	144				
1,3,5-Trimethylbenzene	1.04	0.0200	1.000	0	104	79.7	128				
2-Chlorotoluene	1.04	0.0200	1.000	0	104	76.7	129				
4-Chlorotoluene	1.04	0.0200	1.000	0	104	77.5	125				
tert-Butylbenzene	0.990	0.0200	1.000	0	99.0	74.2	128				
1,2,3-Trichloropropane	1.03	0.0200	1.000	0	103	67.9	136				
1,2,4-Trichlorobenzene	1.10	0.0500	1.000	0	110	65.6	137				
sec-Butylbenzene	0.998	0.0200	1.000	0	99.8	75.6	133				
4-Isopropyltoluene	1.04	0.0200	1.000	0	104	76.8	131				
1,3-Dichlorobenzene	1.06	0.0200	1.000	0	106	72.8	128				
1,4-Dichlorobenzene	1.02	0.0200	1.000	0	102	72.6	126				
n-Butylbenzene	1.01	0.0200	1.000	0	101	65.3	136				
1,2-Dichlorobenzene	1.07	0.0200	1.000	0	107	72.8	126				
1,2-Dibromo-3-chloropropane	1.01	0.0300	1.000	0	101	64.3	135				
1,2,4-Trimethylbenzene	1.03	0.0200	1.000	0	103	77.5	129				
Hexachlorobutadiene	1.16	0.100	1.000	0	116	42	151				
Naphthalene	1.06	0.0300	1.000	0	106	64	130				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-3132</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>				Prep Date: <b>9/5/2012</b>			RunNo: <b>5613</b>		
Client ID: <b>LCSS</b>	Batch ID: <b>3132</b>					Analysis Date: <b>9/6/2012</b>			SeqNo: <b>110364</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	1.15	0.0200	1.000	0	115	62.1	140				
Surr: 1-Bromo-4-fluorobenzene	0.509		0.5000		102	63.1	141				
Surr: Dibromofluoromethane	0.498		0.5000		99.6	67.6	119				
Surr: Toluene-d8	0.502		0.5000		100	78.5	126				

**NOTES:**

S - Outlying spike recovery observed for Chlorodibromomethane. The initial Calibration Verification (ICV) - 2nd source was included and in within control limits.

Sample ID: <b>MB-3132</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>			Prep Date: <b>9/5/2012</b>			RunNo: <b>5613</b>			
Client ID: <b>MBLKS</b>	Batch ID: <b>3132</b>	Analysis Date: <b>9/6/2012</b>						SeqNo: <b>110365</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0600									
Chloromethane	0.0685	0.0600									
Vinyl chloride	ND	0.00200									
Bromomethane	ND	0.0900									
Trichlorofluoromethane (CFC-11)	ND	0.0500									
Chloroethane	ND	0.0600									
1,1-Dichloroethene	ND	0.0500									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0500									
1,1-Dichloroethane	ND	0.0200									
2,2-Dichloropropane	ND	0.0500									
cis-1,2-Dichloroethene	ND	0.0200									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0200									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0200									
1,2-Dichloroethane (EDC)	ND	0.0300									

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3132</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>			Prep Date: <b>9/5/2012</b>			RunNo: <b>5613</b>			
Client ID: <b>MBLKS</b>	Batch ID: <b>3132</b>	Analysis Date: <b>9/6/2012</b>						SeqNo: <b>110365</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	ND	0.0200
Trichloroethene (TCE)	ND	0.0300
1,2-Dichloropropane	ND	0.0200
Bromodichloromethane	ND	0.0200
Dibromomethane	ND	0.0400
cis-1,3-Dichloropropene	ND	0.0200
Toluene	ND	0.0200
trans-1,3-Dichloropropylene	ND	0.0300
1,1,2-Trichloroethane	ND	0.0300
1,3-Dichloropropane	ND	0.0500
Tetrachloroethene (PCE)	ND	0.0200
Dibromochloromethane	ND	0.0300
1,2-Dibromoethane (EDB)	ND	0.00500
Chlorobenzene	ND	0.0200
1,1,1,2-Tetrachloroethane	ND	0.0300
Ethylbenzene	ND	0.0300
m,p-Xylene	ND	0.0200
o-Xylene	ND	0.0200
Styrene	ND	0.0200
Isopropylbenzene	ND	0.0800
Bromoform	ND	0.0200
1,1,2,2-Tetrachloroethane	ND	0.0200
n-Propylbenzene	ND	0.0200
Bromobenzene	ND	0.0300
1,3,5-Trimethylbenzene	ND	0.0200
2-Chlorotoluene	ND	0.0200
4-Chlorotoluene	ND	0.0200
tert-Butylbenzene	ND	0.0200
1,2,3-Trichloropropane	ND	0.0200

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-3132</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>			Prep Date: <b>9/5/2012</b>			RunNo: <b>5613</b>			
Client ID: <b>MBLKS</b>	Batch ID: <b>3132</b>	Analysis Date: <b>9/6/2012</b>						SeqNo: <b>110365</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	ND	0.0500									
sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.0300									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: 1-Bromo-4-fluorobenzene	0.505		0.5000		101	63.1	141				
Surr: Dibromofluoromethane	0.514		0.5000		103	67.6	119				
Surr: Toluene-d8	0.497		0.5000		99.4	78.5	126				

Sample ID: 1209010-001ADUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 9/5/2012			RunNo: 5613			
Client ID: URS-SB-1-26		Batch ID: 3132		Analysis Date: 9/6/2012							SeqNo: 110373	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Dichlorodifluoromethane (CFC-12)	ND	0.0479						0	0	30		
Chloromethane	ND	0.0479						0.05030	200	30		
Vinyl chloride	ND	0.00160						0	0	30		
Bromomethane	ND	0.0719						0	0	30		
Trichlorofluoromethane (CFC-11)	ND	0.0399						0	0	30		
Chloroethane	ND	0.0479						0	0	30		
1,1-Dichloroethene	ND	0.0399						0	0	30		
Methylene chloride	ND	0.0160						0	0	30		

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209010-001ADUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 9/5/2012			RunNo: 5613		
Client ID: URS-SB-1-26	Batch ID: 3132	Analysis Date: 9/6/2012						SeqNo: 110373			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	ND	0.0160						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	0.0399						0	0	30	
1,1-Dichloroethane	ND	0.0160						0	0	30	
2,2-Dichloropropane	ND	0.0399						0	0	30	
cis-1,2-Dichloroethene	ND	0.0160						0	0	30	
Chloroform	ND	0.0160						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0160						0	0	30	
1,1-Dichloropropene	ND	0.0160						0	0	30	
Carbon tetrachloride	ND	0.0160						0	0	30	
1,2-Dichloroethane (EDC)	ND	0.0240						0	0	30	
Benzene	ND	0.0160						0	0	30	
Trichloroethene (TCE)	ND	0.0240						0	0	30	
1,2-Dichloropropane	ND	0.0160						0	0	30	
Bromodichloromethane	ND	0.0160						0	0	30	
Dibromomethane	ND	0.0319						0	0	30	
cis-1,3-Dichloropropene	ND	0.0160						0	0	30	
Toluene	ND	0.0160						0	0	30	
trans-1,3-Dichloropropylene	ND	0.0240						0	0	30	
1,1,2-Trichloroethane	ND	0.0240						0	0	30	
1,3-Dichloropropane	ND	0.0399						0	0	30	
Tetrachloroethene (PCE)	ND	0.0160						0	0	30	
Dibromochloromethane	ND	0.0240						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.00399						0	0	30	
Chlorobenzene	ND	0.0160						0	0	30	
1,1,1,2-Tetrachloroethane	ND	0.0240						0	0	30	
Ethylbenzene	ND	0.0240						0	0	30	
m,p-Xylene	ND	0.0160						0	0	30	
o-Xylene	ND	0.0160						0	0	30	
Styrene	ND	0.0160						0	0	30	

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/7/2012

**Work Order:** 1209010  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: 1209010-001ADUP	SampType: DUP	Units: mg/Kg-dry			Prep Date: 9/5/2012			RunNo: 5613			
Client ID: URS-SB-1-26	Batch ID: 3132				Analysis Date: 9/6/2012			SeqNo: 110373			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	0.757	0.0639						0.7442	1.65	30	
Bromoform	ND	0.0160						0	0	30	
1,1,2,2-Tetrachloroethane	ND	0.0160						0	0	30	
n-Propylbenzene	5.19	0.0160						5.276	1.66	30	E
Bromobenzene	ND	0.0240						0	0	30	
1,3,5-Trimethylbenzene	5.81	0.0160						5.882	1.30	30	E
2-Chlorotoluene	ND	0.0160						0	0	30	
4-Chlorotoluene	ND	0.0160						0	0	30	
tert-Butylbenzene	0.331	0.0160						0.3342	0.840	30	
1,2,3-Trichloropropane	ND	0.0160						0	0	30	
1,2,4-Trichlorobenzene	ND	0.0399						0	0	30	
sec-Butylbenzene	2.83	0.0160						2.918	2.94	30	E
4-Isopropyltoluene	2.39	0.0160						2.394	0.0167	30	E
1,3-Dichlorobenzene	ND	0.0160						0	0	30	
1,4-Dichlorobenzene	ND	0.0160						0	0	30	
n-Butylbenzene	ND	0.0160						0	0	30	
1,2-Dichlorobenzene	ND	0.0160						0	0	30	
1,2-Dibromo-3-chloropropane	ND	0.0240						0	0	30	
1,2,4-Trimethylbenzene	6.03	0.0160						5.967	1.08	30	E
Hexachlorobutadiene	ND	0.0798						0	0	30	
Naphthalene	ND	0.0240						0	0	30	
1,2,3-Trichlorobenzene	ND	0.0160						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	0.392		0.3992		98.2	63.1	141		0		
Surr: Dibromofluoromethane	0.331		0.3992		83.0	67.6	119		0		
Surr: Toluene-d8	0.457		0.3992		114	78.5	126		0		

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

**Work Order:** 1209010  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: 1209010-002AMS	SampType: MS	Units: mg/Kg-dry				Prep Date: 9/5/2012			RunNo: 5613		
Client ID: URS-SB-1-31	Batch ID: 3132	Analysis Date: 9/6/2012							SeqNo: 110375		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.311	0.0380	0.3165	0	98.1	43.5	121				
Chloromethane	0.382	0.0380	0.3165	0.05064	105	45	130				B
Vinyl chloride	0.382	0.00127	0.3165	0	121	51.2	146				
Bromomethane	0.442	0.0570	0.3165	0	140	70	130				S
Trichlorofluoromethane (CFC-11)	0.332	0.0317	0.3165	0	105	52.2	132				
Chloroethane	0.227	0.0380	0.3165	0	71.8	43.8	117				
1,1-Dichloroethene	0.373	0.0317	0.3165	0	118	61.9	141				
Methylene chloride	0.338	0.0127	0.3165	0	107	54.7	142				
trans-1,2-Dichloroethene	0.369	0.0127	0.3165	0	117	52	136				
Methyl tert-butyl ether (MTBE)	0.271	0.0317	0.3165	0	85.7	54.4	132				
1,1-Dichloroethane	0.348	0.0127	0.3165	0	110	51.8	141				
2,2-Dichloropropane	0.239	0.0317	0.3165	0	75.4	36	123				
cis-1,2-Dichloroethene	0.339	0.0127	0.3165	0	107	58.6	136				
Chloroform	0.362	0.0127	0.3165	0	114	53.2	129				
1,1,1-Trichloroethane (TCA)	0.352	0.0127	0.3165	0	111	58.3	145				
1,1-Dichloropropene	0.358	0.0127	0.3165	0	113	55.1	138				
Carbon tetrachloride	0.297	0.0127	0.3165	0	93.7	53.3	144				
1,2-Dichloroethane (EDC)	0.317	0.0190	0.3165	0	100	51.3	139				
Benzene	0.361	0.0127	0.3165	0	114	63.5	133				
Trichloroethene (TCE)	0.362	0.0190	0.3165	0	114	68.6	132				
1,2-Dichloropropane	0.322	0.0127	0.3165	0	102	59	136				
Bromodichloromethane	0.374	0.0127	0.3165	0	118	50.7	141				
Dibromomethane	0.314	0.0253	0.3165	0	99.1	50.6	137				
cis-1,3-Dichloropropene	0.312	0.0127	0.3165	0	98.6	52.3	129				
Toluene	0.356	0.0127	0.3165	0	112	67.8	129				
trans-1,3-Dichloropropylene	0.312	0.0190	0.3165	0	98.6	52.2	138				
1,1,2-Trichloroethane	0.340	0.0190	0.3165	0	107	51.6	137				
1,3-Dichloropropane	0.320	0.0317	0.3165	0	101	53.1	134				
Tetrachloroethene (PCE)	0.338	0.0127	0.3165	0	107	44.1	141				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209010-002AMS	SampType: MS	Units: mg/Kg-dry			Prep Date: 9/5/2012			RunNo: 5613			
Client ID: URS-SB-1-31	Batch ID: 3132	Analysis Date: 9/6/2012						SeqNo: 110375			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	0.308	0.0190	0.3165	0	97.3	55.3	140				
1,2-Dibromoethane (EDB)	0.308	0.00317	0.3165	0	97.3	50.4	136				
Chlorobenzene	0.338	0.0127	0.3165	0	107	60	133				
1,1,1,2-Tetrachloroethane	0.300	0.0190	0.3165	0	94.8	53.1	142				
Ethylbenzene	0.337	0.0190	0.3165	0	106	54.5	134				
m,p-Xylene	0.655	0.0127	0.6330	0	103	53.1	132				
o-Xylene	0.323	0.0127	0.3165	0	102	53.3	139				
Styrene	0.323	0.0127	0.3165	0	102	51.1	132				
Isopropylbenzene	0.371	0.0506	0.3165	0.03608	106	58.9	138				
Bromoform	0.274	0.0127	0.3165	0	86.7	57.9	130				
1,1,2,2-Tetrachloroethane	0.290	0.0127	0.3165	0	91.5	51.9	131				
n-Propylbenzene	0.428	0.0127	0.3165	0.1117	99.8	53.6	140				
Bromobenzene	0.315	0.0190	0.3165	0	99.4	54.2	140				
1,3,5-Trimethylbenzene	0.546	0.0127	0.3165	0.2418	96.2	51.8	136				
2-Chlorotoluene	0.280	0.0127	0.3165	0	88.4	51.6	136				
4-Chlorotoluene	0.327	0.0127	0.3165	0	103	50.1	139				
tert-Butylbenzene	0.347	0.0127	0.3165	0.1117	74.2	50.5	135				
1,2,3-Trichloropropane	0.297	0.0127	0.3165	0	93.8	50.5	131				
1,2,4-Trichlorobenzene	0.258	0.0317	0.3165	0	81.4	50.8	130				
sec-Butylbenzene	0.346	0.0127	0.3165	0.03197	99.3	52.6	141				
4-Isopropyltoluene	0.323	0.0127	0.3165	0.02311	94.6	52.9	134				
1,3-Dichlorobenzene	0.302	0.0127	0.3165	0	95.3	52.6	131				
1,4-Dichlorobenzene	0.295	0.0127	0.3165	0	93.1	52.9	129				
n-Butylbenzene	0.409	0.0127	0.3165	0	129	52.6	130				
1,2-Dichlorobenzene	0.288	0.0127	0.3165	0	90.9	55.8	129				
1,2-Dibromo-3-chloropropane	0.240	0.0190	0.3165	0	75.9	53	129				
1,2,4-Trimethylbenzene	1.01	0.0127	0.3165	0.6967	98.7	50.6	137				
Hexachlorobutadiene	0.315	0.0633	0.3165	0	99.4	51.5	130				
Naphthalene	0.272	0.0190	0.3165	0	85.9	52.3	124				

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209010-002AMS		SampType: MS		Units: mg/Kg-dry		Prep Date: 9/5/2012			RunNo: 5613			
Client ID: URS-SB-1-31		Batch ID: 3132					Analysis Date: 9/6/2012			SeqNo: 110375		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

1,2,3-Trichlorobenzene	0.259	0.0127	0.3165	0	81.9	54.4	124				
Surr: 1-Bromo-4-fluorobenzene	0.334		0.3165		106	63.1	141				
Surr: Dibromofluoromethane	0.313		0.3165		98.9	67.6	119				
Surr: Toluene-d8	0.324		0.3165		102	78.5	126				

**NOTES:**

S - Outlying QC recoveries were associated with this sample. The method is in control as indicated by the LCS.

Sample ID: <b>ICV-3132</b>		SampType: <b>ICV</b>			Units: <b>mg/Kg</b>		Prep Date: <b>9/5/2012</b>			RunNo: <b>5613</b>		
Client ID: <b>ICV</b>		Batch ID: <b>3132</b>			Analysis Date: <b>9/6/2012</b>			SeqNo: <b>110386</b>				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Dibromochloromethane	18.6	0.0300	20.00	0	93.1	70	130				
Surr: 1-Bromo-4-fluorobenzene	10.0		10.00		100	63.1	141				
Surr: Dibromofluoromethane	10.2		10.00		102	67.6	119				
Surr: Toluene-d8	10.3		10.00		103	78.5	126				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-R5632</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>			Prep Date: <b>9/7/2012</b>			RunNo: <b>5632</b>			
Client ID: <b>MBLKW</b>	Batch ID: <b>R5632</b>	Analysis Date: <b>9/7/2012</b>						SeqNo: <b>110782</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									
Chloromethane	ND	1.00									
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	1.00									
2,2-Dichloropropane	ND	2.00									
cis-1,2-Dichloroethene	ND	1.00									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									
Benzene	ND	1.00									
Trichloroethene (TCE)	ND	1.00									
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									
Dibromomethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
Toluene	ND	1.00									
trans-1,3-Dichloropropene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-R5632</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>			Prep Date: <b>9/7/2012</b>			RunNo: <b>5632</b>			
Client ID: <b>MBLKW</b>	Batch ID: <b>R5632</b>	Analysis Date: <b>9/7/2012</b>						SeqNo: <b>110782</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.0100									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									
4-Isopropyltoluene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2,4-Trimethylbenzene	ND	1.00									
Hexachlorobutadiene	ND	4.00									
Naphthalene	ND	1.00									

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-R5632</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>			Prep Date: <b>9/7/2012</b>			RunNo: <b>5632</b>			
Client ID: <b>MBLKW</b>	Batch ID: <b>R5632</b>				Analysis Date: <b>9/7/2012</b>			SeqNo: <b>110782</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	ND	4.00									
Surr: 1-Bromo-4-fluorobenzene	10.1		10.00		101	79.2	120				
Surr: Dibromofluoromethane	9.65		10.00		96.5	76	114				
Surr: Toluene-d8	9.52		10.00		95.2	86.8	119				

Sample ID: <b>LCS-R5632</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>			Prep Date: <b>9/7/2012</b>			RunNo: <b>5632</b>			
Client ID: <b>LCSW</b>	Batch ID: <b>R5632</b>	Analysis Date: <b>9/7/2012</b>						SeqNo: <b>110783</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	17.4	1.00	20.00	0	86.9	45.1	121				
Chloromethane	18.1	1.00	20.00	0	90.3	42.5	131				
Vinyl chloride	18.5	0.200	20.00	0	92.7	56.2	130				
Bromomethane	18.8	1.00	20.00	0	94.2	45.4	138				
Trichlorofluoromethane (CFC-11)	20.4	1.00	20.00	0	102	64.7	129				
Chloroethane	20.6	1.00	20.00	0	103	62.5	123				
1,1-Dichloroethene	21.6	1.00	20.00	0	108	60.7	146				
Methylene chloride	17.8	1.00	20.00	0	89.0	60.3	135				
trans-1,2-Dichloroethene	20.8	1.00	20.00	0	104	71.3	129				
Methyl tert-butyl ether (MTBE)	19.1	1.00	20.00	0	95.6	75.4	123				
1,1-Dichloroethane	20.4	1.00	20.00	0	102	71.3	129				
2,2-Dichloropropane	19.2	2.00	20.00	0	96.2	37.8	132				
cis-1,2-Dichloroethene	19.4	1.00	20.00	0	96.9	67.5	127				
Chloroform	18.9	1.00	20.00	0	94.4	70.3	123				
1,1,1-Trichloroethane (TCA)	19.5	1.00	20.00	0	97.6	67.9	134				
1,1-Dichloropropene	21.7	1.00	20.00	0	109	72.1	133				
Carbon tetrachloride	18.6	1.00	20.00	0	92.8	68	136				
1,2-Dichloroethane (EDC)	20.2	1.00	20.00	0	101	65.8	126				
Benzene	21.2	1.00	20.00	0	106	75.2	124				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

**Work Order:** 1209010  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: <b>LCS-R5632</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>				Prep Date: <b>9/7/2012</b>		RunNo: <b>5632</b>			
Client ID: <b>LCSW</b>	Batch ID: <b>R5632</b>					Analysis Date: <b>9/7/2012</b>		SeqNo: <b>110783</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	20.0	1.00	20.00	0	100	71.9	130				
1,2-Dichloropropane	20.8	1.00	20.00	0	104	71.9	131				
Bromodichloromethane	20.1	1.00	20.00	0	101	70	130				
Dibromomethane	20.6	1.00	20.00	0	103	74.2	125				
cis-1,3-Dichloropropene	20.1	1.00	20.00	0	101	62.8	135				
Toluene	21.7	1.00	20.00	0	108	75.2	129				
trans-1,3-Dichloropropene	20.1	1.00	20.00	0	101	58.1	138				
1,1,2-Trichloroethane	20.2	1.00	20.00	0	101	65.4	128				
1,3-Dichloropropane	21.2	1.00	20.00	0	106	71.9	131				
Tetrachloroethene (PCE)	22.2	1.00	20.00	0	111	52.4	140				
Dibromochloromethane	24.7	1.00	20.00	0	124	68.7	139				
1,2-Dibromoethane (EDB)	21.4	0.0100	20.00	0	107	71.2	129				
Chlorobenzene	21.0	1.00	20.00	0	105	77.2	122				
1,1,1,2-Tetrachloroethane	22.9	1.00	20.00	0	115	76.2	130				
Ethylbenzene	21.5	1.00	20.00	0	107	78	127				
m,p-Xylene	41.6	1.00	40.00	0	104	77.5	130				
o-Xylene	20.7	1.00	20.00	0	104	77.6	126				
Styrene	21.7	1.00	20.00	0	108	66.8	137				
Isopropylbenzene	20.5	1.00	20.00	0	102	75.9	133				
Bromoform	22.0	1.00	20.00	0	110	69.9	142				
1,1,2,2-Tetrachloroethane	21.3	1.00	20.00	0	107	68	134				
n-Propylbenzene	20.6	1.00	20.00	0	103	77.1	133				
Bromobenzene	19.7	1.00	20.00	0	98.7	71.1	131				
1,3,5-Trimethylbenzene	20.6	1.00	20.00	0	103	76.2	133				
2-Chlorotoluene	20.5	1.00	20.00	0	103	67.1	137				
4-Chlorotoluene	20.0	1.00	20.00	0	100	70.7	132				
tert-Butylbenzene	20.0	1.00	20.00	0	99.8	71.3	139				
1,2,3-Trichloropropane	19.8	1.00	20.00	0	99.0	70.8	132				
1,2,4-Trichlorobenzene	20.4	2.00	20.00	0	102	61.4	139				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-R5632</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>				Prep Date: <b>9/7/2012</b>			RunNo: <b>5632</b>		
Client ID: <b>LCSW</b>	Batch ID: <b>R5632</b>					Analysis Date: <b>9/7/2012</b>			SeqNo: <b>110783</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	20.1	1.00	20.00	0	100	77.4	136				
4-Isopropyltoluene	20.4	1.00	20.00	0	102	78.1	131				
1,3-Dichlorobenzene	20.5	1.00	20.00	0	102	73.5	125				
1,4-Dichlorobenzene	20.2	1.00	20.00	0	101	71.4	125				
n-Butylbenzene	20.2	1.00	20.00	0	101	69.8	138				
1,2-Dichlorobenzene	20.9	1.00	20.00	0	104	74.2	123				
1,2-Dibromo-3-chloropropane	19.9	1.00	20.00	0	99.7	66.1	138				
1,2,4-Trimethylbenzene	19.2	1.00	20.00	0	96.2	72.3	133				
Hexachlorobutadiene	18.2	4.00	20.00	0	91.1	60.9	141				
Naphthalene	19.3	1.00	20.00	0	96.4	58.2	140				
1,2,3-Trichlorobenzene	20.1	4.00	20.00	0	101	61.3	133				
Surr: 1-Bromo-4-fluorobenzene	10.1		10.00		101	79.2	120				
Surr: Dibromofluoromethane	9.70		10.00		97.0	76	114				
Surr: Toluene-d8	10.0		10.00		100	86.8	119				

Sample ID: 1209002-024ADUP	SampType: DUP	Units: µg/L			Prep Date: 9/7/2012			RunNo: 5632			
Client ID: BATCH	Batch ID: R5632				Analysis Date: 9/7/2012			SeqNo: 110785			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0	0	30	
Chloromethane	ND	1.00						0	0	30	
Vinyl chloride	ND	0.200						0	0	30	
Bromomethane	ND	1.00						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0	0	30	
Chloroethane	ND	1.00						0	0	30	
1,1-Dichloroethene	ND	1.00						0	0	30	
Methylene chloride	ND	1.00						0	0	30	
trans-1,2-Dichloroethene	ND	1.00						0	0	30	

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209002-024ADUP	SampType: DUP	Units: µg/L			Prep Date: 9/7/2012			RunNo: 5632			
Client ID: BATCH	Batch ID: R5632				Analysis Date: 9/7/2012			SeqNo: 110785			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.00						0	0	30	
1,1-Dichloroethane	ND	1.00						0	0	30	
2,2-Dichloropropane	ND	2.00						0	0	30	
cis-1,2-Dichloroethene	ND	1.00						0	0	30	
Chloroform	ND	1.00						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0	0	30	
1,1-Dichloropropene	ND	1.00						0	0	30	
Carbon tetrachloride	ND	1.00						0	0	30	
1,2-Dichloroethane (EDC)	ND	1.00						0	0	30	
Benzene	ND	1.00						0	0	30	
Trichloroethene (TCE)	ND	1.00						0	0	30	
1,2-Dichloropropane	ND	1.00						0	0	30	
Bromodichloromethane	ND	1.00						0	0	30	
Dibromomethane	ND	1.00						0	0	30	
cis-1,3-Dichloropropene	ND	1.00						0	0	30	
Toluene	ND	1.00						0	0	30	
trans-1,3-Dichloropropene	ND	1.00						0	0	30	
1,1,2-Trichloroethane	ND	1.00						0	0	30	
1,3-Dichloropropane	ND	1.00						0	0	30	
Tetrachloroethene (PCE)	ND	1.00						0	0	30	
Dibromochloromethane	ND	1.00						0	0	30	
1,2-Dibromoethane (EDB)	ND	0.0100						0	0	30	
Chlorobenzene	ND	1.00						0	0	30	
1,1,1,2-Tetrachloroethane	ND	1.00						0	0	30	
Ethylbenzene	ND	1.00						0	0	30	
m,p-Xylene	ND	1.00						0	0	30	
o-Xylene	ND	1.00						0	0	30	
Styrene	ND	1.00						0	0	30	
Isopropylbenzene	ND	1.00						0	0	30	

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1209002-024ADUP	SampType: DUP	Units: µg/L				Prep Date: 9/7/2012			RunNo: 5632		
Client ID: BATCH	Batch ID: R5632					Analysis Date: 9/7/2012			SeqNo: 110785		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	ND	1.00						0	0	30	
1,1,2,2-Tetrachloroethane	ND	1.00						0	0	30	
n-Propylbenzene	ND	1.00						0	0	30	
Bromobenzene	ND	1.00						0	0	30	
1,3,5-Trimethylbenzene	ND	1.00						0	0	30	
2-Chlorotoluene	ND	1.00						0	0	30	
4-Chlorotoluene	ND	1.00						0	0	30	
tert-Butylbenzene	ND	1.00						0	0	30	
1,2,3-Trichloropropane	ND	1.00						0	0	30	
1,2,4-Trichlorobenzene	ND	2.00						0	0	30	
sec-Butylbenzene	ND	1.00						0	0	30	
4-Isopropyltoluene	ND	1.00						0	0	30	
1,3-Dichlorobenzene	ND	1.00						0	0	30	
1,4-Dichlorobenzene	ND	1.00						0	0	30	
n-Butylbenzene	ND	1.00						0	0	30	
1,2-Dichlorobenzene	ND	1.00						0	0	30	
1,2-Dibromo-3-chloropropane	ND	1.00						0	0	30	
1,2,4-Trimethylbenzene	ND	1.00						0	0	30	
Hexachlorobutadiene	ND	4.00						0	0	30	
Naphthalene	ND	1.00						0	0	30	
1,2,3-Trichlorobenzene	ND	4.00						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	10.2		10.00		102	79.2	120		0		
Surr: Dibromofluoromethane	9.73		10.00		97.3	76	114		0		
Surr: Toluene-d8	9.67		10.00		96.7	86.8	119		0		

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





Date: 9/7/2012

**Work Order:** 1209010  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: 1209002-025AMS	SampType: MS	Units: µg/L				Prep Date: 9/7/2012			RunNo: 5632		
Client ID: BATCH	Batch ID: R5632	Analysis Date: 9/7/2012							SeqNo: 110787		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.7	1.00	20.00	0	83.4	33.3	122				
Chloromethane	18.4	1.00	20.00	0	92.1	48.2	145				
Vinyl chloride	18.8	0.200	20.00	0	94.2	45.6	149				
Bromomethane	19.2	1.00	20.00	0	96.0	31.5	135				
Trichlorofluoromethane (CFC-11)	23.6	1.00	20.00	0	118	54.7	138				
Chloroethane	22.4	1.00	20.00	0	112	52.7	140				
1,1-Dichloroethene	22.3	1.00	20.00	0	112	58.2	146				
Methylene chloride	19.7	1.00	20.00	0	98.6	65.1	127				
trans-1,2-Dichloroethene	21.6	1.00	20.00	0	108	69	132				
Methyl tert-butyl ether (MTBE)	20.1	1.00	20.00	0	101	70	130				
1,1-Dichloroethane	21.4	1.00	20.00	0	107	74.7	133				
2,2-Dichloropropane	19.6	2.00	20.00	0	97.9	31.5	121				
cis-1,2-Dichloroethene	20.0	1.00	20.00	0	99.8	67.1	123				
Chloroform	18.6	1.00	20.00	0	92.9	58.6	123				
1,1,1-Trichloroethane (TCA)	20.2	1.00	20.00	0	101	64.2	146				
1,1-Dichloropropene	22.8	1.00	20.00	0	114	73.8	136				
Carbon tetrachloride	20.3	1.00	20.00	0	102	69.2	141				
1,2-Dichloroethane (EDC)	20.5	1.00	20.00	0	103	62.3	130				
Benzene	22.0	1.00	20.00	0	110	68.7	132				
Trichloroethene (TCE)	20.2	1.00	20.00	0	101	65.7	133				
1,2-Dichloropropane	21.8	1.00	20.00	0	109	70	130				
Bromodichloromethane	20.8	1.00	20.00	0	104	59.4	139				
Dibromomethane	21.4	1.00	20.00	0	107	65.5	130				
cis-1,3-Dichloropropene	20.3	1.00	20.00	0	102	63.3	124				
Toluene	21.0	1.00	20.00	0	105	68.4	133				
trans-1,3-Dichloropropene	20.3	1.00	20.00	0	102	57.7	125				
1,1,2-Trichloroethane	20.2	1.00	20.00	0	101	59.4	127				
1,3-Dichloropropane	20.5	1.00	20.00	0	103	68.2	134				
Tetrachloroethene (PCE)	12.7	1.00	20.00	0	63.4	51.5	109				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

**Work Order:** 1209010  
**CLIENT:** URS Corporation  
**Project:** Belshaw TPH Data Gap

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: 1209002-025AMS	SampType: MS	Units: µg/L				Prep Date: 9/7/2012			RunNo: 5632		
Client ID: BATCH	Batch ID: R5632	Analysis Date: 9/7/2012						SeqNo: 110787			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	24.7	1.00	20.00	0	123	66.2	138				
1,2-Dibromoethane (EDB)	21.0	0.0100	20.00	0	105	68.9	124				
Chlorobenzene	20.6	1.00	20.00	0	103	68.9	128				
1,1,1,2-Tetrachloroethane	22.5	1.00	20.00	0	113	67.3	135				
Ethylbenzene	20.3	1.00	20.00	0	102	67.3	135				
m,p-Xylene	40.2	1.00	40.00	1.890	95.8	63.3	135				
o-Xylene	20.8	1.00	20.00	1.170	98.2	67.8	131				
Styrene	21.1	1.00	20.00	0	105	67.2	123				
Isopropylbenzene	32.1	1.00	20.00	27.58	22.7	56	147				S
Bromoform	22.6	1.00	20.00	0	113	61.4	136				
1,1,2,2-Tetrachloroethane	23.4	1.00	20.00	0	117	59.1	137				
n-Propylbenzene	41.8	1.00	20.00	51.18	-46.8	57.6	142				S
Bromobenzene	20.1	1.00	20.00	0	101	63.6	130				
1,3,5-Trimethylbenzene	17.5	1.00	20.00	0	87.4	59.9	136				
2-Chlorotoluene	20.0	1.00	20.00	0	100	63.4	134				
4-Chlorotoluene	18.5	1.00	20.00	0	92.4	58.4	134				
tert-Butylbenzene	20.4	1.00	20.00	1.050	96.5	74.2	141				
1,2,3-Trichloropropane	21.0	1.00	20.00	0	105	62.4	129				
1,2,4-Trichlorobenzene	15.2	2.00	20.00	0	76.1	53.7	120				
sec-Butylbenzene	25.2	1.00	20.00	23.99	5.80	56	146				S
4-Isopropyltoluene	15.3	1.00	20.00	0.4400	74.4	62.4	134				
1,3-Dichlorobenzene	18.6	1.00	20.00	0	93.0	58.2	128				
1,4-Dichlorobenzene	18.4	1.00	20.00	0	91.9	60.1	123				
n-Butylbenzene	22.9	1.00	20.00	27.61	-23.4	54.6	135				S
1,2-Dichlorobenzene	19.7	1.00	20.00	0	98.7	62.6	124				
1,2-Dibromo-3-chloropropane	16.9	1.00	20.00	0	84.7	51.8	142				
1,2,4-Trimethylbenzene	17.6	1.00	20.00	3.580	70.3	63.7	132				
Hexachlorobutadiene	9.41	4.00	20.00	0	47.1	62.1	121				S
Naphthalene	18.5	1.00	20.00	2.750	78.8	58.7	119				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 9/7/2012

Work Order: 1209010  
CLIENT: URS Corporation  
Project: Belshaw TPH Data Gap

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>1209002-025AMS</b>	SampType: <b>MS</b>	Units: <b>µg/L</b>				Prep Date: <b>9/7/2012</b>			RunNo: <b>5632</b>		
Client ID: <b>BATCH</b>	Batch ID: <b>R5632</b>					Analysis Date: <b>9/7/2012</b>			SeqNo: <b>110787</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	16.6	4.00	20.00	0	83.0	50.7	113				
Surr: 1-Bromo-4-fluorobenzene	10.5		10.00		105	79.2	120				
Surr: Dibromofluoromethane	9.49		10.00		94.9	76	114				
Surr: Toluene-d8	9.61		10.00		96.1	86.8	119				

**NOTES:**

S - Outlying spike recoveries were observed. The method is in control as indicated by the Laboratory Control Sample (LCS).

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Client Name: **URS**

 Work Order Number: **1209010**

 Logged by: **Troy Zehr**

 Date Received: **9/4/2012 5:15:00 PM**

## Chain of Custody

1. Were custodial seals present? Yes ☐ No ☐ Not Required ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Client

## Log In

4. Coolers are present? Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all coolers received at a temperature of >0° C to 10.0°C Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. Is there headspace present in VOA vials? Yes ☐ No ☒ NA ☐
12. Did all sample containers arrive in good condition?(unbroken) Yes ☒ No ☐
13. Does paperwork match bottle labels? Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met? Yes ☒ No ☐

## Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

18. Additional remarks/Discrepancies

Changed to 48hr per David R. TZ 090512.

## Item Information

Item #	Temp °C	Condition
Cooler	1.4	Good



### Chain of Custody Record

Betham TPN Pats Gage  
1752 Rainier Ave S. Seattle  
Anthony Palermo

Project No.:

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)
URS-SB-1-26	9-4-12	0840	Soil
URS-SB-1-31	9-4-12	0920	Soil
URS-SB-1-GW		0850	AQ
URS-SB-1-41		0940	Soil
URS-SB-1-45.5		0945	Soil
URS-SB-2-25.5		1110	Soil
URS-SB-2-GW		1120	AQ
URS-SB-2-36		1206	Soil
URS-SB-2-46		1210	Soil
URS-SB-3-20.5		1415	

Element	Unit	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12	Sample 13	Sample 14	Sample 15	Sample 16	Sample 17	Sample 18	Sample 19	Sample 20	Sample 21	Sample 22	Sample 23	Sample 24	Sample 25	Sample 26	Sample 27	Sample 28	Sample 29	Sample 30	Sample 31	Sample 32	Sample 33	Sample 34	Sample 35	Sample 36	Sample 37	Sample 38	Sample 39	Sample 40	Sample 41	Sample 42	Sample 43	Sample 44	Sample 45	Sample 46	Sample 47	Sample 48	Sample 49	Sample 50	Sample 51	Sample 52	Sample 53	Sample 54	Sample 55	Sample 56	Sample 57	Sample 58	Sample 59	Sample 60	Sample 61	Sample 62	Sample 63	Sample 64	Sample 65	Sample 66	Sample 67	Sample 68	Sample 69	Sample 70	Sample 71	Sample 72	Sample 73	Sample 74	Sample 75	Sample 76	Sample 77	Sample 78	Sample 79	Sample 80	Sample 81	Sample 82	Sample 83	Sample 84	Sample 85	Sample 86	Sample 87	Sample 88	Sample 89	Sample 90	Sample 91	Sample 92	Sample 93	Sample 94	Sample 95	Sample 96	Sample 97	Sample 98	Sample 99	Sample 100
Al	mg/kg	10.5	11.2	12.1	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0	90.0	91.0	92.0	93.0	94.0	95.0	96.0	97.0	98.0	99.0	100.0									
Fe	mg/kg	10.5	11.2	12.1	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0	90.0	91.0	92.0	93.0	94.0	95.0	96.0	97.0	98.0	99.0	100.0									
Cu	mg/kg	10.5	11.2	12.1	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0	90.0	91.0	92.0	93.0	94.0	95.0	96.0	97.0	98.0	99.0	100.0									
Zn	mg/kg	10.5	11.2	12.1	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0																																																																											

Unions (Circle)	Nitrate	Chloride	Sulfate	Sulfide	Hydroxide	Ammonium Nitrate

☐ sample 1 (small)

date/time	date/time	Received	date/time	Received
9.4.12	1715		9/4/12	17:15-
9.4.12	1715		9/4/12	17:15-

TAT	Next Day	2 Day	3 Day	5 Day
100%	100%	100%	100%	100%





1311 N. 35th Street  
Seattle, WA 98103

Tel: 206-352-3790  
Fax: 206-352-7178

Client

Address:

City, State, Zip

Reports To (PM):

Reports To (PM): Kabir Chopra

Fax

Email:

Project No.:

**Library Project No/Intemr):**

Fajana

Date:

Project Name

**Location:**

Collected by:

Page: 2 of 2



Figure 1

De 130000 777 2017 600

1755 Reno Ave 5

AD

[illegible][illegible][illegible]

Sample Disposal:

☐ Return to Client      ☐ Dispose by Lab (A lab may be required to send materials to a licensed waste disposal facility)

Follow-up/Visit	Date/Time	Recall/Notes	Discharge Time
1	5/14/12	516.1	3/4/12 17:15

1A	→	Next Day	2 Day	3 Day	5 Day
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1311 N. 35th St.  
Seattle, WA 98103  
T: (206) 352-3790  
F: (206) 352-7178  
info@fremontanalytical.com

**URS Corporation**  
David Raubvogel  
1501 4th Ave., Suite 1400  
Seattle, Washington 98101

**RE: Belshaw**  
**Lab ID: 1208039**

August 17, 2012

**Attention David Raubvogel:**

Fremont Analytical, Inc. received 25 sample(s) on 8/7/2012 for the analyses presented in the following report.

***Volatile Organic Compounds by EPA Method 8260 SIM***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

**CC:**  
Paul Kalina

Michael Dee  
Sr. Chemist / Principal

**CLIENT:** URS Corporation  
**Project:** Belshaw  
**Lab Order:** 1208039

## Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1208039-001	MW-28D	08/07/2012 10:05 AM	08/07/2012 6:00 PM
1208039-002	MW-28I	08/07/2012 10:25 AM	08/07/2012 6:00 PM
1208039-003	MW-28S	08/07/2012 10:30 AM	08/07/2012 6:00 PM
1208039-004	MW-30S	08/07/2012 11:00 AM	08/07/2012 6:00 PM
1208039-005	MW-30I	08/07/2012 11:05 AM	08/07/2012 6:00 PM
1208039-006	MW-30D	08/07/2012 11:10 AM	08/07/2012 6:00 PM
1208039-007	MW-24S	08/07/2012 12:45 PM	08/07/2012 6:00 PM
1208039-008	MW-24D	08/07/2012 12:50 PM	08/07/2012 6:00 PM
1208039-009	MW-25S	08/07/2012 1:10 PM	08/07/2012 6:00 PM
1208039-010	MW-25I	08/07/2012 1:15 PM	08/07/2012 6:00 PM
1208039-011	MW-25D	08/07/2012 1:20 PM	08/07/2012 6:00 PM
1208039-012	MW-31S	08/07/2012 1:35 PM	08/07/2012 6:00 PM
1208039-013	MW-31I	08/07/2012 1:40 PM	08/07/2012 6:00 PM
1208039-014	MW-31D	08/07/2012 1:45 PM	08/07/2012 6:00 PM
1208039-015	MW-27S	08/07/2012 2:30 PM	08/07/2012 6:00 PM
1208039-016	MW-27I	08/07/2012 2:35 PM	08/07/2012 6:00 PM
1208039-017	MW-27D	08/07/2012 2:40 PM	08/07/2012 6:00 PM
1208039-018	MW-32S	08/07/2012 2:55 PM	08/07/2012 6:00 PM
1208039-019	MW-32I	08/07/2012 3:00 PM	08/07/2012 6:00 PM
1208039-020	MW-32D	08/07/2012 3:05 PM	08/07/2012 6:00 PM
1208039-021	MW-8	08/07/2012 3:20 PM	08/07/2012 6:00 PM
1208039-022	MW-26S	08/07/2012 3:25 PM	08/07/2012 6:00 PM
1208039-023	MW-26I	08/07/2012 3:30 PM	08/07/2012 6:00 PM
1208039-024	MW-26D	08/07/2012 3:35 PM	08/07/2012 6:00 PM
1208039-025	Trip Blank	08/06/2012 5:30 PM	08/07/2012 6:00 PM



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**CLIENT:** URS Corporation**Project:** Belshaw

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**I. SAMPLE RECEIPT:**

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

**II. GENERAL REPORTING COMMENTS:**

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

**III. ANALYSES AND EXCEPTIONS:**

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.



## Analytical Report

WO#: 1208039

Date Reported: 8/17/2012

CLIENT: URS Corporation

Project: Belshaw

Lab ID: 1208039-001

Collection Date: 8/7/2012 10:05:00 AM

Client Sample ID: MW-28D

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	0.600	0.400		µg/L	1	8/14/2012 9:34:00 PM
Surr: 4-Bromofluorobenzene	91.3	62.9-130		%REC	1	8/14/2012 9:34:00 PM
Surr: Dibromofluoromethane	98.1	68-140		%REC	1	8/14/2012 9:34:00 PM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/14/2012 9:34:00 PM

Lab ID: 1208039-002

Collection Date: 8/7/2012 10:25:00 AM

Client Sample ID: MW-28I

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/14/2012 10:06:00 PM
Surr: 4-Bromofluorobenzene	91.3	62.9-130		%REC	1	8/14/2012 10:06:00 PM
Surr: Dibromofluoromethane	96.9	68-140		%REC	1	8/14/2012 10:06:00 PM
Surr: Toluene-d8	104	68.8-119		%REC	1	8/14/2012 10:06:00 PM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1208039

Date Reported: 8/17/2012

CLIENT: URS Corporation

Project: Belshaw

Lab ID: 1208039-003

Collection Date: 8/7/2012 10:30:00 AM

Client Sample ID: MW-28S

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	0.450	0.400		µg/L	1	8/14/2012 10:38:00 PM
Surr: 4-Bromofluorobenzene	90.6	62.9-130		%REC	1	8/14/2012 10:38:00 PM
Surr: Dibromofluoromethane	98.0	68-140		%REC	1	8/14/2012 10:38:00 PM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/14/2012 10:38:00 PM

Lab ID: 1208039-004

Collection Date: 8/7/2012 11:00:00 AM

Client Sample ID: MW-30S

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/14/2012 11:10:00 PM
Surr: 4-Bromofluorobenzene	91.0	62.9-130		%REC	1	8/14/2012 11:10:00 PM
Surr: Dibromofluoromethane	97.0	68-140		%REC	1	8/14/2012 11:10:00 PM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/14/2012 11:10:00 PM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1208039

Date Reported: 8/17/2012

CLIENT: URS Corporation

Project: Belshaw

Lab ID: 1208039-005

Collection Date: 8/7/2012 11:05:00 AM

Client Sample ID: MW-30I

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/14/2012 11:41:00 PM
Surr: 4-Bromofluorobenzene	90.9	62.9-130		%REC	1	8/14/2012 11:41:00 PM
Surr: Dibromofluoromethane	97.2	68-140		%REC	1	8/14/2012 11:41:00 PM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/14/2012 11:41:00 PM

Lab ID: 1208039-006

Collection Date: 8/7/2012 11:10:00 AM

Client Sample ID: MW-30D

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 12:12:00 AM
Surr: 4-Bromofluorobenzene	91.1	62.9-130		%REC	1	8/15/2012 12:12:00 AM
Surr: Dibromofluoromethane	97.6	68-140		%REC	1	8/15/2012 12:12:00 AM
Surr: Toluene-d8	104	68.8-119		%REC	1	8/15/2012 12:12:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1208039

Date Reported: 8/17/2012

CLIENT: URS Corporation

Project: Belshaw

Lab ID: 1208039-007

Collection Date: 8/7/2012 12:45:00 PM

Client Sample ID: MW-24S

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 12:43:00 AM
Surr: 4-Bromofluorobenzene	92.1	62.9-130		%REC	1	8/15/2012 12:43:00 AM
Surr: Dibromofluoromethane	96.6	68-140		%REC	1	8/15/2012 12:43:00 AM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/15/2012 12:43:00 AM

Lab ID: 1208039-008

Collection Date: 8/7/2012 12:50:00 PM

Client Sample ID: MW-24D

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 1:13:00 AM
Surr: 4-Bromofluorobenzene	90.4	62.9-130		%REC	1	8/15/2012 1:13:00 AM
Surr: Dibromofluoromethane	96.3	68-140		%REC	1	8/15/2012 1:13:00 AM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/15/2012 1:13:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1208039

Date Reported: 8/17/2012

CLIENT: URS Corporation

Project: Belshaw

Lab ID: 1208039-009

Collection Date: 8/7/2012 1:10:00 PM

Client Sample ID: MW-25S

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 1:44:00 AM
Surr: 4-Bromofluorobenzene	90.6	62.9-130		%REC	1	8/15/2012 1:44:00 AM
Surr: Dibromofluoromethane	96.7	68-140		%REC	1	8/15/2012 1:44:00 AM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/15/2012 1:44:00 AM

Lab ID: 1208039-010

Collection Date: 8/7/2012 1:15:00 PM

Client Sample ID: MW-25I

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 2:15:00 AM
Surr: 4-Bromofluorobenzene	92.2	62.9-130		%REC	1	8/15/2012 2:15:00 AM
Surr: Dibromofluoromethane	96.2	68-140		%REC	1	8/15/2012 2:15:00 AM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/15/2012 2:15:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1208039

Date Reported: 8/17/2012

CLIENT: URS Corporation

Project: Belshaw

Lab ID: 1208039-011

Collection Date: 8/7/2012 1:20:00 PM

Client Sample ID: MW-25D

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 3:15:00 AM
Surr: 4-Bromofluorobenzene	90.4	62.9-130		%REC	1	8/15/2012 3:15:00 AM
Surr: Dibromofluoromethane	96.5	68-140		%REC	1	8/15/2012 3:15:00 AM
Surr: Toluene-d8	104	68.8-119		%REC	1	8/15/2012 3:15:00 AM

Lab ID: 1208039-012

Collection Date: 8/7/2012 1:35:00 PM

Client Sample ID: MW-31S

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 3:46:00 AM
Surr: 4-Bromofluorobenzene	90.8	62.9-130		%REC	1	8/15/2012 3:46:00 AM
Surr: Dibromofluoromethane	96.7	68-140		%REC	1	8/15/2012 3:46:00 AM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/15/2012 3:46:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1208039

Date Reported: 8/17/2012

CLIENT: URS Corporation

Project: Belshaw

Lab ID: 1208039-013

Collection Date: 8/7/2012 1:40:00 PM

Client Sample ID: MW-31I

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 4:31:00 PM
Surr: 4-Bromofluorobenzene	90.3	62.9-130		%REC	1	8/15/2012 4:31:00 PM
Surr: Dibromofluoromethane	98.9	68-140		%REC	1	8/15/2012 4:31:00 PM
Surr: Toluene-d8	106	68.8-119		%REC	1	8/15/2012 4:31:00 PM

Lab ID: 1208039-014

Collection Date: 8/7/2012 1:45:00 PM

Client Sample ID: MW-31D

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 4:47:00 AM
Surr: 4-Bromofluorobenzene	90.3	62.9-130		%REC	1	8/15/2012 4:47:00 AM
Surr: Dibromofluoromethane	96.3	68-140		%REC	1	8/15/2012 4:47:00 AM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/15/2012 4:47:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits





## Analytical Report

WO#: 1208039

Date Reported: 8/17/2012

CLIENT: URS Corporation

Project: Belshaw

Lab ID: 1208039-015

Collection Date: 8/7/2012 2:30:00 PM

Client Sample ID: MW-27S

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 5:17:00 AM
Surr: 4-Bromofluorobenzene	91.3	62.9-130		%REC	1	8/15/2012 5:17:00 AM
Surr: Dibromofluoromethane	97.3	68-140		%REC	1	8/15/2012 5:17:00 AM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/15/2012 5:17:00 AM

Lab ID: 1208039-016

Collection Date: 8/7/2012 2:35:00 PM

Client Sample ID: MW-27I

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 5:49:00 AM
Surr: 4-Bromofluorobenzene	88.0	62.9-130		%REC	1	8/15/2012 5:49:00 AM
Surr: Dibromofluoromethane	96.5	68-140		%REC	1	8/15/2012 5:49:00 AM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/15/2012 5:49:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1208039

Date Reported: 8/17/2012

CLIENT: URS Corporation

Project: Belshaw

Lab ID: 1208039-017

Collection Date: 8/7/2012 2:40:00 PM

Client Sample ID: MW-27D

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 6:19:00 AM
Surr: 4-Bromofluorobenzene	89.0	62.9-130		%REC	1	8/15/2012 6:19:00 AM
Surr: Dibromofluoromethane	96.2	68-140		%REC	1	8/15/2012 6:19:00 AM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/15/2012 6:19:00 AM

Lab ID: 1208039-018

Collection Date: 8/7/2012 2:55:00 PM

Client Sample ID: MW-32S

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 6:50:00 AM
Surr: 4-Bromofluorobenzene	89.7	62.9-130		%REC	1	8/15/2012 6:50:00 AM
Surr: Dibromofluoromethane	97.8	68-140		%REC	1	8/15/2012 6:50:00 AM
Surr: Toluene-d8	106	68.8-119		%REC	1	8/15/2012 6:50:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1208039

Date Reported: 8/17/2012

CLIENT: URS Corporation

Project: Belshaw

Lab ID: 1208039-019

Collection Date: 8/7/2012 3:00:00 PM

Client Sample ID: MW-32I

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 7:21:00 AM
Surr: 4-Bromofluorobenzene	96.0	62.9-130		%REC	1	8/15/2012 7:21:00 AM
Surr: Dibromofluoromethane	96.4	68-140		%REC	1	8/15/2012 7:21:00 AM
Surr: Toluene-d8	104	68.8-119		%REC	1	8/15/2012 7:21:00 AM

Lab ID: 1208039-020

Collection Date: 8/7/2012 3:05:00 PM

Client Sample ID: MW-32D

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	0.410	0.400		µg/L	1	8/15/2012 7:51:00 AM
Surr: 4-Bromofluorobenzene	90.4	62.9-130		%REC	1	8/15/2012 7:51:00 AM
Surr: Dibromofluoromethane	95.7	68-140		%REC	1	8/15/2012 7:51:00 AM
Surr: Toluene-d8	104	68.8-119		%REC	1	8/15/2012 7:51:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1208039

Date Reported: 8/17/2012

CLIENT: URS Corporation

Project: Belshaw

Lab ID: 1208039-021

Collection Date: 8/7/2012 3:20:00 PM

Client Sample ID: MW-8

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 8:51:00 AM
Surr: 4-Bromofluorobenzene	91.2	62.9-130		%REC	1	8/15/2012 8:51:00 AM
Surr: Dibromofluoromethane	96.8	68-140		%REC	1	8/15/2012 8:51:00 AM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/15/2012 8:51:00 AM

Lab ID: 1208039-022

Collection Date: 8/7/2012 3:25:00 PM

Client Sample ID: MW-26S

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 9:20:00 AM
Surr: 4-Bromofluorobenzene	88.9	62.9-130		%REC	1	8/15/2012 9:20:00 AM
Surr: Dibromofluoromethane	96.7	68-140		%REC	1	8/15/2012 9:20:00 AM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/15/2012 9:20:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1208039

Date Reported: 8/17/2012

CLIENT: URS Corporation

Project: Belshaw

Lab ID: 1208039-023

Collection Date: 8/7/2012 3:30:00 PM

Client Sample ID: MW-26I

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/15/2012 1:49:00 PM
Surr: 4-Bromofluorobenzene	91.6	62.9-130		%REC	1	8/15/2012 1:49:00 PM
Surr: Dibromofluoromethane	97.2	68-140		%REC	1	8/15/2012 1:49:00 PM
Surr: Toluene-d8	105	68.8-119		%REC	1	8/15/2012 1:49:00 PM

Lab ID: 1208039-024

Collection Date: 8/7/2012 3:35:00 PM

Client Sample ID: MW-26D

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5355

Analyst: MD

1,4-Dioxane	0.590	0.400		µg/L	1	8/15/2012 11:20:00 AM
Surr: 4-Bromofluorobenzene	90.9	62.9-130		%REC	1	8/15/2012 11:20:00 AM
Surr: Dibromofluoromethane	96.8	68-140		%REC	1	8/15/2012 11:20:00 AM
Surr: Toluene-d8	106	68.8-119		%REC	1	8/15/2012 11:20:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



Date: 8/17/2012

Work Order: 1208039  
CLIENT: URS Corporation  
Project: Belshaw

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260 SIM**

Sample ID: 1208039-020ADUP	SampType: DUP	Units: µg/L				Prep Date: 8/14/2012			RunNo: 5355		
Client ID: MW-32D	Batch ID: R5355					Analysis Date: 8/15/2012			SeqNo: 105081		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	0.440	0.400						0.4100	7.06	30	
Surr: 4-Bromofluorobenzene	9.15		10.00		91.5	62.9	130		0		
Surr: Dibromofluoromethane	9.69		10.00		96.9	68	140		0		
Surr: Toluene-d8	10.5		10.00		105	68.8	119		0		

Sample ID: 1208039-024ADUP	SampType: DUP	Units: µg/L				Prep Date: 8/14/2012			RunNo: 5355		
Client ID: MW-26D	Batch ID: R5355					Analysis Date: 8/15/2012			SeqNo: 105085		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	0.500	0.400						0.5900	16.5	30	
Surr: 4-Bromofluorobenzene	9.04		10.00		90.4	62.9	130		0		
Surr: Dibromofluoromethane	9.64		10.00		96.4	68	140		0		
Surr: Toluene-d8	10.5		10.00		105	68.8	119		0		

Sample ID: 1208039-009AMS	SampType: MS	Units: µg/L				Prep Date: 8/14/2012			RunNo: 5355		
Client ID: MW-25S	Batch ID: R5355					Analysis Date: 8/15/2012			SeqNo: 105087		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	106	0.400	100.0	0.2500	106	65	135				
Surr: 4-Bromofluorobenzene	9.18		10.00		91.8	62.9	130				
Surr: Dibromofluoromethane	9.70		10.00		97.0	68	140				
Surr: Toluene-d8	10.5		10.00		105	68.8	119				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 8/17/2012

Work Order: 1208039  
CLIENT: URS Corporation  
Project: Belshaw

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260 SIM**

Sample ID: 1208039-019AMS		SampType: MS			Units: µg/L		Prep Date: 8/14/2012			RunNo: 5355		
Client ID: MW-32I		Batch ID: R5355			Analysis Date: 8/15/2012			SeqNo: 105088				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

1,4-Dioxane	101	0.400	100.0	0.3400	101	65	135				
Surr: 4-Bromofluorobenzene	8.73		10.00		87.3	62.9	130				
Surr: Dibromofluoromethane	9.66		10.00		96.6	68	140				
Surr: Toluene-d8	10.9		10.00		109	68.8	119				

Sample ID: <b>MBLK-R5355</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>			Prep Date: <b>8/14/2012</b>			RunNo: <b>5355</b>			
Client ID: <b>MBLKW</b>	Batch ID: <b>R5355</b>				Analysis Date: <b>8/14/2012</b>			SeqNo: <b>105089</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,4-Dioxane	ND	0.400									
Surr: 4-Bromofluorobenzene	9.03		10.00		90.3	62.9	130				
Surr: Dibromofluoromethane	9.74		10.00		97.4	68	140				
Surr: Toluene-d8	10.4		10.00		104	68.8	119				

Sample ID: <b>LCS-R5355</b>		SampType: <b>LCS</b>		Units: <b>µg/L</b>		Prep Date: <b>8/14/2012</b>			RunNo: <b>5355</b>		
Client ID: <b>LCSW</b>		Batch ID: <b>R5355</b>					Analysis Date: <b>8/14/2012</b>			SeqNo: <b>105092</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,4-Dioxane	99.7	0.400	100.0	0	99.7	70	130				
Surr: 4-Bromofluorobenzene	9.17		10.00		91.7	62.9	130				
Surr: Dibromofluoromethane	9.79		10.00		97.9	68	140				
Surr: Toluene-d8	10.5		10.00		105	68.8	119				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 8/17/2012

Work Order: 1208039  
CLIENT: URS Corporation  
Project: Belshaw

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260 SIM**

Sample ID: <b>MBLK2-R5355</b>		SampType: <b>MBLK</b>		Units: <b>µg/L</b>		Prep Date: <b>8/14/2012</b>			RunNo: <b>5355</b>			
Client ID: <b>MBLKW</b>		Batch ID: <b>R5355</b>					Analysis Date: <b>8/15/2012</b>			SeqNo: <b>105101</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

1,4-Dioxane	ND	0.400									
Surr: 4-Bromofluorobenzene	9.12		10.00		91.2	62.9	130				
Surr: Dibromofluoromethane	9.61		10.00		96.1	68	140				
Surr: Toluene-d8	11.0		10.00		110	68.8	119				

Sample ID: <b>LCS2-R5355</b>		SampType: <b>LCS</b>			Units: <b>µg/L</b>		Prep Date: <b>8/14/2012</b>			RunNo: <b>5355</b>		
Client ID: <b>LCSW</b>		Batch ID: <b>R5355</b>			Analysis Date: <b>8/15/2012</b>			SeqNo: <b>105102</b>				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

1,4-Dioxane	107	0.400	100.0	0	107	70	130				
Surr: 4-Bromofluorobenzene	9.10		10.00		91.0	62.9	130				
Surr: Dibromofluoromethane	9.80		10.00		98.0	68	140				
Surr: Toluene-d8	10.4		10.00		104	68.8	119				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Client Name: **URS**

 Work Order Number: **1208039**

 Logged by: **Clare Griggs**

 Date Received: **8/7/2012 6:00:00 PM**

## Chain of Custody

1. Were custodial seals present? Yes ☐ No ☐ Not Required ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Client

## Log In

4. Coolers are present? Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all coolers received at a temperature of >0° C to 10.0°C Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. Is there headspace present in VOA vials? Yes ☐ No ☒ NA ☐
12. Did all sample containers arrive in good condition?(unbroken) Yes ☒ No ☐
13. Does paperwork match bottle labels? Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met? Yes ☒ No ☐

## Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

18. Additional remarks/Discrepancies

## Item Information

Item #	Temp °C	Condition
Cooler	4.2	Good



# Fremont

1211 N. 35th Street  
Seattle, WA 98103

Tel: 206-352-3790  
Fax: 206-352-7178

Client: URS

Address:

City, State, Zip

Tel:

Date: 8-7-12

Project Name:

Location:

Collected by:

## Chain of Custody Record

Laboratory Project No. (Internal): 1208039

Page 1 of 3

Be/Sheila

Seattle, Wash

Anthony Robinson

Reports To (PIN): Rainbow and Alkaline Fax:

Email:

Project No:

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	Comments/Notes
1. MW-28D	8-7-12	1005	AG	
2. MW-28T		1025		
3. MW-28S		1030		
4. MW-30S		1100		
5. MW-30I		1105		
6. MW-30D		1110		
7. MW-24S		1245		
8. MW-24D		1250		
9. MW-25S		1310		
10. MW-25I		1315		

\* Metals Analysis (Circle): Ni/Ca-S Priority Pollutants TAL Individual: Ag Al As B Bi Be Cd Co Cr Cu Fe Hg Mn Mo Ni Pb Sb Se Sr Ti V W Zn Pb

\* Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide Iodide Fluoride Bifluoride

Sample Disposal: ☐ Return to Client ☐ Disposal (by Lab) (All samples to be tested for metals (overlaid after 30 days))

Signature: Anthony Robinson Date/Time: 8-7-12 1800

Signature: [Signature] Date/Time: 8/7/12 1800

Special Remarks:  
Call Paul Araling for Analyte list!!!

TAT -> Test Day: 3.0 Day STD



TEL: 206-352-3790  
FAX: 206-452-7178

1175

Tool

Tool

Reports To (PM): Paulino J. Kallio Fax: \_\_\_\_\_

Pretest No.

Project Name:

Location

Collected by:

Page: 13

at: M

*Bolsone*

Sept 2, 1904

Autbury Palmera

### Chain of Custody Record

[illegible][illegible]

*Anions (Cations)	Minerals	Minerals	Sulfate	Bromide	D. Bromide	Fluoride	Nitrate + Nitrite

☐ Return to Client ☐ Disposed by Job (See [Disposition and Disposal](#)) ☒ Disposed by Other (See [Disposition and Disposal](#))

1. *Mathematics* (100 marks)

Responsible	Date/Time
Choksy, A.C.	8.7.12 1800
Responsible	Date/Time

Date/Time 8/7/12 1:00

Special Remarks: Col Paul  
Estimate for Analyte  
Dist !!!

Day	Next Day	Day	Day
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	







1311 N. 35th St.  
Seattle, WA 98103  
T: (206) 352-3790  
F: (206) 352-7178  
info@fremontanalytical.com

**URS Corporation**  
David Raubvogel  
1501 4th Ave., Suite 1400  
Seattle, Washington 98101

**RE: Belshaw Bros. GW Sampling**  
**Lab ID: 1207141**

August 14, 2012

**Attention David Raubvogel:**

Fremont Analytical, Inc. received 19 sample(s) on 7/25/2012 for the analyses presented in the following report.

***Gasoline by NWTPH-Gx***  
***Total Metals by EPA Method 6020***  
***Volatile Organic Compounds by EPA Method 8260***  
***Volatile Organic Compounds by EPA Method 8260 SIM***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Michael Dee  
Sr. Chemist / Principal

**CC:**  
Christine Gebel  
Paul Kalina



Date: 08/14/2012

**CLIENT:** URS Corporation  
**Project:** Belshaw Bros. GW Sampling  
**Lab Order:** 1207141

## Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1207141-001	Trip Blank	07/18/2012 3:20 PM	07/25/2012 2:25 PM
1207141-002	DPE-7	07/23/2012 4:20 PM	07/25/2012 2:25 PM
1207141-003	DPE-2	07/24/2012 9:10 AM	07/25/2012 2:25 PM
1207141-004	DPE-6	07/24/2012 10:20 AM	07/25/2012 2:25 PM
1207141-005	DPE-1	07/24/2012 11:20 AM	07/25/2012 2:25 PM
1207141-006	MW-13	07/24/2012 1:20 PM	07/25/2012 2:25 PM
1207141-007	DPE-3	07/24/2012 2:15 PM	07/25/2012 2:25 PM
1207141-008	MW-3	07/24/2012 3:30 PM	07/25/2012 2:25 PM
1207141-009	MW-18-1	07/24/2012 3:45 PM	07/25/2012 2:25 PM
1207141-010	MW-18-2	07/24/2012 4:25 PM	07/25/2012 2:25 PM
1207141-011	MW-18-3	07/24/2012 5:05 PM	07/25/2012 2:25 PM
1207141-012	MW-19-1	07/25/2012 9:20 AM	07/25/2012 2:25 PM
1207141-013	MW-19-2	07/25/2012 10:00 AM	07/25/2012 2:25 PM
1207141-014	MW-19-6	07/25/2012 10:40 AM	07/25/2012 2:25 PM
1207141-015	MW-1	07/25/2012 11:20 AM	07/25/2012 2:25 PM
1207141-016	MW-20-1	07/25/2012 11:30 AM	07/25/2012 2:25 PM
1207141-017	MW-20-2	07/25/2012 12:15 PM	07/25/2012 2:25 PM
1207141-018	MW-20-3	07/25/2012 12:55 PM	07/25/2012 2:25 PM
1207141-019	MW-20-5	07/25/2012 1:45 PM	07/25/2012 2:25 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned



## Case Narrative

WO#: 1207141

Date: 8/14/2012

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**CLIENT:** URS Corporation  
**Project:** Belshaw Bros. GW Sampling

---

### I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

### II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

### III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.



# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/23/2012 4:20:00 PM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-002

Matrix: Water

Client Sample ID: DPE-7

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Gasoline by NWTPH-Gx**

Batch ID: R5150

Analyst: EM

Gasoline	ND	50.0		µg/L	1	7/31/2012 9:32:00 AM
Surr: 1,2-Dichloroethane-d4	87.6	65-135		%REC	1	7/31/2012 9:32:00 AM
Surr: Fluorobenzene	100	65-135		%REC	1	7/31/2012 9:32:00 AM

**Volatile Organic Compounds by EPA Method 8260**

Batch ID: R5149

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Chloromethane	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Vinyl chloride	ND	0.200		µg/L	1	7/31/2012 9:32:00 AM
Bromomethane	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Chloroethane	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Methylene chloride	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	7/31/2012 9:32:00 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Chloroform	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Carbon tetrachloride	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Benzene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Trichloroethene (TCE)	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Bromodichloromethane	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Dibromomethane	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Toluene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/23/2012 4:20:00 PM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-002

Matrix: Water

Client Sample ID: DPE-7

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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### Volatile Organic Compounds by EPA Method 8260

Batch ID: R5149

Analyst: EM

Dibromochloromethane	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	7/31/2012 9:32:00 AM
Chlorobenzene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Ethylbenzene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
m,p-Xylene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
o-Xylene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Styrene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Isopropylbenzene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Bromoform	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
n-Propylbenzene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Bromobenzene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
2-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
4-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
tert-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	7/31/2012 9:32:00 AM
sec-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
n-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
Hexachlorobutadiene	ND	4.00		µg/L	1	7/31/2012 9:32:00 AM
Naphthalene	ND	1.00		µg/L	1	7/31/2012 9:32:00 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	7/31/2012 9:32:00 AM
Surr: 1-Bromo-4-fluorobenzene	120	79.2-120		%REC	1	7/31/2012 9:32:00 AM
Surr: Dibromofluoromethane	99.1	76-114		%REC	1	7/31/2012 9:32:00 AM
Surr: Toluene-d8	106	86.8-119		%REC	1	7/31/2012 9:32:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/23/2012 4:20:00 PM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-002

Matrix: Water

Client Sample ID: DPE-7

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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### Volatile Organic Compounds by EPA Method 8260 SIM

Batch ID: R5317

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/7/2012 4:07:00 PM
Surr: 4-Bromofluorobenzene	85.6	62.9-130		%REC	1	8/7/2012 4:07:00 PM
Surr: Dibromofluoromethane	97.5	68-140		%REC	1	8/7/2012 4:07:00 PM
Surr: Toluene-d8	101	68.8-119		%REC	1	8/7/2012 4:07:00 PM

### Total Metals by EPA Method 6020

Batch ID: 2853

Analyst: BR

Lead	1.57	1.00		µg/L	1	7/26/2012 8:40:17 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/24/2012 9:10:00 AM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-003

Matrix: Water

Client Sample ID: DPE-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Gasoline by NWTPH-Gx</b>				Batch ID: R5150		Analyst: EM
Gasoline	77.0	50.0		µg/L	1	7/31/2012 10:44:00 AM
Surr: 1,2-Dichloroethane-d4	91.6	65-135		%REC	1	7/31/2012 10:44:00 AM
Surr: Fluorobenzene	103	65-135		%REC	1	7/31/2012 10:44:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5149 Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Chloromethane	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Vinyl chloride	ND	0.200		µg/L	1	7/31/2012 10:44:00 AM
Bromomethane	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Chloroethane	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Methylene chloride	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	7/31/2012 10:44:00 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Chloroform	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Carbon tetrachloride	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Benzene	1.18	1.00		µg/L	1	7/31/2012 10:44:00 AM
Trichloroethene (TCE)	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Bromodichloromethane	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Dibromomethane	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Toluene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/24/2012 9:10:00 AM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-003

Matrix: Water

Client Sample ID: DPE-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>				Batch ID: R5149		Analyst: EM
Dibromochloromethane	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	7/31/2012 10:44:00 AM
Chlorobenzene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Ethylbenzene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
m,p-Xylene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
o-Xylene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Styrene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Isopropylbenzene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Bromoform	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
n-Propylbenzene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
Bromobenzene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
2-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
4-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
tert-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	7/31/2012 10:44:00 AM
sec-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
n-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,2,4-Trimethylbenzene	4.65	1.00		µg/L	1	7/31/2012 10:44:00 AM
Hexachlorobutadiene	ND	4.00		µg/L	1	7/31/2012 10:44:00 AM
Naphthalene	ND	1.00		µg/L	1	7/31/2012 10:44:00 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	7/31/2012 10:44:00 AM
Surr: 1-Bromo-4-fluorobenzene	118	79.2-120		%REC	1	7/31/2012 10:44:00 AM
Surr: Dibromofluoromethane	100	76-114		%REC	1	7/31/2012 10:44:00 AM
Surr: Toluene-d8	107	86.8-119		%REC	1	7/31/2012 10:44:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/24/2012 9:10:00 AM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-003

Matrix: Water

Client Sample ID: DPE-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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### Volatile Organic Compounds by EPA Method 8260 SIM

Batch ID: R5317

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/7/2012 4:53:00 AM
Surr: 4-Bromofluorobenzene	100	62.9-130		%REC	1	8/7/2012 4:53:00 AM
Surr: Dibromofluoromethane	98.4	68-140		%REC	1	8/7/2012 4:53:00 AM
Surr: Toluene-d8	99.9	68.8-119		%REC	1	8/7/2012 4:53:00 AM

### Total Metals by EPA Method 6020

Batch ID: 2853

Analyst: BR

Lead	1.06	1.00		µg/L	1	7/26/2012 8:46:51 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/24/2012 10:20:00 AM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-004

**Matrix:** Water

**Client Sample ID:** DPE-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5150

Analyst: EM

Gasoline	ND	50.0		µg/L	1	7/31/2012 11:20:00 AM
Surr: 1,2-Dichloroethane-d4	88.6	65-135		%REC	1	7/31/2012 11:20:00 AM
Surr: Fluorobenzene	102	65-135		%REC	1	7/31/2012 11:20:00 AM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5149

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Chloromethane	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Vinyl chloride	ND	0.200		µg/L	1	7/31/2012 11:20:00 AM
Bromomethane	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Chloroethane	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Methylene chloride	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	7/31/2012 11:20:00 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Chloroform	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Carbon tetrachloride	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Benzene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Trichloroethene (TCE)	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Bromodichloromethane	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Dibromomethane	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Toluene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/24/2012 10:20:00 AM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-004

Matrix: Water

Client Sample ID: DPE-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>				Batch ID: R5149	Analyst: EM	
Dibromochloromethane	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	7/31/2012 11:20:00 AM
Chlorobenzene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Ethylbenzene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
m,p-Xylene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
o-Xylene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Styrene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Isopropylbenzene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Bromoform	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
n-Propylbenzene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Bromobenzene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
2-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
4-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
tert-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	7/31/2012 11:20:00 AM
sec-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
n-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
Hexachlorobutadiene	ND	4.00		µg/L	1	7/31/2012 11:20:00 AM
Naphthalene	ND	1.00		µg/L	1	7/31/2012 11:20:00 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	7/31/2012 11:20:00 AM
Surr: 1-Bromo-4-fluorobenzene	117	79.2-120		%REC	1	7/31/2012 11:20:00 AM
Surr: Dibromofluoromethane	99.0	76-114		%REC	1	7/31/2012 11:20:00 AM
Surr: Toluene-d8	106	86.8-119		%REC	1	7/31/2012 11:20:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/24/2012 10:20:00 AM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-004

Matrix: Water

Client Sample ID: DPE-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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### Volatile Organic Compounds by EPA Method 8260 SIM

Batch ID: R5317

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/7/2012 5:23:00 AM
Surr: 4-Bromofluorobenzene	97.9	62.9-130		%REC	1	8/7/2012 5:23:00 AM
Surr: Dibromofluoromethane	99.8	68-140		%REC	1	8/7/2012 5:23:00 AM
Surr: Toluene-d8	101	68.8-119		%REC	1	8/7/2012 5:23:00 AM

### Total Metals by EPA Method 6020

Batch ID: 2853

Analyst: BR

Lead	ND	1.00		µg/L	1	7/26/2012 8:53:24 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/24/2012 11:20:00 AM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-005

**Matrix:** Water

**Client Sample ID:** DPE-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>				Batch ID: R5149		Analyst: EM
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Chloromethane	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Vinyl chloride	ND	0.200		µg/L	1	7/31/2012 11:52:00 AM
Bromomethane	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Chloroethane	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Methylene chloride	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	7/31/2012 11:52:00 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Chloroform	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,1,1-Trichloroethane (TCA)	4.87	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Carbon tetrachloride	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Benzene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Trichloroethene (TCE)	16.9	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Bromodichloromethane	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Dibromomethane	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Toluene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Tetrachloroethene (PCE)	1.32	1.00		µg/L	1	7/31/2012 11:52:00 AM
Dibromochloromethane	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	7/31/2012 11:52:00 AM
Chlorobenzene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Ethylbenzene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
m,p-Xylene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/24/2012 11:20:00 AM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-005

Matrix: Water

Client Sample ID: DPE-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5149

Analyst: EM

o-Xylene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Styrene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Isopropylbenzene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Bromoform	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
n-Propylbenzene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Bromobenzene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
2-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
4-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
tert-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	7/31/2012 11:52:00 AM
sec-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
n-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
Hexachlorobutadiene	ND	4.00		µg/L	1	7/31/2012 11:52:00 AM
Naphthalene	ND	1.00		µg/L	1	7/31/2012 11:52:00 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	7/31/2012 11:52:00 AM
Surr: 1-Bromo-4-fluorobenzene	116	79.2-120		%REC	1	7/31/2012 11:52:00 AM
Surr: Dibromofluoromethane	99.5	76-114		%REC	1	7/31/2012 11:52:00 AM
Surr: Toluene-d8	106	86.8-119		%REC	1	7/31/2012 11:52:00 AM

## Volatile Organic Compounds by EPA Method 8260 SIM

Batch ID: R5317

Analyst: MD

1,4-Dioxane	1.00	0.400		µg/L	1	8/7/2012 6:23:00 AM
Surr: 4-Bromofluorobenzene	98.8	62.9-130		%REC	1	8/7/2012 6:23:00 AM
Surr: Dibromofluoromethane	100	68-140		%REC	1	8/7/2012 6:23:00 AM
Surr: Toluene-d8	100	68.8-119		%REC	1	8/7/2012 6:23:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/24/2012 1:20:00 PM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-006

**Matrix:** Water

**Client Sample ID:** MW-13

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5150

Analyst: EM

Gasoline	ND	50.0		µg/L	1	7/31/2012 12:25:00 PM
Surr: 1,2-Dichloroethane-d4	89.9	65-135		%REC	1	7/31/2012 12:25:00 PM
Surr: Fluorobenzene	103	65-135		%REC	1	7/31/2012 12:25:00 PM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5149

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Chloromethane	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Vinyl chloride	ND	0.200		µg/L	1	7/31/2012 12:25:00 PM
Bromomethane	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Chloroethane	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Methylene chloride	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
2,2-Dichloropropane	ND	2.00		µg/L	1	7/31/2012 12:25:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Chloroform	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Benzene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Trichloroethene (TCE)	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Bromodichloromethane	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Dibromomethane	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Toluene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/24/2012 1:20:00 PM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-006

Matrix: Water

Client Sample ID: MW-13

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>				Batch ID: R5149		Analyst: EM
Dibromochloromethane	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	7/31/2012 12:25:00 PM
Chlorobenzene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Ethylbenzene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
m,p-Xylene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
o-Xylene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Styrene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Bromoform	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Bromobenzene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	7/31/2012 12:25:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
Hexachlorobutadiene	ND	4.00		µg/L	1	7/31/2012 12:25:00 PM
Naphthalene	ND	1.00		µg/L	1	7/31/2012 12:25:00 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	7/31/2012 12:25:00 PM
Surr: 1-Bromo-4-fluorobenzene	118	79.2-120		%REC	1	7/31/2012 12:25:00 PM
Surr: Dibromofluoromethane	96.1	76-114		%REC	1	7/31/2012 12:25:00 PM
Surr: Toluene-d8	107	86.8-119		%REC	1	7/31/2012 12:25:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/24/2012 1:20:00 PM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-006

Matrix: Water

Client Sample ID: MW-13

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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### Volatile Organic Compounds by EPA Method 8260 SIM

Batch ID: R5317

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/7/2012 6:54:00 AM
Surr: 4-Bromofluorobenzene	99.0	62.9-130		%REC	1	8/7/2012 6:54:00 AM
Surr: Dibromofluoromethane	99.9	68-140		%REC	1	8/7/2012 6:54:00 AM
Surr: Toluene-d8	101	68.8-119		%REC	1	8/7/2012 6:54:00 AM

### Total Metals by EPA Method 6020

Batch ID: 2853

Analyst: BR

Lead	ND	1.00		µg/L	1	7/26/2012 8:59:57 PM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/24/2012 2:15:00 PM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-007

Matrix: Water

Client Sample ID: DPE-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5150

Analyst: EM

Gasoline	445	50.0		µg/L	1	7/31/2012 12:57:00 PM
Surr: 1,2-Dichloroethane-d4	92.6	65-135		%REC	1	7/31/2012 12:57:00 PM
Surr: Fluorobenzene	103	65-135		%REC	1	7/31/2012 12:57:00 PM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5149

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
Chloromethane	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
Vinyl chloride	ND	0.200		µg/L	1	7/31/2012 12:57:00 PM
Bromomethane	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
Chloroethane	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
Methylene chloride	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
2,2-Dichloropropane	ND	2.00		µg/L	1	7/31/2012 12:57:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
Chloroform	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,2-Dichloroethane (EDC)	2.86	1.00		µg/L	1	7/31/2012 12:57:00 PM
Benzene	26.4	1.00		µg/L	1	7/31/2012 12:57:00 PM
Trichloroethene (TCE)	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
Bromodichloromethane	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
Dibromomethane	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
Toluene	10.4	1.00		µg/L	1	7/31/2012 12:57:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/24/2012 2:15:00 PM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-007

Matrix: Water

Client Sample ID: DPE-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>				Batch ID: R5149		Analyst: EM
Dibromochloromethane	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	7/31/2012 12:57:00 PM
Chlorobenzene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
Ethylbenzene	7.17	1.00		µg/L	1	7/31/2012 12:57:00 PM
m,p-Xylene	26.4	1.00		µg/L	1	7/31/2012 12:57:00 PM
o-Xylene	10.0	1.00		µg/L	1	7/31/2012 12:57:00 PM
Styrene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
Isopropylbenzene	1.51	1.00		µg/L	1	7/31/2012 12:57:00 PM
Bromoform	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
n-Propylbenzene	2.10	1.00		µg/L	1	7/31/2012 12:57:00 PM
Bromobenzene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	7/31/2012 12:57:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,2,4-Trimethylbenzene	12.0	1.00		µg/L	1	7/31/2012 12:57:00 PM
Hexachlorobutadiene	ND	4.00		µg/L	1	7/31/2012 12:57:00 PM
Naphthalene	2.44	1.00		µg/L	1	7/31/2012 12:57:00 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	7/31/2012 12:57:00 PM
Surr: 1-Bromo-4-fluorobenzene	119	79.2-120		%REC	1	7/31/2012 12:57:00 PM
Surr: Dibromofluoromethane	101	76-114		%REC	1	7/31/2012 12:57:00 PM
Surr: Toluene-d8	110	86.8-119		%REC	1	7/31/2012 12:57:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits





## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/24/2012 2:15:00 PM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-007

**Matrix:** Water

**Client Sample ID:** DPE-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5317

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/7/2012 7:24:00 AM
Surr: 4-Bromofluorobenzene	99.7	62.9-130		%REC	1	8/7/2012 7:24:00 AM
Surr: Dibromofluoromethane	99.9	68-140		%REC	1	8/7/2012 7:24:00 AM
Surr: Toluene-d8	99.9	68.8-119		%REC	1	8/7/2012 7:24:00 AM

**Total Metals by EPA Method 6020**

Batch ID: 2853

Analyst: BR

Lead	1.45	1.00		µg/L	1	7/26/2012 9:06:30 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits





# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/24/2012 3:30:00 PM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-008

**Matrix:** Water

**Client Sample ID:** MW-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Gasoline by NWTPH-Gx

Batch ID: R5150

Analyst: EM

Gasoline	ND	50.0		µg/L	1	7/31/2012 1:30:00 PM
Surr: 1,2-Dichloroethane-d4	81.3	65-135		%REC	1	7/31/2012 1:30:00 PM
Surr: Fluorobenzene	100	65-135		%REC	1	7/31/2012 1:30:00 PM

## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5149

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Chloromethane	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Vinyl chloride	ND	0.200		µg/L	1	7/31/2012 1:30:00 PM
Bromomethane	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Chloroethane	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Methylene chloride	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
2,2-Dichloropropane	ND	2.00		µg/L	1	7/31/2012 1:30:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Chloroform	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Benzene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Trichloroethene (TCE)	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Bromodichloromethane	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Dibromomethane	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Toluene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 RL Reporting Limit

D Dilution was required  
 H Holding times for preparation or analysis exceeded  
 ND Not detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/24/2012 3:30:00 PM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-008

Matrix: Water

Client Sample ID: MW-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Volatile Organic Compounds by EPA Method 8260</b>				Batch ID: R5149	Analyst: EM	
Dibromochloromethane	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	7/31/2012 1:30:00 PM
Chlorobenzene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Ethylbenzene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
m,p-Xylene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
o-Xylene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Styrene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Bromoform	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Bromobenzene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	7/31/2012 1:30:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
Hexachlorobutadiene	ND	4.00		µg/L	1	7/31/2012 1:30:00 PM
Naphthalene	ND	1.00		µg/L	1	7/31/2012 1:30:00 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	7/31/2012 1:30:00 PM
Surr: 1-Bromo-4-fluorobenzene	120	79.2-120		%REC	1	7/31/2012 1:30:00 PM
Surr: Dibromofluoromethane	96.8	76-114		%REC	1	7/31/2012 1:30:00 PM
Surr: Toluene-d8	109	86.8-119		%REC	1	7/31/2012 1:30:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/24/2012 3:30:00 PM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-008

**Matrix:** Water

**Client Sample ID:** MW-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Total Metals by EPA Method 6020**

Batch ID: 2853

Analyst: BR

Lead	ND	1.00		µg/L	1	7/26/2012 9:13:03 PM
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**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/24/2012 3:45:00 PM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-009

**Matrix:** Water

**Client Sample ID:** MW-18-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5317

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/7/2012 8:52:00 AM
Surr: 4-Bromofluorobenzene	97.8	62.9-130		%REC	1	8/7/2012 8:52:00 AM
Surr: Dibromofluoromethane	99.4	68-140		%REC	1	8/7/2012 8:52:00 AM
Surr: Toluene-d8	101	68.8-119		%REC	1	8/7/2012 8:52:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/24/2012 4:25:00 PM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-010

**Matrix:** Water

**Client Sample ID:** MW-18-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5317

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/7/2012 9:21:00 AM
Surr: 4-Bromofluorobenzene	99.7	62.9-130		%REC	1	8/7/2012 9:21:00 AM
Surr: Dibromofluoromethane	99.7	68-140		%REC	1	8/7/2012 9:21:00 AM
Surr: Toluene-d8	101	68.8-119		%REC	1	8/7/2012 9:21:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/24/2012 5:05:00 PM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-011

**Matrix:** Water

**Client Sample ID:** MW-18-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5317

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/7/2012 9:50:00 AM
Surr: 4-Bromofluorobenzene	97.5	62.9-130		%REC	1	8/7/2012 9:50:00 AM
Surr: Dibromofluoromethane	99.3	68-140		%REC	1	8/7/2012 9:50:00 AM
Surr: Toluene-d8	101	68.8-119		%REC	1	8/7/2012 9:50:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/25/2012 9:20:00 AM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-012

**Matrix:** Water

**Client Sample ID:** MW-19-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5317

Analyst: MD

1,4-Dioxane	2.86	0.400		µg/L	1	8/7/2012 10:20:00 AM
Surr: 4-Bromofluorobenzene	98.9	62.9-130		%REC	1	8/7/2012 10:20:00 AM
Surr: Dibromofluoromethane	99.7	68-140		%REC	1	8/7/2012 10:20:00 AM
Surr: Toluene-d8	101	68.8-119		%REC	1	8/7/2012 10:20:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/25/2012 10:00:00 AM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-013

**Matrix:** Water

**Client Sample ID:** MW-19-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5317

Analyst: MD

1,4-Dioxane	3.73	0.400		µg/L	1	8/7/2012 10:49:00 AM
Surr: 4-Bromofluorobenzene	98.8	62.9-130		%REC	1	8/7/2012 10:49:00 AM
Surr: Dibromofluoromethane	99.7	68-140		%REC	1	8/7/2012 10:49:00 AM
Surr: Toluene-d8	101	68.8-119		%REC	1	8/7/2012 10:49:00 AM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits





## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/25/2012 10:40:00 AM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-014

**Matrix:** Water

**Client Sample ID:** MW-19-6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5317

Analyst: MD

1,4-Dioxane	1.42	0.400		µg/L	1	8/7/2012 11:19:00 AM
Surr: 4-Bromofluorobenzene	99.1	62.9-130		%REC	1	8/7/2012 11:19:00 AM
Surr: Dibromofluoromethane	97.1	68-140		%REC	1	8/7/2012 11:19:00 AM
Surr: Toluene-d8	101	68.8-119		%REC	1	8/7/2012 11:19:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/25/2012 11:20:00 AM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-015

Matrix: Water

Client Sample ID: MW-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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## Volatile Organic Compounds by EPA Method 8260

Batch ID: R5149

Analyst: EM

Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Chloromethane	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Vinyl chloride	ND	0.200		µg/L	1	7/31/2012 2:02:00 PM
Bromomethane	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Chloroethane	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,1-Dichloroethene	9.51	1.00		µg/L	1	7/31/2012 2:02:00 PM
Methylene chloride	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
2,2-Dichloropropane	ND	2.00		µg/L	1	7/31/2012 2:02:00 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Chloroform	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,1,1-Trichloroethane (TCA)	21.6	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Carbon tetrachloride	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Benzene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Trichloroethene (TCE)	4.62	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Bromodichloromethane	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Dibromomethane	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Toluene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Dibromochloromethane	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,2-Dibromoethane (EDB)	ND	0.0100		µg/L	1	7/31/2012 2:02:00 PM
Chlorobenzene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Ethylbenzene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
m,p-Xylene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

Client: URS Corporation

Collection Date: 7/25/2012 11:20:00 AM

Project: Belshaw Bros. GW Sampling

Lab ID: 1207141-015

Matrix: Water

Client Sample ID: MW-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260**

Batch ID: R5149

Analyst: EM

o-Xylene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Styrene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Isopropylbenzene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Bromoform	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
n-Propylbenzene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Bromobenzene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
2-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
4-Chlorotoluene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
tert-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	7/31/2012 2:02:00 PM
sec-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
n-Butylbenzene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
Hexachlorobutadiene	ND	4.00		µg/L	1	7/31/2012 2:02:00 PM
Naphthalene	ND	1.00		µg/L	1	7/31/2012 2:02:00 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	7/31/2012 2:02:00 PM
Surr: 1-Bromo-4-fluorobenzene	119	79.2-120		%REC	1	7/31/2012 2:02:00 PM
Surr: Dibromofluoromethane	100	76-114		%REC	1	7/31/2012 2:02:00 PM
Surr: Toluene-d8	110	86.8-119		%REC	1	7/31/2012 2:02:00 PM

**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5317

Analyst: MD

1,4-Dioxane	0.700	0.400		µg/L	1	8/7/2012 11:48:00 AM
Surr: 4-Bromofluorobenzene	97.9	62.9-130		%REC	1	8/7/2012 11:48:00 AM
Surr: Dibromofluoromethane	99.3	68-140		%REC	1	8/7/2012 11:48:00 AM
Surr: Toluene-d8	101	68.8-119		%REC	1	8/7/2012 11:48:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/25/2012 11:30:00 AM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-016

**Matrix:** Water

**Client Sample ID:** MW-20-1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5317

Analyst: MD

1,4-Dioxane	0.750	0.400		µg/L	1	8/7/2012 12:19:00 PM
Surr: 4-Bromofluorobenzene	99.6	62.9-130		%REC	1	8/7/2012 12:19:00 PM
Surr: Dibromofluoromethane	98.6	68-140		%REC	1	8/7/2012 12:19:00 PM
Surr: Toluene-d8	101	68.8-119		%REC	1	8/7/2012 12:19:00 PM

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/25/2012 12:15:00 PM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-017

**Matrix:** Water

**Client Sample ID:** MW-20-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5317

Analyst: MD

1,4-Dioxane	0.530	0.400		µg/L	1	8/7/2012 12:49:00 PM
Surr: 4-Bromofluorobenzene	98.3	62.9-130		%REC	1	8/7/2012 12:49:00 PM
Surr: Dibromofluoromethane	97.7	68-140		%REC	1	8/7/2012 12:49:00 PM
Surr: Toluene-d8	101	68.8-119		%REC	1	8/7/2012 12:49:00 PM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/25/2012 12:55:00 PM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-018

**Matrix:** Water

**Client Sample ID:** MW-20-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5317

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/7/2012 1:20:00 PM
Surr: 4-Bromofluorobenzene	127	62.9-130		%REC	1	8/7/2012 1:20:00 PM
Surr: Dibromofluoromethane	89.2	68-140		%REC	1	8/7/2012 1:20:00 PM
Surr: Toluene-d8	120	68.8-119	S	%REC	1	8/7/2012 1:20:00 PM

**NOTES:**

S - Outlying surrogate recovery observed.

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



## Analytical Report

WO#: 1207141

Date Reported: 8/14/2012

**Client:** URS Corporation

**Collection Date:** 7/25/2012 1:45:00 PM

**Project:** Belshaw Bros. GW Sampling

**Lab ID:** 1207141-019

**Matrix:** Water

**Client Sample ID:** MW-20-5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Volatile Organic Compounds by EPA Method 8260 SIM**

Batch ID: R5317

Analyst: MD

1,4-Dioxane	ND	0.400		µg/L	1	8/7/2012 1:52:00 PM
Surr: 4-Bromofluorobenzene	118	62.9-130		%REC	1	8/7/2012 1:52:00 PM
Surr: Dibromofluoromethane	81.2	68-140		%REC	1	8/7/2012 1:52:00 PM
Surr: Toluene-d8	138	68.8-119	S	%REC	1	8/7/2012 1:52:00 PM

**NOTES:**

S - Outlying surrogate recovery observed.

**Qualifiers:**

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
RL	Reporting Limit

D	Dilution was required
H	Holding times for preparation or analysis exceeded
ND	Not detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits



Date: 8/14/2012

Work Order: 1207141  
CLIENT: URS Corporation  
Project: Belshaw Bros. GW Sampling

**QC SUMMARY REPORT**  
**Total Metals by EPA Method 6020**

Sample ID: <b>MB-2853</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>			Prep Date: <b>7/26/2012</b>			RunNo: <b>5112</b>			
Client ID: <b>MBLKW</b>	Batch ID: <b>2853</b>				Analysis Date: <b>7/26/2012</b>			SeqNo: <b>99918</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	ND	1.00									
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Sample ID: <b>LCS-2853</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>			Prep Date: <b>7/26/2012</b>			RunNo: <b>5112</b>			
Client ID: <b>LCSW</b>	Batch ID: <b>2853</b>				Analysis Date: <b>7/26/2012</b>			SeqNo: <b>99919</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	50.8	1.00	50.00	0	102	80	120				
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Sample ID: 1207126-001ADUP		SampType: DUP			Units: µg/L		Prep Date: 7/26/2012			RunNo: 5112		
Client ID: BATCH		Batch ID: 2853			Analysis Date: 7/26/2012			SeqNo: 99921				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	3.01	1.00						3.198	5.94	30	
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Sample ID: 1207126-001AMS		SampType: MS			Units: µg/L		Prep Date: 7/26/2012			RunNo: 5112		
Client ID: BATCH		Batch ID: 2853			Analysis Date: 7/26/2012			SeqNo: 99922				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	270	1.00	250.0	3.198	107	75	125				
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Sample ID: 1207126-001AMSD	SampType: MSD	Units: µg/L				Prep Date: 7/26/2012				RunNo: 5112	
Client ID: BATCH	Batch ID: 2853					Analysis Date: 7/26/2012				SeqNo: 99923	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	261	1.00	250.0	3.198	103	75	125	269.8	3.27	30	
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<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits





Date: 8/14/2012

Work Order: 1207141  
CLIENT: URS Corporation  
Project: Belshaw Bros. GW Sampling

## QC SUMMARY REPORT

### Gasoline by NWTPH-Gx

Sample ID: 1207141-002ADUP		SampType: DUP		Units: µg/L		Prep Date: 7/31/2012			RunNo: 5150			
Client ID: DPE-7		Batch ID: R5150					Analysis Date: 7/31/2012			SeqNo: 101136		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Gasoline	ND	50.0						0	0	30	
Surr: 1,2-Dichloroethane-d4	8.49		10.00		84.9	65	135		0		
Surr: Fluorobenzene	10.2		10.00		102	65	135		0		

Sample ID: <b>LCS-R5150</b>		SampType: <b>LCS</b>			Units: <b>µg/L</b>		Prep Date: <b>7/31/2012</b>			RunNo: <b>5150</b>		
Client ID: <b>LCSW</b>		Batch ID: <b>R5150</b>			Analysis Date: <b>7/31/2012</b>			SeqNo: <b>101144</b>				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Gasoline	368	50.0	500.0	0	73.6	65	135				
Surr: 1,2-Dichloroethane-d4	8.83		10.00		88.3	65	135				
Surr: Fluorobenzene	9.93		10.00		99.3	65	135				

Sample ID: <b>MB-R5150</b>		SampType: <b>MBLK</b>		Units: <b>µg/L</b>		Prep Date: <b>7/31/2012</b>			RunNo: <b>5150</b>		
Client ID: <b>MBLKW</b>		Batch ID: <b>R5150</b>					Analysis Date: <b>7/31/2012</b>			SeqNo: <b>101145</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	50.0									
Surr: 1,2-Dichloroethane-d4	8.96		10.00		89.6	65	135				
Surr: Fluorobenzene	10.4		10.00		104	65	135				

Qualifiers:	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 8/14/2012

Work Order: 1207141  
CLIENT: URS Corporation  
Project: Belshaw Bros. GW Sampling

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1207141-002ADUP	SampType: DUP	Units: µg/L			Prep Date: 7/31/2012			RunNo: 5149			
Client ID: DPE-7	Batch ID: R5149				Analysis Date: 7/31/2012			SeqNo: 101123			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0	0	30	
Chloromethane	ND	1.00						0	0	30	
Vinyl chloride	ND	0.200						0	0	30	
Bromomethane	ND	1.00						0	0	30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0	0	30	
Chloroethane	ND	1.00						0	0	30	
1,1-Dichloroethene	ND	1.00						0	0	30	
Methylene chloride	ND	1.00						0	0	30	
trans-1,2-Dichloroethene	ND	1.00						0	0	30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0	0	30	
1,1-Dichloroethane	ND	1.00						0	0	30	
2,2-Dichloropropane	ND	2.00						0	0	30	
cis-1,2-Dichloroethene	ND	1.00						0	0	30	
Chloroform	ND	1.00						0	0	30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0	0	30	
1,1-Dichloropropene	ND	1.00						0	0	30	
Carbon tetrachloride	ND	1.00						0	0	30	
1,2-Dichloroethane (EDC)	ND	1.00						0	0	30	
Benzene	ND	1.00						0	0	30	
Trichloroethene (TCE)	ND	1.00						0	0	30	
1,2-Dichloropropane	ND	1.00						0	0	30	
Bromodichloromethane	ND	1.00						0	0	30	
Dibromomethane	ND	1.00						0	0	30	
cis-1,3-Dichloropropene	ND	1.00						0	0	30	
Toluene	ND	1.00						0	0	30	
trans-1,3-Dichloropropene	ND	1.00						0	0	30	
1,1,2-Trichloroethane	ND	1.00						0	0	30	
1,3-Dichloropropane	ND	1.00						0	0	30	
Tetrachloroethene (PCE)	ND	1.00						0	0	30	

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 8/14/2012

**Work Order:** 1207141  
**CLIENT:** URS Corporation  
**Project:** Belshaw Bros. GW Sampling

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: 1207141-002ADUP		SampType: DUP		Units: µg/L		Prep Date: 7/31/2012			RunNo: 5149			
Client ID: DPE-7		Batch ID: R5149					Analysis Date: 7/31/2012			SeqNo: 101123		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Dibromochloromethane	ND	1.00						0	0	30		
1,2-Dibromoethane (EDB)	ND	0.0100						0	0	30		
Chlorobenzene	ND	1.00						0	0	30		
1,1,1,2-Tetrachloroethane	ND	1.00						0	0	30		
Ethylbenzene	ND	1.00						0	0	30		
m,p-Xylene	ND	1.00						0	0	30		
o-Xylene	ND	1.00						0	0	30		
Styrene	ND	1.00						0	0	30		
Isopropylbenzene	ND	1.00						0	0	30		
Bromoform	ND	1.00						0	0	30		
1,1,2,2-Tetrachloroethane	ND	1.00						0	0	30		
n-Propylbenzene	ND	1.00						0	0	30		
Bromobenzene	ND	1.00						0	0	30		
1,3,5-Trimethylbenzene	ND	1.00						0	0	30		
2-Chlorotoluene	ND	1.00						0	0	30		
4-Chlorotoluene	ND	1.00						0	0	30		
tert-Butylbenzene	ND	1.00						0	0	30		
1,2,3-Trichloropropane	ND	1.00						0	0	30		
1,2,4-Trichlorobenzene	ND	2.00						0	0	30		
sec-Butylbenzene	ND	1.00						0	0	30		
4-Isopropyltoluene	ND	1.00						0	0	30		
1,3-Dichlorobenzene	ND	1.00						0	0	30		
1,4-Dichlorobenzene	ND	1.00						0	0	30		
n-Butylbenzene	ND	1.00						0	0	30		
1,2-Dichlorobenzene	ND	1.00						0	0	30		
1,2-Dibromo-3-chloropropane	ND	1.00						0	0	30		
1,2,4-Trimethylbenzene	ND	1.00						0	0	30		
Hexachlorobutadiene	ND	4.00						0	0	30		
Naphthalene	ND	1.00						0	0	30		

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 8/14/2012

Work Order: 1207141  
CLIENT: URS Corporation  
Project: Belshaw Bros. GW Sampling

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1207141-002ADUP	SampType: DUP	Units: µg/L			Prep Date: 7/31/2012			RunNo: 5149			
Client ID: DPE-7	Batch ID: R5149				Analysis Date: 7/31/2012			SeqNo: 101123			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	ND	4.00						0	0	30	
Surr: 1-Bromo-4-fluorobenzene	11.8		10.00		118	79.2	120		0		
Surr: Dibromofluoromethane	9.49		10.00		94.9	76	114		0		
Surr: Toluene-d8	10.9		10.00		109	86.8	119		0		

Sample ID: 1207141-015AMS	SampType: MS	Units: µg/L				Prep Date: 7/31/2012			RunNo: 5149		
Client ID: MW-1	Batch ID: R5149					Analysis Date: 7/31/2012			SeqNo: 101131		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	28.4	1.00	20.00	0	142	33.3	122				S
Chloromethane	22.6	1.00	20.00	0	113	48.2	145				
Vinyl chloride	20.6	0.200	20.00	0	103	45.6	149				
Bromomethane	23.5	1.00	20.00	0	118	31.5	135				
Trichlorofluoromethane (CFC-11)	29.1	1.00	20.00	0	146	54.7	138				S
Chloroethane	25.5	1.00	20.00	0	127	52.7	140				
1,1-Dichloroethene	30.2	1.00	20.00	9.510	103	58.2	146				
Methylene chloride	20.2	1.00	20.00	0	101	65.1	127				
trans-1,2-Dichloroethene	25.6	1.00	20.00	0	128	69	132				
Methyl tert-butyl ether (MTBE)	23.5	1.00	20.00	0	118	70	130				
1,1-Dichloroethane	19.9	1.00	20.00	0	99.5	74.7	133				
2,2-Dichloropropane	17.6	2.00	20.00	0	88.1	31.5	121				
cis-1,2-Dichloroethene	23.5	1.00	20.00	0	118	67.1	123				
Chloroform	24.5	1.00	20.00	0	122	58.6	123				
1,1,1-Trichloroethane (TCA)	49.4	1.00	20.00	21.57	139	64.2	146				
1,1-Dichloropropene	21.7	1.00	20.00	0	109	73.8	136				
Carbon tetrachloride	27.2	1.00	20.00	0	136	69.2	141				
1,2-Dichloroethane (EDC)	21.4	1.00	20.00	0	107	62.3	130				
Benzene	20.3	1.00	20.00	0	102	68.7	132				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 8/14/2012

**Work Order:** 1207141  
**CLIENT:** URS Corporation  
**Project:** Belshaw Bros. GW Sampling

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: 1207141-015AMS	SampType: MS	Units: µg/L				Prep Date: 7/31/2012			RunNo: 5149		
Client ID: MW-1	Batch ID: R5149	Analysis Date: 7/31/2012							SeqNo: 101131		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	27.8	1.00	20.00	4.620	116	65.7	133				
1,2-Dichloropropane	18.4	1.00	20.00	0	91.9	70	130				
Bromodichloromethane	24.7	1.00	20.00	0	124	59.4	139				
Dibromomethane	23.9	1.00	20.00	0	119	65.5	130				
cis-1,3-Dichloropropene	21.5	1.00	20.00	0	107	63.3	124				
Toluene	23.5	1.00	20.00	0	118	68.4	133				
trans-1,3-Dichloropropene	21.5	1.00	20.00	0	107	57.7	125				
1,1,2-Trichloroethane	21.8	1.00	20.00	0	109	59.4	127				
1,3-Dichloropropane	20.8	1.00	20.00	0	104	68.2	134				
Tetrachloroethene (PCE)	16.6	1.00	20.00	0	82.9	51.5	109				
Dibromochloromethane	21.0	1.00	20.00	0	105	66.2	138				
1,2-Dibromoethane (EDB)	23.9	0.0100	20.00	0	120	68.9	124				
Chlorobenzene	20.8	1.00	20.00	0	104	68.9	128				
1,1,1,2-Tetrachloroethane	20.1	1.00	20.00	0	101	67.3	135				
Ethylbenzene	24.8	1.00	20.00	0	124	67.3	135				
m,p-Xylene	48.6	1.00	40.00	0.05000	121	63.3	135				
o-Xylene	24.6	1.00	20.00	0	123	67.8	131				
Styrene	23.8	1.00	20.00	0	119	67.2	123				
Isopropylbenzene	24.9	1.00	20.00	0	124	56	147				
Bromoform	23.8	1.00	20.00	0	119	61.4	136				
1,1,2,2-Tetrachloroethane	22.6	1.00	20.00	0	113	59.1	137				
n-Propylbenzene	24.8	1.00	20.00	0	124	57.6	142				
Bromobenzene	20.9	1.00	20.00	0	104	63.6	130				
1,3,5-Trimethylbenzene	25.5	1.00	20.00	0	128	59.9	136				
2-Chlorotoluene	23.7	1.00	20.00	0	118	63.4	134				
4-Chlorotoluene	23.9	1.00	20.00	0	120	58.4	134				
tert-Butylbenzene	23.6	1.00	20.00	0	118	74.2	141				
1,2,3-Trichloropropane	24.6	1.00	20.00	0	123	62.4	129				
1,2,4-Trichlorobenzene	17.6	2.00	20.00	0	88.2	53.7	120				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 8/14/2012

Work Order: 1207141  
CLIENT: URS Corporation  
Project: Belshaw Bros. GW Sampling

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: 1207141-015AMS	SampType: MS	Units: µg/L				Prep Date: 7/31/2012			RunNo: 5149		
Client ID: MW-1	Batch ID: R5149	Analysis Date: 7/31/2012							SeqNo: 101131		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	24.0	1.00	20.00	0	120	56	146				
4-Isopropyltoluene	20.7	1.00	20.00	0	104	62.4	134				
1,3-Dichlorobenzene	18.7	1.00	20.00	0	93.6	58.2	128				
1,4-Dichlorobenzene	18.7	1.00	20.00	0	93.6	60.1	123				
n-Butylbenzene	21.2	1.00	20.00	0	106	54.6	135				
1,2-Dichlorobenzene	18.8	1.00	20.00	0	93.8	62.6	124				
1,2-Dibromo-3-chloropropane	23.7	1.00	20.00	0	118	51.8	142				
1,2,4-Trimethylbenzene	24.3	1.00	20.00	0.06000	121	63.7	132				
Hexachlorobutadiene	12.2	4.00	20.00	0	61.2	62.1	121				S
Naphthalene	19.5	1.00	20.00	0	97.5	58.7	119				
1,2,3-Trichlorobenzene	19.2	4.00	20.00	0	95.8	50.7	113				
Surr: 1-Bromo-4-fluorobenzene	120		10.00		1,200	82	118				S
Surr: Dibromofluoromethane	9.94		10.00		99.4	79.4	116				
Surr: Toluene-d8	10.6		10.00		106	92	107				

**NOTES:**

S - Outlying QC recoveries were associated with this sample.

Sample ID: <b>LCS-R5149</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>				Prep Date: <b>7/30/2012</b>			RunNo: <b>5149</b>		
Client ID: <b>LCSW</b>	Batch ID: <b>R5149</b>					Analysis Date: <b>7/30/2012</b>			SeqNo: <b>101132</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	26.0	1.00	20.00	0	130	45.1	121				S
Chloromethane	19.2	1.00	20.00	0	95.8	42.5	131				
Vinyl chloride	16.8	0.200	20.00	0	83.8	56.2	130				
Bromomethane	13.3	1.00	20.00	0	66.4	45.4	138				
Trichlorofluoromethane (CFC-11)	22.8	1.00	20.00	0	114	64.7	129				
Chloroethane	20.2	1.00	20.00	0	101	62.5	123				
1,1-Dichloroethene	17.4	1.00	20.00	0	86.8	60.7	146				
Methylene chloride	17.2	1.00	20.00	0	86.0	60.3	135				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 8/14/2012

**Work Order:** 1207141  
**CLIENT:** URS Corporation  
**Project:** Belshaw Bros. GW Sampling

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: <b>LCS-R5149</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>				Prep Date: <b>7/30/2012</b>		RunNo: <b>5149</b>			
Client ID: <b>LCSW</b>	Batch ID: <b>R5149</b>	Analysis Date: <b>7/30/2012</b>						SeqNo: <b>101132</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	20.9	1.00	20.00	0	104	71.3	129				
Methyl tert-butyl ether (MTBE)	18.0	1.00	20.00	0	90.2	75.4	123				
1,1-Dichloroethane	16.3	1.00	20.00	0	81.4	71.3	129				
2,2-Dichloropropane	25.1	2.00	20.00	0	125	37.8	132				
cis-1,2-Dichloroethene	19.2	1.00	20.00	0	95.9	67.5	127				
Chloroform	20.3	1.00	20.00	0	102	70.3	123				
1,1,1-Trichloroethane (TCA)	23.0	1.00	20.00	0	115	67.9	134				
1,1-Dichloropropene	19.2	1.00	20.00	0	96.0	72.1	133				
Carbon tetrachloride	22.4	1.00	20.00	0	112	68	136				
1,2-Dichloroethane (EDC)	16.1	1.00	20.00	0	80.6	65.8	126				
Benzene	17.4	1.00	20.00	0	87.1	75.2	124				
Trichloroethene (TCE)	21.4	1.00	20.00	0	107	71.9	130				
1,2-Dichloropropane	16.3	1.00	20.00	0	81.4	71.9	131				
Bromodichloromethane	20.6	1.00	20.00	0	103	70	130				
Dibromomethane	19.3	1.00	20.00	0	96.6	74.2	125				
cis-1,3-Dichloropropene	23.7	1.00	20.00	0	119	62.8	135				
Toluene	20.5	1.00	20.00	0	103	75.2	129				
trans-1,3-Dichloropropene	23.7	1.00	20.00	0	119	58.1	138				
1,1,2-Trichloroethane	18.2	1.00	20.00	0	90.8	65.4	128				
1,3-Dichloropropane	17.7	1.00	20.00	0	88.6	71.9	131				
Tetrachloroethene (PCE)	18.5	1.00	20.00	0	92.4	52.4	140				
Dibromochloromethane	19.2	1.00	20.00	0	96.2	68.7	139				
1,2-Dibromoethane (EDB)	20.0	0.0100	20.00	0	100	71.2	129				
Chlorobenzene	19.7	1.00	20.00	0	98.7	77.2	122				
1,1,1,2-Tetrachloroethane	18.2	1.00	20.00	0	91.2	76.2	130				
Ethylbenzene	22.5	1.00	20.00	0	113	78	127				
m,p-Xylene	47.7	1.00	40.00	0	119	77.5	130				
o-Xylene	23.5	1.00	20.00	0	117	77.6	126				
Styrene	23.2	1.00	20.00	0	116	66.8	137				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 8/14/2012

Work Order: 1207141  
CLIENT: URS Corporation  
Project: Belshaw Bros. GW Sampling

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>LCS-R5149</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>			Prep Date: <b>7/30/2012</b>			RunNo: <b>5149</b>			
Client ID: <b>LCSW</b>	Batch ID: <b>R5149</b>	Analysis Date: <b>7/30/2012</b>						SeqNo: <b>101132</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	24.5	1.00	20.00	0	122	75.9	133				
Bromoform	21.7	1.00	20.00	0	109	69.9	142				
1,1,2,2-Tetrachloroethane	20.0	1.00	20.00	0	100	68	134				
n-Propylbenzene	23.8	1.00	20.00	0	119	77.1	133				
Bromobenzene	20.7	1.00	20.00	0	103	71.1	131				
1,3,5-Trimethylbenzene	23.2	1.00	20.00	0	116	76.2	133				
2-Chlorotoluene	23.2	1.00	20.00	0	116	67.1	137				
4-Chlorotoluene	22.8	1.00	20.00	0	114	70.7	132				
tert-Butylbenzene	22.1	1.00	20.00	0	111	71.3	139				
1,2,3-Trichloropropane	21.7	1.00	20.00	0	108	70.8	132				
1,2,4-Trichlorobenzene	19.4	2.00	20.00	0	97.2	61.4	139				
sec-Butylbenzene	24.1	1.00	20.00	0	120	77.4	136				
4-Isopropyltoluene	21.8	1.00	20.00	0	109	78.1	131				
1,3-Dichlorobenzene	18.7	1.00	20.00	0	93.6	73.5	125				
1,4-Dichlorobenzene	18.7	1.00	20.00	0	93.6	71.4	125				
n-Butylbenzene	23.5	1.00	20.00	0	118	69.8	138				
1,2-Dichlorobenzene	18.8	1.00	20.00	0	94.2	74.2	123				
1,2-Dibromo-3-chloropropane	20.6	1.00	20.00	0	103	66.1	138				
1,2,4-Trimethylbenzene	23.1	1.00	20.00	0	116	72.3	133				
Hexachlorobutadiene	13.6	4.00	20.00	0	68.0	60.9	141				
Naphthalene	18.8	1.00	20.00	0	94.0	58.2	140				
1,2,3-Trichlorobenzene	20.0	4.00	20.00	0	100	61.3	133				
Surr: 1-Bromo-4-fluorobenzene	11.7		10.00		117	83.4	115				S
Surr: Dibromofluoromethane	9.14		10.00		91.4	81.2	112				
Surr: Toluene-d8	10.1		10.00		101	89.4	109				

**NOTES:**

S - Outlying surrogate and spike recovery(ies) observed. The Initial Calibration Verification - 2nd Source was within range.

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits





Date: 8/14/2012

**Work Order:** 1207141  
**CLIENT:** URS Corporation  
**Project:** Belshaw Bros. GW Sampling

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-R5149</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>				Prep Date: <b>7/31/2012</b>			RunNo: <b>5149</b>		
Client ID: <b>MBLKW</b>	Batch ID: <b>R5149</b>					Analysis Date: <b>7/31/2012</b>			SeqNo: <b>101134</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									
Chloromethane	ND	1.00									
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	1.00									
2,2-Dichloropropane	ND	2.00									
cis-1,2-Dichloroethene	ND	1.00									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									
Benzene	ND	1.00									
Trichloroethene (TCE)	ND	1.00									
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									
Dibromomethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
Toluene	ND	1.00									
trans-1,3-Dichloropropene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 8/14/2012

**Work Order:** 1207141  
**CLIENT:** URS Corporation  
**Project:** Belshaw Bros. GW Sampling

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260**

Sample ID: <b>MB-R5149</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>			Prep Date: <b>7/31/2012</b>			RunNo: <b>5149</b>			
Client ID: <b>MBLKW</b>	Batch ID: <b>R5149</b>	Analysis Date: <b>7/31/2012</b>						SeqNo: <b>101134</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.0100									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									
4-Isopropyltoluene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2,4-Trimethylbenzene	ND	1.00									
Hexachlorobutadiene	ND	4.00									
Naphthalene	ND	1.00									

**Qualifiers:** B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

D Dilution was required  
J Analyte detected below quantitation limits  
RL Reporting Limit

E Value above quantitation range  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 8/14/2012

**Work Order:** 1207141  
**CLIENT:** URS Corporation  
**Project:** Belshaw Bros. GW Sampling

## QC SUMMARY REPORT

### Volatile Organic Compounds by EPA Method 8260

Sample ID: <b>MB-R5149</b>		SampType: <b>MBLK</b>		Units: <b>µg/L</b>		Prep Date: <b>7/31/2012</b>			RunNo: <b>5149</b>		
Client ID: <b>MBLKW</b>		Batch ID: <b>R5149</b>					Analysis Date: <b>7/31/2012</b>			SeqNo: <b>101134</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,2,3-Trichlorobenzene	ND	4.00									
Surr: 1-Bromo-4-fluorobenzene	12.0		10.00		120	79.2	120				
Surr: Dibromofluoromethane	9.88		10.00		98.8	76	114				
Surr: Toluene-d8	10.8		10.00		108	86.8	119				

Sample ID: <b>ICV-R5149</b>		SampType: <b>ICV</b>			Units: <b>µg/L</b>		Prep Date: <b>7/25/2012</b>			RunNo: <b>5149</b>		
Client ID: <b>ICV</b>		Batch ID: <b>R5149</b>			Analysis Date: <b>7/26/2012</b>			SeqNo: <b>101156</b>				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Dichlorodifluoromethane (CFC-12)	15.5	1.00	20.00	0	77.7	70	130				
Trichlorofluoromethane (CFC-11)	14.8	1.00	20.00	0	73.8	70	130				
Surr: 1-Bromo-4-fluorobenzene	9.93		10.00		99.3	79.2	120				
Surr: Dibromofluoromethane	10.3		10.00		103	76	114				
Surr: Toluene-d8	10.3		10.00		103	86.8	119				

Sample ID: <b>CCV-R5149</b>		SampType: <b>CCV</b>		Units: <b>µg/L</b>		Prep Date: <b>7/31/2012</b>			RunNo: <b>5149</b>		
Client ID: <b>CCV</b>		Batch ID: <b>R5149</b>		Analysis Date: <b>7/31/2012</b>						SeqNo: <b>104030</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	19.1	1.00	20.00	0	95.6	80	120				
Trichlorofluoromethane (CFC-11)	18.9	1.00	20.00	0	94.7	80	120				
Surr: 1-Bromo-4-fluorobenzene	11.7		10.00		117	79.2	120				
Surr: Dibromofluoromethane	9.91		10.00		99.1	76	114				
Surr: Toluene-d8	10.4		10.00		104	86.8	119				

**Qualifiers:**

B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 8/14/2012

Work Order: 1207141  
CLIENT: URS Corporation  
Project: Belshaw Bros. GW Sampling

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260 SIM**

Sample ID: <b>MBLK-R5317</b>		SampType: <b>MBLK</b>		Units: <b>µg/L</b>		Prep Date: <b>8/6/2012</b>			RunNo: <b>5317</b>		
Client ID: <b>MBLKW</b>		Batch ID: <b>R5317</b>					Analysis Date: <b>8/7/2012</b>			SeqNo: <b>104032</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,4-Dioxane	ND	0.400									
Surr: 4-Bromofluorobenzene	9.80		10.00		98.0	62.9	130				
Surr: Dibromofluoromethane	9.85		10.00		98.5	68	140				
Surr: Toluene-d8	10.0		10.00		100	68.8	119				

Sample ID: <b>LCS-R5317</b>		SampType: <b>LCS</b>		Units: <b>µg/L</b>		Prep Date: <b>8/6/2012</b>			RunNo: <b>5317</b>		
Client ID: <b>LCSW</b>		Batch ID: <b>R5317</b>					Analysis Date: <b>8/7/2012</b>			SeqNo: <b>104033</b>	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,4-Dioxane	84.0	0.400	100.0	0	84.0	70	130				
Surr: 4-Bromofluorobenzene	9.84		10.00		98.4	62.9	130				
Surr: Dibromofluoromethane	9.94		10.00		99.4	68	140				
Surr: Toluene-d8	10.1		10.00		101	68.8	119				

Sample ID: 1207141-007BMS		SampType: MS		Units: µg/L		Prep Date: 8/6/2012			RunNo: 5317			
Client ID: DPE-3		Batch ID: R5317					Analysis Date: 8/7/2012			SeqNo: 104040		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

1,4-Dioxane	75.0	0.400	100.0	0.3500	74.7	65	135				
Surr: 4-Bromofluorobenzene	9.98		10.00		99.8	62.9	130				
Surr: Dibromofluoromethane	9.83		10.00		98.3	68	140				
Surr: Toluene-d8	9.91		10.00		99.1	68.8	119				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 8/14/2012

Work Order: 1207141  
CLIENT: URS Corporation  
Project: Belshaw Bros. GW Sampling

**QC SUMMARY REPORT**  
**Volatile Organic Compounds by EPA Method 8260 SIM**

Sample ID: 1207141-019ADUP	SampType: DUP	Units: µg/L			Prep Date: 8/6/2012			RunNo: 5317			
Client ID: MW-20-5	Batch ID: R5317				Analysis Date: 8/7/2012			SeqNo: 104053			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	0.400						0	0	30	
Surr: 4-Bromofluorobenzene	9.70		10.00		97.0	62.9	130		0		
Surr: Dibromofluoromethane	9.68		10.00		96.8	68	140		0		
Surr: Toluene-d8	9.88		10.00		98.8	68.8	119		0		

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

Client Name: **URS**

 Work Order Number: **1207141**

 Logged by: **Troy Zehr**

 Date Received: **7/25/2012 2:25:00 PM**

## Chain of Custody

1. Were custodial seals present? Yes ☐ No ☐ Not Required ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Client

## Log In

4. Coolers are present? Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all coolers received at a temperature of >0° C to 10.0°C Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. Is there headspace present in VOA vials? Yes ☐ No ☐ NA ☒
12. Did all sample containers arrive in good condition?(unbroken) Yes ☒ No ☐
13. Does paperwork match bottle labels? Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met? Yes ☒ No ☐

## Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

18. Additional remarks/Discrepancies

## Item Information

Item #	Temp °C	Condition
Cooler	3.8	Good



**Fremont**  
ANALYTICAL

1311 N. 35th Street  
Seattle, WA 98103

Tel: 206-352-3790  
Fax: 206-352-7178

Client: URS

Address: 1501 4th Ave, #1400

City, State, Zip: Seattle 98101

Tel: 206-438-3700

Reports To (PM): DAVID RABENOLD Fax: \_\_\_\_\_

Email: daavid.rabenold@URS.COM Project No: 33762072, 00001

Project Name: \_\_\_\_\_

Location: \_\_\_\_\_

Collected by: \_\_\_\_\_

Date: \_\_\_\_\_

Page: \_\_\_\_\_

Laboratory Project No (Internal): \_\_\_\_\_

1207141

## Chain of Custody Record

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	Initials/Ref	Ag	Al	As	B	Br	Ca	Cd	Co	Cr	Cu	Fe	Hg	Mn	Mo	N	Pb	Se	Si	Ti	V	W	Zn	Comments/Depth
1 TRIP BLANK	7/8/12	1520	H <sub>2</sub> O																								
2 DPE-7	7/24/12	1620	"																								
3 DPE-2	7/24/12	0910	"																								
4 DPE-6	"	1020	"																								
5 DPE-1	"	1120	"																								
6 MW-13	"	1320	"																								
7 DPE-3	"	1415	"																								
8 MW-3	"	1530	"																								
9 MW-18-1	"	1545	"																								
10 MW-18-2	"	1625	"																								

\*Metal Analysis (Circle): VTC-6 ECRM Empty Pollutants TAIL Initials/Ref: Ag Al As B Br Ca Cd Co Cr Cu Fe Hg Mn Mo N Pb Se Si Ti V W Zn

\*\*Anions (Circle): Nitrate Nitrite Phosphate Sulfate Acetate Fluoride Chloride Nitrate/Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (Analysis by Lab is required if sample is not analyzed at the client's lab)

Refused/Included: David Lewis Date/Time: 7/25/12 1425 Received: David Lewis Date/Time: 7/25/12 1425

Special Remarks:

TOTAL: 1st Day 2 Day 3 Day 4 Day 5 Day

Distribution: White - Lab, Yellow - File, Pink - Originator

www.fremontanalytical.com





# Fremont

1311 N. 35th Street  
Seattle, WA 98103

Tel: 206-352-3790  
Fax: 206-352-7178

Client: URS

Address: 1501 4th Ave

City, State, Zip: Seattle 98101

Tel: 206-438-2700

Date: \_\_\_\_\_

Project Name:

Location:

Collected by:

Fig: \_\_\_\_\_ of: \_\_\_\_\_

Bilshaw Bros

South Seattle

D. Lewis

## Chain of Custody Record

Lab/Project No (if known): \_\_\_\_\_

Reports To (EMS): DAVID RAUBERDEL Email: david.rauberg@URS.com Project No: 3376472 0.00001

Fax: \_\_\_\_\_

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	Comments/Depth
1. MW-18-3	7/24/12	1705	H <sub>2</sub> O	
2. MW-19-1	7/25/12	0920	"	
3. MW-19-2	"	1000	"	
4. MW-19-6	"	1040	"	
5. MW-1	"	1120	"	
6. MW-20-1	"	1130	"	
7. MW-20-2	"	1215	"	
8. MW-20-3	"	1255	"	
9. MW-20-5	"	1345	"	
10.				

\*Metals Analyses (Circle): ☐ Metals ☐ Priority Pollutants ☐ TAL ☐ Individual ☐ Ag ☐ Al ☐ As ☐ Ba ☐ Bi ☐ Br ☐ Ca ☐ Cd ☐ Co ☐ Cr ☐ Cu ☐ Fe ☐ Hg ☐ Mn ☐ Mo ☐ Ni ☐ Pb ☐ Se ☐ Si ☐ Sn ☐ Ti ☐ V ☐ Zn

\*\*Anions (Circle): ☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Fluoride ☐ Phosphate ☐ Silicate ☐ Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (As per MSD's instructions) (Samples are retained after 30 days)

Special Remarks:

Relinquished

Date/Time

1425

Received

David Lewis

Date/Time

7/25/12 14:25

Relinquished

Date/Time

7/25/12 14:25



**APPENDIX E  
WELL AND BORING LOGS**

**DRAFT FOR ECOLOGY REVIEW  
REMEDIAL INVESTIGATION-FEASIBILITY STUDY REPORT**

**FORMER PENTHOUSE DRAPERY AND BELSHAW SITE  
1752 RAINIER AVENUE SOUTH  
SEATTLE, WASHINGTON**

**PACIFIC CREST PN: 105-003**

Project: Belshaw

Project Location: Seattle, Washington

Project Number: 33763763

## Log of Boring URS-SB-1

Sheet 1 of 2

Date(s) Drilled	9/4/12	Logged By	AP	Checked By	
Drilling Method	Hollow Stem Auger	Drilling Contractor	Cascade	Total Depth of Borehole	45.5 feet bgs
Drill Rig Type	CME 75	Drill Bit Size/Type	8.5"	Ground Surface Elevation	
Groundwater Level (feet bgs)	25' bgs	Sampling Method	D&M Sampler	Hammer Data	300 lb.
Borehole Backfill	Cetco Medium Chips	Location			

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type	Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)			
0								Grass and GRAVEL (fill)	
							ML	Light gray/light brown SILT with clay, interbedded fine sand lensed (moist) (no odor, no staining)	
5				6 7 8		0.0 0.0 0.0			
10				16 18 20		0.0 0.0 0.0	SP	Light brown fine SAND (moist) (no odor, no staining)	
15				10 12 15		0.0 0.0 0.0			
20				20 23 28		0.0 0.0 0.0			
25		URS-SB-1-GW URS-SB-1-26	21 23 25			1035		Grading (wet) (strong gasoline odor)	25 ft ▼
30									

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANNI\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ\_URSSEA3B.GLB\_URSSEA3.GDT 11/7/12

Project: Belshaw

Project Location: Seattle, Washington

Project Number: 33763763

# Log of Boring URS-SB-1

Sheet 2 of 2

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type Number	Blows/6in.	Recovery (%)	PID/OVM (ppm)				
30		URS- SB-1- 31	22 26 28		56 84 71			Grading (slight gasoline odor)	
35			23 25 28		61 78 72			Grading trace fine gravel	
40		URS- SB-1- 41	33 50		0.0 0.0		SM	Light gray silty fine SAND with fine gravel (wet) (no odor, no staining)	
45		URS- SB-1 45.5	50		0.0			Boring was completed to 45.5' bgs. Groundwater was encountered at 25' bgs. Boring was backfilled with Cetco medium chips.	
50									
55									
60									
65									

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANNI\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ\_URSSEA3B.GLB\_URSSEA3.GDT 11/7/12

Project: Belshaw  
 Project Location: Seattle, Washington  
 Project Number: 33763763

## Log of Boring URS-SB-2

Sheet 1 of 2

Date(s) Drilled	9/4/12	Logged By	AP	Checked By	
Drilling Method	Hollow Stem Auger	Drilling Contractor	Cascade	Total Depth of Borehole	46 feet bgs
Drill Rig Type	CME 75	Drill Bit Size/Type	8.5"	Ground Surface Elevation	
Groundwater Level (feet bgs)	25.5' bgs	Sampling Method	D&M Sampler	Hammer Data	300 lb.
Borehole Backfill	Cetco Medium Chips	Location			

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type	Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)			
0								Grass and GRAVEL (fill)	
							ML	Light brown/light gray SILT with trace fine sand and trace fine gravel (dry) (no odor, no staining)	
5				42 50		0.0 0.0			
10				46/50		0.0			
15				48 50		0.0 0.0	SM	Light brown/light gray silty fine SAND with trace fine gravel (moist) (no odor, no staining)	
20				49 50		0.0 0.0	ML	Light brown SILT with clay (dry) (no odor, no staining)	
25		URS-SB-2-GW	43 50				SP	Light brown/light gray fine SAND, trace silt (wet) (no odor, no staining) 25.5 ft ▼	
30									

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANN\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ URSSEA3B.GLB URSSEA3.GDT 11/7/12

Project: Belshaw

Project Location: Seattle, Washington

Project Number: 33763763

## Log of Boring URS-SB-2

Sheet 2 of 2

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type Number	Blows/6in.	Recovery (%)	PID/OVM (ppm)				
	30	URS-SB-2-36	41/50		0.0		ML	Gray SILT with trace fine gravel (moist) (no odor, no staining)	
	35	URS-SB-2-36	40 50		0.0 0.0		SP	Light gray fine SAND (moist) (no odor, no staining)	
	40		28 35 56		0.0 0.0 0.0				
	45	URS-SB-2-46	36 50		0.0 0.0		ML	Light gray SILT with trace fine SAND (moist) (no odor, no staining)	
								Boring was completed to 46' bgs. Groundwater was encountered at 25.5' bgs. Boring was backfilled with Cetco medium chips.	
	50								
	55								
	60								
	65								

Project: Belshaw

Project Location: Seattle, Washington

Project Number: 33763763

## Log of Boring URS-SB-3

Sheet 1 of 2

Date(s) Drilled	9/4/12	Logged By	AP	Checked By	
Drilling Method	Hollow Stem Auger	Drilling Contractor	Cascade	Total Depth of Borehole	56.5 feet bgs
Drill Rig Type	CME 75	Drill Bit Size/Type	8.5"	Ground Surface Elevation	
Groundwater Level (feet bgs)	30.5' bgs	Sampling Method	D&M Sampler	Hammer Data	300 lb.
Borehole Backfill	Cetco Medium Chips	Location			

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type	Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)			
0								Grass and GRAVEL (fill)	
							SP	Light gray/light brown fine SAND with fine gravel (dry) (no odor, no staining)	
5				15		0.0			
				23		0.0			
				25		0.0			
				35					
				50					
10				35		0.0			
				50		0.0	ML	Light brown SILT with trace fine gravel (dry) (no odor, no staining)	
15				45		0.0			
				50		0.0	SM	Light brown silty fine SAND with trace gravel (moist) (no odor, no staining)	
20				50		20.5		Grading (slight gasoline odor)	
25				41		7.6			
				50		5.1	ML	Light brown SILT with fine gravel (moist) (slight gasoline odor)	
30									

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANN\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ\_URSSEA3B.GLB\_URSSEA3.GDT 11/7/12

Project: Belshaw

Project Location: Seattle, Washington

Project Number: 33763763

## Log of Boring URS-SB-3

Sheet 2 of 2

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type Number	Blows/6in.	Recovery (%)	PID/OVM (ppm)				
	30	URS-SB-3-31 URS-SB-3-GW	37 50		8.9 10.1		SM	Medium gray silty fine SAND (wet) 30.5 ft ▼	
	35	URS-SB-3-36	38 50		0.0		ML	Light gray SILT with interbedded fine sand lenses (very moist) (no odor, no staining)	
	40		42 50		0.0 0.0				
	45	URS-SB-3-46.5	23 28 30		0.0 0.0 0.0		SP	Medium gray fine SAND with interbedded silt lenses, trace fine gravel (moist) (no odor, no staining)	
	50		24 28 30		0.0 0.0 0.0		ML	Medium gray SILT with trace fine gravel (moist) (no odor, no staining)	
	55		25 18 28		0.0 0.0 0.0				
	60							Boring was completed to 56.5' bgs. Groundwater was encountered at 30.5' bgs. Boring was backfilled with Cetco medium chips.	
	65								

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANN\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ\_URSSEA3B.GLB\_URSSEA3.GDT 11/7/12

Project: Belshaw

Project Location: Seattle, Washington

Project Number: 33763763

## Log of Boring URS-SB-4

Sheet 1 of 2

Date(s) Drilled	9/5/12	Logged By	AP	Checked By	
Drilling Method	Hollow Stem Auger	Drilling Contractor	Cascade	Total Depth of Borehole	56.5 feet bgs
Drill Rig Type	CME 75	Drill Bit Size/Type	8.5"	Ground Surface Elevation	
Groundwater Level (feet bgs)	28' bgs	Sampling Method	D&M Sampler	Hammer Data	300 lb.
Borehole Backfill	Cetco Medium Chips	Location			

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type	Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)			
0								Grass and GRAVEL (fill)	
							SP	Light brown fine SAND with trace silt and trace fine gravel (moist) (no odor, no staining)	
5				21 32 40		0.0 0.0 0.0			
10				32 38 40		0.0 0.0 0.0		Grading trace fine gravel (moist)	
15				48 50		0.0 0.0			
20				46 50		0.0 0.0		Grading light brown fine SAND with trace silt and trace fine gravel (moist) (no odor, no staining)	
25				42 50		14.1 12.7		Grading medium gray fine SAND (very moist) (slight hydrocarbon odor)	
								Grading (wet)	
30									28 ft ▼

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANN\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ\_URSSEA3B.GLB\_URSSEA3.GDT 11/7/12



Project: Belshaw

Project Location: Seattle, Washington

Project Number: 33763763

## Log of Boring URS-SB-4

Sheet 2 of 2

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type Number	Blows/6in.	Recovery (%)	PID/OVM (ppm)				
	30	URS- SB-4- 31	41 50		0.0 0.0		SM	Medium gray silty fine SAND with trace fine gravel (wet) (no odor, no staining)	
	35		48 50		0.0 0.0			Grading with interbedded silt lenses and trace fine gravel (wet) (no odor, no staining)	
	40	URS- SB-4- 41	39 50		0.0 0.0				
	45		43 50		0.0 0.0				
	50		8 23 30		0.0 0.0 0.0		ML	Light brown/light gray SILT with interbedded fine sand lenses (moist) (no odor, no staining)	
	55		18 25 32		0.0 0.0 0.0		SM	Medium gray silty fine SAND with some interbedded silt lenses (very moist) (no odor, no staining)	
	60							Boring was completed to 56.5' bgs. Groundwater was encountered at 28' bgs. Boring was backfilled with Cetco medium chips.	
	65								

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANN\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ\_URSSEA3B.GLB\_URSSEA3.GDT 11/7/12

Project: Belshaw

Project Location: Seattle, Washington

Project Number: 33763763

## Log of Boring URS-SB-5

Sheet 1 of 2

Date(s) Drilled	9/5/12	Logged By	AP	Checked By	
Drilling Method	Hollow Stem Auger	Drilling Contractor	Cascade	Total Depth of Borehole	56.5 feet bgs
Drill Rig Type	CME 75	Drill Bit Size/Type	8.5"	Ground Surface Elevation	
Groundwater Level (feet bgs)	Not Encountered	Sampling Method	D&M Sampler	Hammer Data	300 lb.
Borehole Backfill	Cetco Medium Chips	Location			

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)				
0						XXXX	ML	Grass Light brown SILT with trace fine sand (moist) (no odor, no staining)	
5			48 50		0.0 0.0				
10			25 32 50		0.0 0.0 0.0		SM	Light brown silty fine SAND with fine gravel (moist) (no odor, no staining)	
15			38 50		0.0 0.0		SP	Light brown fine SAND with fine gravel, trace silt (moist) (no odor, no staining)	
20			37 50		0.0 0.0				
25		URS-SB-5-26	47 50		0.0 0.0				
30									

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANN\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ\_URSSEA3B.GLB\_URSSEA3.GDT 11/7/12

Project: Belshaw

Project Location: Seattle, Washington

Project Number: 33763763

# Log of Boring URS-SB-5

Sheet 2 of 2

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type Number	Blows/6in.	Recovery (%)	PID/OVM (ppm)				
	30		48/50		0.0		ML	Light gray SILT with trace fine gravel (moist) (no odor, no staining)	
	35		41 50		0.0 0.0			Grading medium gray SILT with clay (moist)	
	40	URS- SB-5- 41	42 50		0.0 0.0		SM	Medium gray sandy SILT with trace gravel (moist) (no odor, no staining)	
	45		23 38 50		0.0 0.0 0.0			Grading medium brown sandy SILT with clay, trace fine gravel (dry)	
	50		17 28 31		0.0 0.0 0.0				
	55	URS- SB-5- 56.5	18 22 23		0.0 0.0 0.0			Grading medium gray silty fine SAND, trace fine gravel (moist)	
	60							Boring was completed to 56.5' bgs. Groundwater was not encountered. Boring was backfilled with Cetco medium chips.	
	65								

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANN\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ\_URSSEA3B.GLB\_URSSEA3.GDT 11/7/12

Project: Belshaw  
 Project Location: Seattle, Washington  
 Project Number: 33763763

## Log of Boring URS-SB-6

Sheet 1 of 2

Date(s) Drilled	9/5/12	Logged By	AP	Checked By	
Drilling Method	Hollow Stem Auger	Drilling Contractor	Cascade	Total Depth of Borehole	46 feet bgs
Drill Rig Type	CME 75	Drill Bit Size/Type	8.5"	Ground Surface Elevation	
Groundwater Level (feet bgs)	29' bgs	Sampling Method	D&M Sampler	Hammer Data	300 lb.
Borehole Backfill	Cetco Medium Chips	Location			

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type	Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)			
0								Grass and GRAVEL (fill) Light brown silty fine SAND with fine gravel (dry) (no odor, no staining)	
5				38 50		0.0 0.0			
10				20-28 32		0.0 0.0	SP	Light brown fine SAND (moist) (no odor, no staining)	
15				42 50		0.0 0.0	SM	Light brown silty fine SAND with fine gravel (moist) (no odor, no staining)	
20		URS-SB-6-21		47 50		0.0 0.0	SP	Medium brown fine SAND with fine gravel, trace silt (very moist) (no odor, no staining)	
25				48 50		0.0 0.0			
30		URS-SB-6-						Grading (wet)	29 ft ▼

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANN\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ URSSEA3B.GLB URSSEA3.GDT 11/7/12

Project: Belshaw

Project Location: Seattle, Washington

Project Number: 33763763

## Log of Boring URS-SB-6

Sheet 2 of 2

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type Number	Blows/6in.	Recovery (%)	PID/OVM (ppm)				
	30	GW URS- SB-6- 31	43 50		0.0 0.0				
	35		32 35 45		0.0 0.0 0.0			Grading medium brown fine SAND (wet)	
	40		37 50		0.0 0.0		ML	Medium gray SILT with trace interbedded fine sand lenses (dry) (no odor, no staining)	
	45	URS- SB-6- 46	45 50		0.0 0.0		SP	Medium brown fine SAND with trace fine gravel (wet) (no odor, no staining)	
	50							Boring was completed to 46' bgs. Groundwater was encountered at 29' bgs. Boring was backfilled with Cetco medium chips.	
	55								
	60								
	65								

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANNI\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ\_URSSEA3B.GLB\_URSSEA3.GDT 11/7/12

Project: Belshaw  
 Project Location: Seattle, Washington  
 Project Number: 33763763

# Log of Boring URS-SB-7

Sheet 1 of 2

Date(s) Drilled	9/6/12	Logged By	AP	Checked By	
Drilling Method	Hollow Stem Auger	Drilling Contractor	Cascade	Total Depth of Borehole	46.5 feet bgs
Drill Rig Type	CME 75	Drill Bit Size/Type	8.5"	Ground Surface Elevation	
Groundwater Level (feet bgs)	29.5' bgs	Sampling Method	D&M Sampler	Hammer Data	300 lb.
Borehole Backfill	Cetco Medium Chips	Location			

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type	Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)			
0								Grass and GRAVEL (fill)	
							SM	Light brown silty fine SAND (moist) (no odor, no staining)	
5				48 50		0.0 0.0			
10				43 50		0.0 0.0		Grading light brown silty fine SAND with interbedded fine sand lenses (moist)	
15				45 50		0.0		Grading light brown silty fine SAND (moist)	
20				49 50		0.0 0.0	SP	Light brown fine SAND with trace fine gravel (moist) (no odor, no staining)	
25		URS-SB-7-26		49 50		0.0 0.0	ML	Medium gray sandy SILT with fine gravel (moist) (no odor, no staining)	
30		URS-						Grading (wet)	29.5 ft ▼

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANN\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ\_URSSEA3B.GLB\_URSSEA3.GDT 11/7/12









Project: Belshaw

Project Location: Seattle, Washington

Project Number: 33763763

## Log of Boring URS-SB-7

Sheet 2 of 2

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type Number	Blows/6in.	Recovery (%)	PID/OVM (ppm)				
30		SB-7- GW URS- SB-7- 31	49 50		0.0 0.0				
35			43 50		0.0 0.0			Grading light gray SILT with trace fine gravel (moist)	
40		URS- SB-7- 41	36 50		0.0 0.0		SP	Medium brown fine SAND (very moist) (no odor, no staining)	
45			38 36 50		0.0 0.0 0.0		ML	Medium gray SILT with fine gravel (moist) (no odor, no staining)	
50								Boring was completed to 46.5' bgs. Groundwater was encountered at 29.5' bgs. Boring was backfilled with Cetco medium chips.	
55									
60									
65									

Project: Belshaw  
 Project Location: Seattle, Washington  
 Project Number: 33763763

# Log of Boring URS-SB-8

Sheet 1 of 2

Date(s) Drilled	9/6/12	Logged By	AP	Checked By	
Drilling Method	Hollow Stem Auger	Drilling Contractor	Cascade	Total Depth of Borehole	46 feet bgs
Drill Rig Type	CME 75	Drill Bit Size/Type	8.5"	Ground Surface Elevation	
Groundwater Level (feet bgs)	29' bgs	Sampling Method	D&M Sampler	Hammer Data	300 lb.
Borehole Backfill	Cetco Medium Chips	Location			

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type	Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)			
0								Grass	
							ML/SM	Light brown sandy SILT with trace fine gravel (moist) (no odor, no staining)	
5				11 25 30		0.0 0.0 0.0			
10				36 50		0.0 0.0			
15				37 50		0.0 0.0	SP	Medium brown fine SAND with trace fine gravel (moist) (no odor, no staining)	
20		URS-SB-8-21		39 50		0.0 0.0		Grading (very moist)	
25				37 50		0.0 0.0	SM/ML	Light brown sandy SILT with trace fine gravel (dry) (no odor, no staining)	
30		URS-SB-8-						Grading (wet)	29 ft ▼

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANN\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ\_URSSEA3B.GLB\_URSSEA3.GDT 11/7/12



Project: Belshaw

Project Location: Seattle, Washington

Project Number: 33763763

## Log of Boring URS-SB-8

Sheet 2 of 2

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type Number	Blows/6in.	Recovery (%)	PID/OVM (ppm)				
	30	GW URS- SB-8- 31	18 50		0.0 0.0				
	35		31 50		0.0 0.0				
	40	URS- SB-8- 41.5	18 26 32		0.0 0.0 0.0		SP	Medium brown fine SAND with coarse gravel (wet)	
	45		39 50		0.0 0.0		MH	Light brown SILT with clay (dry)	
								Boring was completed to 46' bgs. Groundwater was encountered at 29' bgs. Boring was backfilled with Cetco medium chips.	
	50								
	55								
	60								
	65								

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANNI\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ\_URSSEA3B.GLB\_URSSEA3.GDT 11/7/12

**Project: Belshaw**

**Project Location: Seattle, Washington**

**Project Number: 33763763**

# Log of Boring URS-SB-9

Sheet 1 of 2

Date(s) Drilled	9/6/12	Logged By	AP	Checked By	
Drilling Method	Hollow Stem Auger	Drilling Contractor	Cascade	Total Depth of Borehole	46 feet bgs
Drill Rig Type	CME 75	Drill Bit Size/Type	8.5"	Ground Surface Elevation	
Groundwater Level (feet bgs)	24.5' bgs	Sampling Method	D&M Sampler	Hammer Data	300 lb.
Borehole Backfill	Cetco Medium Chips	Location			

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type	Number	Blows/ 6in.	Recovery (%)	PID/OVM (ppm)			
0								Grass	
							ML	Light brown/light gray silty CLAY with trace fine sand (moist) (no odor, no staining)	
5				16 23 28		0.0 0.0 0.0			
10				7 8 9		0.0 0.0 0.0		Grading interbedded fine sand lenses (moist)	
15				12 18 25		0.0 0.0 0.0	SP	Light brown fine SAND (moist)	
20				48 50		0.0 0.0	ML	Light brown SILT with trace fine gravel (dry) (no odor, no staining)	
25		URS-SB-9-GW	46	50		0.0 0.0	SP	Grading (wet) Medium brown fine to coarse SAND with fine gravel, trace silt (wet) (no odor, no staining)	24.5 ft ▼
30									

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANN\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ URSSEA3B.GLB URSSEA3.GDT 11/7/12





Project: Belshaw

Project Location: Seattle, Washington

Project Number: 33763763

# Log of Boring URS-SB-9

Sheet 2 of 2

Elevation, feet	Downhole Depth, feet	SAMPLES				Graphic Log	USCS	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
		Type	Number	Blows/6in.	Recovery (%)	PID/OVM (ppm)			
30				44 50		0.0 0.0		Medium brown silty fine to coarse SAND with coarse gravel (wet0 (no odor, no staining)	
35			URS- SB-9- 36	42 50		0.0 0.0			
40			URS- SB-9- 42	45 50		0.0 0.0			
45				48 50		0.0 0.0		Grading light brown SILT (dry)	
								Boring was completed to 46' bgs. Groundwater was encountered at 24.5' bgs. Boring was backfilled with Cetco medium chips.	
50									
55									
60									
65									

ENV2 W/O WELL C:\DOCUMENTS AND SETTINGS\ANNI\_CAMPBELL\DESKTOP\WORK FILES\NOV 7\33763763\LOGS.GPJ URSSEA3B.GLB URSSEA3.GDT 11/7/12

# LOG OF BORING SB-1

(Page 1 of 4)

Date/Time Started : 9-11-12 / 1050  
 Date/Time Completed : 9-12-12 / 1045  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : ~16'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	% Recovery	PID (ppm)	Lab No.
0				0.0-0.25 Concrete/crushed rock.					
1				0.25-5.0 Gravelly SAND, minor silt (45% fine to coarse sand, 40% fine to coarse gravel, 15% silt), brown, slightly moist, no odor.	GM			0.4	SB1-0.25-5.0@1100
2									
3									
4									
5				5.0-6.5 SAND, minor silt, trace gravel (80% fine to coarse sand, 15% silt, 5% fine to coarse gravel), brown/grey, moist, no odor.	SW			0.8	
6									
7				6.5-16.0 CLAY, minor silt (80% clay, 15% silt), brown/grey, moist, no odor.	CL			0.6	SB1-6.5-10.0@1115
8									
9									
10									
11									
12									
13									
14									
15									
16				16.0-19.0 Silty SAND, minor silt, minor gravel (70% fine to coarse sand, 15% silt, 15% fine to coarse gravel), brown/grey, wet, no odor.	SM				
17									
18									
19				19.0-20.0 SILT, minor sand, minor gravel, trace clay (65% silt, 15% fine sand, 15% fine to coarse gravel, 5% clay), brown/grey, moist, no odor.	ML				
20				20.0-30.0 SILT, minor sand, trace gravel (80% silt, 15% fine to medium sand, 5% fine to coarse gravel), brown, moist, no odor.	ML				
21									
22									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-1

(Page 1 of 4)

# LOG OF BORING SB-1

(Page 2 of 4)

Date/Time Started : 9-11-12 / 1050  
 Date/Time Completed : 9-12-12 / 1045  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : ~16'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	% Recovery	PID (ppm)	Lab No.
22									
23									
24									
25									SB1-25.0-RG@12.05
26					ML				
27									
28								1.3	SB1-25.0-30.0@1200
29									
30				30.0-31.5 Silty SAND, minor gravel (50% fine to medium sand, 25% silt, 25% fine to coarse gravel), brown/grey, wet, no odor.	SM			1.8	
31									
32				31.5-34.0 SILT with gravel, minor sand (55% silt, 30% fine to coarse gravel, 15% fine to coarse sand), brown/grey, moist, no odor.	ML			0.6	SB1-31.0-35.0@1320
33									
34				34.0-35.0 SILT, minor gravel, minor sand (85% silt, 10% fine to coarse gravel, 5% fine to medium sand), grey, slightly moist, no odor.	ML				
35				35.0-37.5 SAND with gravel, minor silt (60% fine to coarse sand, 30% fine to coarse gravel, 10% silt), brown/grey, wet, no odor.	SW				
36									
37									
38				37.5-40.0 SILT, minor gravel, trace sand (80% silt, 15% fine to coarse gravel, 5% fine sand), grey, moist grading to slightly moist, no odor.	ML				
39									
40				40.0-45.0 SILT, minor gravel, minor sand (75% silt, 15% fine to coarse gravel, 10% fine sand), grey, moist, no odor.					
41									
42					ML			7.0	SB1-40.0-45.0@1430
43									
44									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-1

(Page 2 of 4)

# LOG OF BORING SB-1

(Page 3 of 4)

Date/Time Started : 9-11-12 / 1050  
 Date/Time Completed : 9-12-12 / 1045  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : ~16'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	% Recovery	PID (ppm)	Lab No.
44					ML				
45				45.0-47.0 Sandy SILT, trace gravel (60% silt, 35% fine sand, 5% fine to coarse gravel), grey/brown, moist, no odor.	ML				SB1-45.0-RG@1430
46					ML				
47				47.0-49.0 Silty SAND, trace gravel (70% fine sand, 25% silt, 5% fine to coarse gravel), brown/grey, wet, no odor.	SM				
48					SM				
49				49.0-51.0 SILT, minor sand, trace gravel (80% silt, 15% fine sand, 5% fine to coarse gravel)	ML				
50					ML				
51				51.0-52.5 Silty SAND, minor gravel (60% fine to medium sand, 30% silt, 10% fine to coarse gravel), grey, wet, no odor.	SM			1.8	
52					SM				
53				52.5-62.5 SILT, minor sand, trace gravel (85% silt, 10% fine sand, 5% fine to coarse gravel), grey, moist grading to slightly moist, no odor.				4.1	SB1-52.5-55.0@1600
54									
55									SB1-55.0-RG@1600
56									
57					ML				
58					ML				
59					ML				
60					ML				
61					ML				
62					ML				
63				62.5-63.5 Silty SAND, trace gravel (65% fine to medium sand, 30% silt, 5% fine to coarse gravel), grey, wet, no odor.	SM				
64				63.5-67.5 SILT, minor sand, trace gravel (80% silt, 15% fine sand, 5% fine to coarse gravel), grey, moist, no odor.				3.3	SB1-63.5-65.0@1645
65					ML				
66					ML				

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-1

(Page 3 of 4)

# LOG OF BORING SB-1

(Page 4 of 4)

Date/Time Started : 9-11-12 / 1050  
 Date/Time Completed : 9-12-12 / 1045  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : ~16'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	% Recovery	PID (ppm)	Lab No.
66					ML				
67					SM				
68				67.5-68.5 Silty SAND, trace gravel (65% fine to medium sand, 30% silt, 5% fine to coarse gravel), grey, wet, no odor.					
69				68.5-70.0 SILT, minor sand, trace gravel (80% silt, 15% fine to medium sand, 5% fine to coarse gravel), gray, moist, no odor.	ML				
70									
71				70.0-75.0 Sandy SILT, trace gravel (60% silt, 35% fine to medium sand, 5% fine to coarse gravel), grey, wet, no odor.					
72					ML			0.0	SB1-70.0-75.0@0850
73									
74									
75				75.0-80.0 SAND, minor silt (90% fine to medium sand, 10% silt), grey, wet, no odor.					SB1-75.0-RG@0940
76									
77					SW			1.4	SB1-75.0-80.0@0930
78									
79									
80				Bottom of boring at 80.0 feet.					
81									
82									
83									
84									
85									
86									
87									
88									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-1

(Page 4 of 4)

# LOG OF BORING SB-2

(Page 1 of 2)

Date/Time Started : 8-15-2010/09:38  
 Date/Time Completed : 8-15-2010/16:15  
 Total Boring Depth (bgs) : 45'  
 Depth to Water ATD (bgs) : 26'  
 Elevation (ft) : -  
 Drilling Method : Limited Access HSA  
 Sampler Type : 18" Split Spoon  
 Drive Hammer (lbs) : 140 lbs



Site Name: Former Penthouse Drapery

Client: Forsberg

Project #: 105-003

Depth In Feet	Samples	Description	USCS	Graphic	% Recovery	PID (ppm)	Lab ID
0		0.0 - 0.5 Concrete Slab					
	X	2.5-4.0 SILT with gravel (75% Silt, 25% fine gravel), medium brown, moist, no odor.	ML		100	17.1	
5	X	5.0-6.0 SILT (100%), medium gray, dry, no odor.	ML		100	14.5	SB2-5.0-6.0
	X	6.0-7.5 SILT (100%) grading to SAND (100% fine sand), light brown, moist, no odor.	ML/SM		30	11.3	
	X	8.5-10.0 SILT trace sand and gravel (90% Silt, 5% fine-med sand, 5% fine gravel), medium gray, dry, no odor.	ML		30	10.5	SB2-8.5-10.0
10	X	11.0-12.5 SILT trace sand and gravel (90% Silt, 5% fine sand, 5% fine gravel), medium gray, dry, no odor.	ML		50	12.4	
	X	13.5-15.0 SILT trace gravel (95% silt, 5% fine gravel), med gray, dry, no odor.	ML		40	12.1	SB2-13.5-15.0
15	X	16.0-17.5 SILT trace gravel (95% silt, 5% fine gravel), med gray, dry, dense, no odor.	ML		20	25.1	
	X	18.5-20.0 SILT trace gravel (95% silt, 5% fine gravel), med gray, dry, dense, no odor.	ML		10	21.9	SB2-18.5-20.0
20	X	21.0-22.5 SILT trace gravel (95% silt, 5% fine gravel), med gray, dry, dense, no odor.	ML		40	20.6	
	X	23.5-25.0 SILT (100%), medium gray, moist, no odor.	ML		70	4.1	SB2-23.5-25.0
25							

Drilling Company : Cascade Drilling, Inc.  
 Drilling Foreman : Curtis Aiken  
 Equipment : CME W136  
 Pacific Crest Rep. : Monty Busbee

LOG OF BORING SB-2

(Page 1 of 2)



(Page 2 of 2)



**PACIFIC CREST ENVIRONMENTAL**  
**WWW.PCENV.COM 425-888-4990**

Project #: 105-003

Drilling Company	: Cascade Drilling, Inc.
Drilling Foreman	: Curtis Aiken
Equipment	: CME W136
Pacific Crest Rep.	: Monty Busbee

(Page 2 of 2)

# LOG OF BORING SB-3

(Page 1 of 2)

Date/Time Started : 9-12-2010/08:31  
 Date/Time Completed : 8-12-2010/14:00  
 Total Boring Depth (bgs) : 46.5'  
 Depth to Water ATD (bgs) : 25'  
 Elevation (ft) : -  
 Drilling Method : Limited Access HSA  
 Sampler Type : 18" Split Spoon  
 Drive Hammer (lbs) : 140 lbs



Site Name: Former Penthouse Drapery

Client: Forsberg

Project #: 105-003

Depth In Feet	Samples	Description	USCS	Graphic	% Recovery	PID (ppm)	Sample ID
0		0.0 - 1.0 Concrete Slab					
5	X	5.0-6.5 SILT (100% silt), light brown, dry, no odor.	ML		70	31.2	SB3-5-6.5
15	X	15.0-16.5 SAND grading to SILT trace sand (100% fine sand to 95% silt, 5% fine sand), light gray, moist, no odor.	ML		70	33.9	SB3-15-16.5
20	X	20.0-21.5 SILT (100% silt), light gray, dry, slight odor.	ML		50	43.2	SB3-20-21.5
25							

Drilling Company : Cascade Drilling, Inc.  
 Drilling Foreman : Curtis Aiken  
 Equipment : CME W136  
 Pacific Crest Rep. : Monty Busbee

## LOG OF BORING SB-3

(Page 1 of 2)

# LOG OF BORING SB-3

(Page 2 of 2)

Date/Time Started : 9-12-2010/08:31  
 Date/Time Completed : 8-12-2010/14:00  
 Total Boring Depth (bgs) : 46.5'  
 Depth to Water ATD (bgs) : 25'  
 Elevation (ft) : -  
 Drilling Method : Limited Access HSA  
 Sampler Type : 18" Split Spoon  
 Drive Hammer (lbs) : 140 lbs



Site Name: Former Penthouse Drapery  
 Client: Forsberg  
 Project #: 105-003

Depth In Feet	Samples	Description	USCS	Graphic	% Recovery	PID (ppm)	Sample ID
25	X	25.0-26.5 Silty SAND (60% fine to medium sand, 40% silt), medium gray, moist, slight odor.	ML		20	35.5	SB3-25-26.5 SB3-25-26.5-DUP
30	X	30.0-31.5 SILT (100% silt), light gray, moist to wet, chemical odor.	ML		20	36.2	SB3-30-31.5
35	X	35.0-36.5 Silty SAND, trace gravel (70% silt, 25% fine sand, 5% fine gravel), medium gray, moist, chemical odor.	SM		30	40.1	SB3-35-36.5 SB3-35-RGW
40	X	40.0-41.5 SILT (100% silt), medium gray, wet grading to dry, no odor.	ML			46.8	SB3-40-41.5 SB3-40-RGW SB3-40-RGW-DUP
45	X	45.0-46.5 Silty SAND (60% fine sand, 40% silt), medium gray, moist to wet, no odor.	SM			29.2	SB3-45-46.5 SB3-45-RGW
		Bottom of Boring.					
50							

Drilling Company : Cascade Drilling, Inc.  
 Drilling Foreman : Curtis Aiken  
 Equipment : CME W136  
 Pacific Crest Rep. : Monty Busbee

## LOG OF BORING SB-3

(Page 2 of 2)

# LOG OF BORING SB-4

(Page 1 of 2)

Date/Time Started : 8-22-2010/08:44  
 Date/Time Completed : 8-22-2010/15:00  
 Total Boring Depth (bgs) : 45'  
 Depth to Water ATD (bgs) : 22'  
 Elevation (ft) : -  
 Drilling Method : Limited Access HSA  
 Sampler Type : 18" Split Spoon  
 Drive Hammer (lbs) : 140 lbs



Site Name: Former Penthouse Drapery

Client: Forsberg

Project #: 105-003

Depth In Feet	Samples	Description	USCS	Graphic	% Recovery	PID (ppm)	Sample ID
0		0.0 - 1.0 Concrete Slab					
	X	2.5-4.0 SILT trace sand (95% Silt, 5% fine sand), gray-brown, dry, no odor.	ML		60	17.8	
5	X	5.0-6.5 SILT minor sand stringers (85% silt, 15% fine sand), medium gray, dry, no odor.	ML		90	255	SB4-5-6.5
	X	7.5-9.0 SILT (100%) medium gray, dry, no odor.	ML		75	398	
10	X	10.0-11.5 SILT trace sand and gravel (90% Silt, 5% fine sand, 5% fine gravel), medium gray, dry, slight chemical odor.	ML		60	304	SB4-10-11.5
	X	12.5-14.0 SILT trace sand and gravel (90% Silt, 5% fine sand, 5% fine gravel), medium gray, dry, strong odor.	ML		30	302	
15	X	15.0-16.5 SILT trace sand and gravel (90% Silt, 5% fine sand, 5% fine gravel), medium gray, dry, no odor.	ML		50	180	SB4-15-16.5
	X	17.5-19.0 SILT with sand (75% silt, 25% fine-medium sand), medium gray, moist, chemical odor.	ML		30	104	
20	X	20.0-21.5 SILT with sand (75% silt, 25% fine-medium sand), medium gray, moist, slight odor.	ML		30	120	SB4-20-21.5
	X	22.5-24.0 Silty SAND (60% fine sand, 40% silt) grading to Sandy SILT (60% silt, 40% fine sand), medium gray, wet, slight odor.	SM/ML		40	292	SB4-24-RGW
25							

Drilling Company : Cascade Drilling, Inc.  
 Drilling Foreman : Curtis Aiken  
 Equipment : CME W136  
 Pacific Crest Rep. : Monty Busbee

## LOG OF BORING SB-4

(Page 1 of 2)

# LOG OF BORING SB-4

(Page 2 of 2)

Date/Time Started : 8-22-2010/08:44  
 Date/Time Completed : 8-22-2010/15:00  
 Total Boring Depth (bgs) : 45'  
 Depth to Water ATD (bgs) : 22'  
 Elevation (ft) : -  
 Drilling Method : Limited Access HSA  
 Sampler Type : 18" Split Spoon  
 Drive Hammer (lbs) : 140 lbs



Site Name: Former Penthouse Drapery

Client: Forsberg

Project #: 105-003

Depth In Feet	Samples	Description	USCS	Graphic	% Recovery	PID (ppm)	Sample ID
25	X	25.0-26.5 SILT trace sand (95% silt, 5% fine sand), medium gray, dry, no odor.	ML		10	56	SB4-25-26.5
	X	27.5-29.0 SILT trace sand (95% silt, 5% fine sand), medium gray, moist, slight odor.	ML		10	410	SB4-30-RGW
30	X	30.0-30.6 Sandy SILT, trace gravel (60% silt, 35% fine sand, 5% fine gravel), medium brown, wet, chemical odor.	ML			85.5	SB4-30-31.5
	X	32.5-33.0 Sandy SILT (60% silt, 40% fine sand), medium brown, moist, chemical odor.	ML			97.5	
35	X	35.0-36.5 SAND (100% fine to coarse sand), brown, wet, chemical odor.	SW			43.3	SB4-35-36.5
	X	37.5-39.0 SAND (100% fine to medium) grading to Sandy SILT (60% silt, 40% fine sand), brown, wet, chemical odor.	SM/ML			25.2	SB4-40-RGW
40	X	40.0-41.5 Silty SAND (60% fine to medium sand, 40% silt), medium brown, wet, no odor.	SM			35.1	SB4-40-41.5
	X	42.5-43.0 SILT trace gravel (95% silt, 5% fine gravel), medium gray, moist, no odor.	ML			18.9	
45	X	45.0-46.0 SILT trace gravel (95% silt, 5% fine gravel), medium gray, dry, dense, no odor.	ML			13.8	SB4-45-46
		Bottom of Boring.					
50							

Drilling Company : Cascade Drilling, Inc.  
 Drilling Foreman : Curtis Aiken  
 Equipment : CME W136  
 Pacific Crest Rep. : Monty Busbee

LOG OF BORING SB-4

(Page 2 of 2)

# LOG OF BORING SB-5

(Page 1 of 1)

Date/Time Started : 9-30-2010 / 11:07  
 Date/Time Completed : 9-30-2010 / 12:30  
 Total Boring Depth (bgs) : 60 feet  
 Depth to Water ATD (bgs) : unknown  
 Elevation (ft) : -  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon  
 Drive Hammer (lbs) : 140 lbs



Site Name: Former Penthouse Drapery

Client: Forsberg

Project #: 105-003

Depth In Feet	Samples	Description	USCS	Graphic	% Recovery	PID (ppm)	Sample ID
0		0.0 - 40.0 No Sampling.					
5							
10							
15							
20							
25							
30							
35							
40	X	40.0-40.25 Silty coarse SAND (60% sand, 40% silt), med. brown, wet, no odor	SM ML		100	31.1	SB5-40.0
45	X	40.25-41.5 SILT (100%), medium gray, moist, no odor.					
45	X	45.0-46.5 SILT (100%), medium gray, moist, slight odor.	ML		30	55.3	SB5-46.0
50	X	50.0-51.5 SILT (100%), medium gray, dry, slight odor.	ML			55.2	SB5-51.0
55	X	55.0-56.5 Sandy SILT (60% silt, 40% fine sand), medium gray, moist, no odor.	ML			50.9	SB5-56.0
60	X	60.0-61.5 Silty SAND (75% fine to medium sand, 25% silt), medium gray, wet, no odor.	SM			58.3	SB5-61.0
65		Bottom of boring at 60.0 feet.					

Drilling Company : Cascade Drilling, Inc.  
 Drilling Foreman : Scotty  
 Equipment : CME 75  
 Pacific Crest Rep. : Monty Busbee

LOG OF BORING SB-5

(Page 1 of 1)

# LOG OF BORING SB-6

(Page 1 of 4)

Date/Time Started : 9-5-12 / 1100  
 Date/Time Completed : 9-6-12 / 1020  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : ~30  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	% Recovery	PID (ppm)	Lab No.
0				0.0-2.5 Silty SAND, minor gravel (55% fine to coarse sand, 30% silt, 15% fine to coarse gravel), brown to light grey, slightly moist, no odor.	SM			3.0	
1									
2									
3				2.5-5.0 SILT with sand, minor gravel (65% silt, 25% fine to medium sand, 10% fine to coarse gravel), light grey/brown, slightly moist, no odor.	ML			4.3	SB6-2.5-5.0@1115
4									
5				5.0-10.0 Silty SAND and gravel (50% fine to coarse sand, 30% fine to coarse gravel, 20% silt), light brown/grey, slightly moist, no odor.	SM			4.2	SB6-7.5-10.0@1125
6									
7									
8									
9									
10				10.0-22.5 Silty SAND and gravel, trace cobbles (50% fine to coarse sand, 30% fine to coarse gravel, 20% silt), light brown/grey, slightly moist grading to moist, no odor.				9.1	SB6-12.5-15.0@1140
11									
12									
13									
14									
15									
16					SM				
17									
18									
19									
20									
21								15.9	SB6-22.5-25@1300
22									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

LOG OF BORING SB-6

(Page 1 of 4)

# LOG OF BORING SB-6

(Page 2 of 4)

Date/Time Started : 9-5-12 / 1100  
 Date/Time Completed : 9-6-12 / 1020  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : ~30  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	% Recovery	PID (ppm)	Lab No.
22					SM				
23				22.5-30.0 Silty SAND and gravel, trace cobbles (50% fine to coarse sand, 30% fine to coarse gravel, 20% silt), light brown/grey, slightly moist grading to dry, no odor.				9.7	
24									
25									
26					SM				
27									
28								13.1	
29									
30				30.0-33.0 SAND with silt, trace gravel (65% fine to medium sand, 30% silt, 5% fine to coarse gravel), light grey/brown, moist, no odor.	SW				
31									
32									
33				33.0-39.0 SILT with gravel, minor silt (70% silt, 15% fine to medium sand, 15% fine to coarse gravel), grey, moist, no odor.					
34									
35								4.3	SB6-33.0-36.0@1435
36					ML			6.4	SB6-35.0-RG@1410
37									
38								9.1	
39				39.0-40.0 SAND with gravel, minor silt (70% fine to coarse sand, 20% fine to coarse gravel, 10% silt), brown/grey, wet, no odor.	SW				
40				40.0-45.0 SILT, minor gravel, minor sand (75% silt, 15% fine to coarse gravel, 10% fine to medium sand), light brown/grey grading to grey, slightly moist to dry, no odor.				13.7	
41									
42					ML				
43									
44									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-6

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# LOG OF BORING SB-6

(Page 3 of 4)

Date/Time Started : 9-5-12 / 1100  
 Date/Time Completed : 9-6-12 / 1020  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : ~30  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	% Recovery	PID (ppm)	Lab No.
44					ML				
45				45.0-46.0 GRAVEL with sand (80% fine to coarse gravel, 20% fine to coarse sand), grey/black, wet, no odor.	GW			8.8	SB6-45.0-46.0@1510
46				46.0-60 SILT, minor gravel, minor sand (65% silt, 15% fine to coarse gravel, 10% fine to medium sand), dark grey, moist, no odor.				5.9	SB6-46.0-47.0@1515
47									
48								4.3	
49									
50								7.7	SB6-50.0-RG@1545
51									
52									
53					ML			7.9	SB6-51.0-55.0@1640
54									
55									
56								6.4	
57									
58									
59								12.2	
60				60.0-62.5 SILT with clay, trace sand, trace gravel (60% silt, 30% clay, 5% fine to medium sand, 5% fine to coarse gravel), brown/grey, moist, no odor.	ML			5.7	
61									
62				62.5-65.0 SILT with clay, minor sand, trace gravel (60% silt, 25% clay, 10% fine to medium sand, 5% fine to coarse gravel), brown/grey, moist, no odor.	ML			2.4	SB6-62.5-65.0@0820
63									
64									
65				65.0-68.5 SILT with clay, minor sand, trace gravel (60% silt, 25% clay, 10% fine to coarse sand, 5% fine to coarse gravel), brown/grey, moist, no odor.	ML				
66									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-6

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# LOG OF BORING SB-6

(Page 4 of 4)

Date/Time Started : 9-5-12 / 1100  
 Date/Time Completed : 9-6-12 / 1020  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : ~30  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	% Recovery	PID (ppm)	Lab No.
66									
67					ML			5.5	
68									
69				68.5-70.0 Silty SAND, minor clay, minor gravel (45% fine to coarse sand, 35% silt, 10% clay, 10% fine to coarse gravel), brown/grey, wet, no odor.	SM			3.6	
70									SB6-70.0-RG@0545
71				70.0-71.5 Sandy SILT, minor gravel, minor clay (40% silt, 35% fine to coarse sand, 15% fine to coarse gravel, 10% clay), brown, wet, no odor.	ML			4.4	
72									
73				71.5-75.0 SAND, minor silt, minor gravel (60% fine to coarse sand, 10% silt, 10% fine to coarse gravel), brown/grey, wet, no odor.	SW			7.1	
74									
75									
76				75.0-78.0 SAND, minor silt, minor gravel (80% fine to coarse sand, 10% silt, 10% fine to coarse gravel), brown/grey, wet, no odor.	SW			4.4	SB6-75.0-78.0@0940
77									
78									
79				78.0-80.0 SAND, minor silt, trace gravel (85% fine to medium sand, 15% silt, 5% fine to coarse gravel), brown/grey, wet, no odor.	SM			7.2	
80									SB6-80.0-RG@0945
81				Bottom of boring at 80.0 feet.					
82									
83									
84									
85									
86									
87									
88									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-6

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# LOG OF BORING SB-7

(Page 1 of 4)

Date/Time Started : 9-4-12 / 0930  
 Date/Time Completed : 9-5-12 / 1030  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : 30'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	% Recovery	PID (ppm)	Lab No.
0				0.0-7.5 Silty SAND, minor gravel (55% fine to medium sand, 35% silt, 10% fine to coarse gravel), brown, no odor.				7.6	
1								11.3	SB7-2-4@0945
2					SM				
3									
4									
5									
6									
7									
8				7.5-17.0 Silty SAND with gravel/cobbles (45% fine to medium sand, 30% silt, 25% fine to coarse gravel), brown, moist, no odor.				8.4	SB7-7.5-9.5@0950
9									
10									
11								9.3	
12					SM				
13									
14									
15								18.9	SB7-13-17@1005
16									
17				17.0-20.0 SAND with gravel/cobbles (70% fine to medium sand, 25% fine to coarse gravel, 5% silt), trace silt, brown, moist, no odor.					
18					SW			15.8	
19									
20				20.0-20.5 SAND, minor gravel (85% medium to coarse sand, 15% fine to coarse gravel), brown/grey, moist, no odor.				9.4	
21					SW				
22									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-7

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# LOG OF BORING SB-7

(Page 2 of 4)

Date/Time Started : 9-4-12 / 0930  
 Date/Time Completed : 9-5-12 / 1030  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : 30'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	% Recovery	PID (ppm)	Lab No.
22					SW				
23				22.5-24.0 Silty SAND, minor gravel (65% fine to coarse sand, 20% silt, 15% fine to coarse gravel), brown/grey, moist no odor.	SM				SB7-22.5-25.0@1310
24									
25				24.0-26.5 Silty SAND, minor gravel (55% fine to medium sand, 35% silt, 10% fine to coarse gravel), grey, moist, no odor.	SM				SB7-25-26.5@1315
26									
27				26.5-30.0 Silty SAND, minor gravel (65% fine to coarse sand, 20% silt, 15% fine to coarse gravel), brown/grey, moist to wet, no odor.	SM				
28									
29									
30				30.0-31.0 Silty SAND, minor gravel (55% fine to medium sand, 35% silt, 10% fine to coarse gravel), moist to wet, brown/grey, no odor.	SM				
31				31.0-32.0 SAND, minor gravel, trace silt (85% fine to coarse sand, 10% fine to coarse gravel, 5% silt), brown/grey, moist, no odor.	SW				
32				32.0-35.0 Silty SAND, minor gravel (55% fine to medium sand, 35% silt, 10% fine to coarse gravel), brown/grey, slightly moist, no odor.	SM				SB7-34-35#1430
33									
34									
35				35.0-36.0 Silty SAND, minor gravel (55% fine to medium sand, 35% silt, 10% fine to coarse gravel), grey, wet, no odor.	SM				
36				36.0-37.0 SAND with gravel, minor silt (70% fine to medium sand, 20% fine to coarse gravel, 10% silt), brown/grey, wet, no odor.	SW				
37				37.0-40.0 Silty SAND, minor gravel (55% fine to medium sand, 35% silt, 10% fine to coarse gravel), brown/grey, wet, no odor.	SM				
38									
39									
40				40.0-42.0 SILT with gravel, minor sand (65% silt, 20% fine to coarse gravel, 15% fine to medium sand), dark brown/grey, slightly moist, no odor.	ML				
41									
42				42.0-45.0 SILT with gravel, minor sand (65% silt, 20% fine to coarse gravel, 15% fine to medium sand), dark brown/grey, slightly moist, no odor.	ML				SB7-42-45@1515
43									
44									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-7

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# LOG OF BORING SB-7

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Date/Time Started : 9-4-12 / 0930  
 Date/Time Completed : 9-5-12 / 1030  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : 30'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	% Recovery	PID (ppm)	Lab No.
44					ML				
45				45.0-55.0 SILT, minor gravel, trace sand (85% silt, 10% fine to coarse gravel, 5% fine to medium sand), grey, moist, no odor.					
46									
47									
48									
49									
50					ML				
51									
52									
53									
54									SB7-55-57.5@1715
55				55.0-70.0 SILT, trace sand, trace gravel (90% silt, 5% fine to medium sand, 5% fine to coarse gravel), grey, moist, no odor.					
56									
57									
58									
59									
60					ML				
61									
62									
63									
64									SB7-62.5-65@1720
65									
66									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

LOG OF BORING SB-7

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# LOG OF BORING SB-7

(Page 4 of 4)

Date/Time Started : 9-4-12 / 0930  
 Date/Time Completed : 9-5-12 / 1030  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : 30'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	% Recovery	PID (ppm)	Lab No.
66					ML				
67									
68									
69									
70				70.0-72.5 Silty SAND, trace gravel (65% fine to medium sand, 30% silt, 5% fine to coarse gravel), grey, wet, no odor.	SM			3.2	
71									
72									
73				72.5-75.0 SILT with sand, minor gravel (60% silt, 30% fine to medium sand, 10% fine to coarse gravel), grey, moist, no odor.	ML			3.6	SB7-72.5-75.0@0905
74									
75				75.0-80.0 Silty SAND, trace gravel (60% fine to medium sand, 35% silt, 5% fine to coarse gravel), grey/brown, wet, no odor.	SM			4.2	SB7-75.0-77.5@0945
76									
77									
78									
79								5.7	SB7-75.0-77.5
80				Bortom of boring at 80.0 feet.					
81									
82									
83									
84									
85									
86									
87									
88									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-7

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# LOG OF BORING SB-8

(Page 1 of 4)

Date/Time Started : 9-10-12 / 0945  
 Date/Time Completed : 9-10-12 / 1730  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : 20'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	%Recovery	PID (ppm)	Lab No.
0				0.0-0.5 Crushed rock/asphalt	FB				
1				0.5-6.0 Silty SAND, minor gravel (50% fine to coarse sand, 35% silt, 15% fine to coarse gravel), brown, slightly moist, no odor.	SM			2.8	SB8-0.5-6.0@1000
2									
3									
4									
5									
6				6.0-10.0 SILT, minor clay, trace gravel (80% silt, 15% clay, 5% fine to coarse gravel), brown, moist, no odor.	ML			3.8	SB8-6.0-10.0@1005
7									
8									
9									
10				10.0-16.5 CLAY, minor silt, trace sand (80% clay, 15% silt, 5% fine sand), brown, moist, no odor.	CL			5.5	SB8-10.0-16.5@1020
11									
12									
13									
14									
15									
16									
17				16.5-20.0 Silty SAND, trace clay, trace gravel (55% fine to medium sand, 35% silt, 5% clay, 5% fine to coarse gravel), brown, moist, no odor.	SM			6.2	
18									
19									
20				20.0-26.0 Silty SAND (75% fine to medium sand, 25% silt), brown, wet, no odor.	SM				
21									
22									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-8

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# LOG OF BORING SB-8

(Page 2 of 4)

Date/Time Started : 9-10-12 / 0945  
 Date/Time Completed : 9-10-12 / 1730  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : 20'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	%Recovery	PID (ppm)	Lab No.
22									
23								6.5	SB8-20.0-26.0@1130
24					SM				
25								9.0	SB8-25.0-RG@1110
26				26.0-30.0 Silty SAND (65% fine to medium sand, 35% silt), brown/grey, moist, no odor.					
27									
28					SM				
29									
30				30.0-33.0 SILT, trace sand, trace gravel (90% silt, 5% fine to medium sand, 5% fine to coarse gravel) grey/brown, slightly moist, no odor.					
31					ML			3.9	
32									
33				33.0-35.0 Sandy SILT (60% silt, 40% fine sand), grey, moist, no odor.					
34					ML			7.4	SB8-33.0-35.0@1210
35				35.0-40.0 SILT, minor sand, trace gravel (85% silt, 10% fine sand, 5% fine to coarse gravel) grey, slightly moist, no odor.					SB8-35.0-RG@1220
36									
37					ML			10.4	SB8-35.0-40.0@1215
38									
39									
40				40.0-46.0 SILT, minor sand, trace gravel (85% silt, 10% fine sand, 5% fine to coarse gravel) grey, moist grading to dry, no odor.					
41					ML				
42									
43								3.5	SB8-40.0-46.0@1330
44									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

LOG OF BORING SB-8

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# LOG OF BORING SB-8

(Page 3 of 4)

Date/Time Started : 9-10-12 / 0945  
 Date/Time Completed : 9-10-12 / 1730  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : 20'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	%Recovery	PID (ppm)	Lab No.
44									
45					ML			8.8	SB8-45.0-RG@1400
46				46.0-47.5 Silty SAND, minor gravel (70% fine to medium sand, 20% silt, 10% fine to coarse gravel), grey/brown, moist, no odor.	SM				
47									
48				47.5-50.0 Sandy SILT grading to SILT, minor sand, minor gravel (60% silt, 40% fine sand) to (70% silt, 15% fine to medium sand, 15% fine to coarse gravel), brown/grey, moist grading to slightly moist, no odor.	ML				
49									
50				50.0-63.0 SILT, minor sand, minor gravel (70% silt, 15% fine to medium sand, 15% fine to coarse gravel), grey/brown, slightly moist, no odor.					
51									
52								2.0	SB8-50.0-55.0@1430
53									
54									
55								1.5	SB8-55.0-RG@1500
56					ML				
57									
58									
59									
60									
61									
62									
63				63.0-64.0 Sandy SILT, trace gravel (60% silt, 35% fine sand, 5% fine to coarse gravel), grey, wet, no odor.	ML				
64				64.0-66.0 Silty SAND, trace gravel (60% fine to medium sand, 35% silt, 5% gravel), grey, wet, no odor.	SM			2.0	SB8-64.0-66.0@1600 SB8-65.0-RG@1615
65									
66									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-8

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# LOG OF BORING SB-8

(Page 4 of 4)

Date/Time Started : 9-10-12 / 0945  
 Date/Time Completed : 9-10-12 / 1730  
 Total Boring Depth (bgs) : 80'  
 Depth to Water ATD (bgs) : 20'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery

Client: Forsberg and Umlauf

Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	%Recovery	PID (ppm)	Lab No.
66				66.0-70.0 SILT, minor gravel, trace sand (80% silt, 15% fine to coarse gravel, 5% fine to coarse sand) grey, moist grading to dry, no odor.	ML				
67									
68									
69									
70				70.0-80.0 SILT, minor gravel, trace sand (80% silt, 15% fine to coarse gravel, 5% fine to coarse sand) grey, slightly moist, no odor.	ML				
71									
72									
73									
74									
75									
76									
77									SB8-74.0-80.0@1715
78									
79									
80				Bottom of boring at 80.0 feet.					
81									
82									
83									
84									
85									
86									
87									
88									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-8

(Page 4 of 4)

# LOG OF BORING SB-9

(Page 1 of 4)

Date/Time Started : 9-6-12 / 1045  
 Date/Time Completed : 9-6-12 / 1235  
 Total Boring Depth (bgs) : 100'  
 Depth to Water ATD (bgs) : 23'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	%Recovery	PID (ppm)	Lab No.
0				0.0-16.0 Silty SAND, minor gravel/cobbles (50% fine to coarse sand, 35% silt, 15% fine to coarse gravel), brown/grey, moist, no odor.					
1									
2									
3									
4									
5								3.4	
6									
7									
8					SM				
9									
10									
11								13.3	
12									
13									
14								6.9	
15									
16				16.0-23.0 Silty SAND, minor gravel (45% fine to medium sand, 40% silt, 15% gravel), brown/grey, slightly, moist, no odor.					
17								9.3	
18									
19					SM				
20								9.9	
21									
22									
23				23.0-24.0 Silty SAND, trace gravel (65% fine to medium sand, 30% silt, 5% fine to coarse gravel), brown/grey, wet, no odor.	SM			4.8	
24				24.0-27.0 Silty SAND, minor gravel (45% fine to medium sand, 40% silt, 15% gravel), brown/grey, slightly moist, no odor.	SM				
25								4.5	
26									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

LOG OF BORING SB-9

(Page 1 of 4)

# LOG OF BORING SB-9

(Page 2 of 4)

Date/Time Started : 9-6-12 / 1045  
 Date/Time Completed : 9-6-12 / 1235  
 Total Boring Depth (bgs) : 100'  
 Depth to Water ATD (bgs) : 23'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	%Recovery	PID (ppm)	Lab No.
26					SM				
27				27.0-31.5 SAND with silt, trace gravel (65% fine to coarse sand, 30% silt, 5% fine to coarse gravel), brown/grey, wet, no odor.					
28					SW				
29									
30									
31									
32				31.5-35.0 Silty SAND, minor gravel (75% fine to medium sand, 10% silt, 15% fine to coarse gravel), brown/grey, wet, no odor.					
33					SM			8.0	
34									
35				35.0-37.0 SILT with sand, trace gravel (65% silt, 30% fine to medium sand, 5% fine to coarse gravel) brown/grey, moist, no odor.					
36					ML			19.4	
37				37.0-50.0 SILT, trace sand, trace gravel (90% silt, 5% fine to medium sand, 5% fine to coarse gravel), dark grey, slightly moist, no odor.					
38									
39									
40									
41									
42								7.1	
43					ML				
44									
45									
46									
47									
48								4.8	
49									
50				50.0-52.5 SILT with sand, trace gravel (65% silt, 30% fine sand, 5% fine to coarse gravel) dark grey, wet, no odor.					
51					ML				
52									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

LOG OF BORING SB-9

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# LOG OF BORING SB-9

(Page 3 of 4)

Date/Time Started : 9-6-12 / 1045  
 Date/Time Completed : 9-6-12 / 1235  
 Total Boring Depth (bgs) : 100'  
 Depth to Water ATD (bgs) : 23'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	%Recovery	PID (ppm)	Lab No.
52					ML				
53				52.5-55.0 SILT, minor sand, trace gravel (85% silt, 10% fine sand, 5% fine to coarse gravel), dark grey, slightly moist, no odor.	ML			1.0	
54									
55				55.0-60.0 SILT, trace sand, trace gravel (90% silt, 5% fine sand, 5% fine to coarse gravel), dark grey, moist, no odor.					
56									
57					ML			4.3	
58									
59									
60				60.0-63.5 SILT, minor sand (90% silt, 10% fine sand), dark grey, wet, no odor.					
61									
62					ML			11.8	
63									
64				63.5-78.5 Silty SAND (60% fine sand, 40% silt), dark grey, wet, no odor.					
65									SB9-65.0-RG@0845
66									
67								10.0	SB9-63.5-70@0930
68									
69									
70									
71					SM				
72									
73									
74								4.0	
75									SB9-75.0-RG@1020
76									
77									
78									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-9

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# LOG OF BORING SB-9

(Page 4 of 4)

Date/Time Started : 9-6-12 / 1045  
 Date/Time Completed : 9-6-12 / 1235  
 Total Boring Depth (bgs) : 100'  
 Depth to Water ATD (bgs) : 23'  
 Elevation (ft) : NA  
 Drilling Method : Sonic  
 Sampler Type : Sonic Core



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	RG Sample	Water Level	Description	USCS	Graphic	%Recovery	PID (ppm)	Lab No.
78					SM				
79				78.5-80.0 Silty SAND (80% fine to medium sand, 20% silt), brown/grey, wet, no odor.	SM			5.2	
80				80.0-100.0 Sandy SILT (60% silt, 40% fine sand), dark grey, wet, no odor.					
81									
82									
83									
84									
85								5.5	
86									SB9-85.0-87.5@11200
87									
88									
89									
90					ML				
91									
92									
93									
94									
95								1.3	
96									SB9-95.0-97.5@1605
97									
98									
99									
100				Bottom of boring at 100 feet.					
101									
102									
103									
104									

Drilling Company : Cascade Drilling  
 Drilling Foreman : Andy Flagan  
 Equipment : Sonic CRS-17-C Track Mounted rig  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-9

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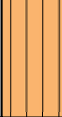
# LOG OF BORING SB-10

(Page 1 of 1)

Date/Time Started : 12-8-12 / 1115  
 Date/Time Completed : 12-8-12 / 1150  
 Total Boring Depth (bgs) : 1'  
 Depth to Water ATD (bgs): NA  
 Elevation (ft) : NA  
 Drilling Method : Geoprobe  
 Sampler Type : 5-ft Continuous  
 Core Sampler



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	Description	USCS	Graphic	% Recovery	PID (ppm)	Sample ID
0	X	0.0-1.0 SILT, trace sand, trace gravel (90% silt, 5% sand, 5% fine gravel), orange/brown, slightly moist, no odor.	ML		80	0.0	SB10-0-1 @1140
1		Refusal at 1 foot.					
2							
3							
4							
5							
6							
7							
8							
9							
10							

Drilling Company : Holt Drilling  
 Drilling Foreman : Carlos Trajillo  
 Equipment : Limited access Geoprobe (106 7822DT)  
 Backfill Material : Bentonite/Concrete  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-10

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# LOG OF BORING SB-11

(Page 1 of 1)

Date/Time Started : 12-8-12 / 1000  
 Date/Time Completed : 12-8-12 / 1030  
 Total Boring Depth (bgs) : 12'  
 Depth to Water ATD (bgs) : NA  
 Elevation (ft) : NA  
 Drilling Method : Geoprobe  
 Sampler Type : 5-ft Continuous  
 Core Sampler



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	Description	USCS	Graphic	% Recovery	PID (ppm)	Sample ID
0		0.0-5.0 SILT with sand, minor gravel (65% silt, 20% fine sand, 15% fine to coarse gravel), brown, slightly moist, no odor.					
1							
2							
3			ML		70	0.0	SB11-2-4@1005
4							
5		5.0-12.0 SILT, minor sand, minor gravel (75% silt, 15% fine sand, 10% fine to coarse gravel), brown, moist, no odor.					
6							
7							
8			ML		100	0.0	SB11-8-10@1020
9							
10							
11					50	0.7	SB11-10-12@1030
12		Refusal at 12 feet.					

Drilling Company : Holt Drilling  
 Drilling Foreman : Carlos Trajillo  
 Equipment : Limited access Geoprobe (106 7822DT)  
 Backfill Material : Bentonite/Concrete  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-11

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# LOG OF BORING SB-12

(Page 1 of 1)

Date/Time Started : 12-8-12 / 1050  
 Date/Time Completed : 12-8-12 / 1105  
 Total Boring Depth (bgs) : 5'  
 Depth to Water ATD (bgs) : NA  
 Elevation (ft) : NA  
 Drilling Method : Geoprobe  
 Sampler Type : 5-ft Continuous  
 Core Sampler



Site Name: Former Penthouse Drapery  
 Client: Forsberg and Umlauf  
 Project #: 105-003

Depth In Feet	Samples	Description	USCS	Graphic	% Recovery	PID (ppm)	Sample ID
0		0.0-5.0 SILT, trace sand, trace gravel (90% silt, 5% fine sand, 5% fine to coarse gravel) orange/brown, slightly moist, no odor.					
1							
2							
3			ML		50	0.0	SB12-2-4@1055 SBD-2-4@1100 (duplicate)
4							
5		Refusal at 5 feet.					
6							
7							
8							
9							
10							

Drilling Company : Holt Drilling  
 Drilling Foreman : Carlos Trajillo  
 Equipment : Limited access Geoprobe (106 7822DT)  
 Backfill Material : Bentonite/Concrete  
 Pacific Crest Rep. : April Wiebenga

LOG OF BORING SB-12

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# LOG OF BORING SB-13

(Page 1 of 5)

Date/Time Started : 1-4-13 / 1000  
 Date/Time Completed : 1-8-13 / 1200  
 Total Boring Depth (bgs) : 111.5'  
 Depth to Water ATD (bgs) : ~52.5'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
0			0.0-1.5 SILT, trace sand, trace gravel (90% silt, 5% fine to coarse sand, 5% coarse gravel), light brown, moist, organic matter, no odor.	ML		20	3/5/9	-	
1									
2									
3			2.5-4.0 Sandy SILT, trace gravel (60% silt, 35% fine to coarse sand, 5% coarse gravel), brown, moist, no odor.	ML		80	-	0.0	
4									
5			5.0-6.5 Sandy SILT, minor gravel (50% silt, 40% fine to coarse sand, 10% coarse gravel), brown, dry to moist, no odor.	ML		60	8/13/16	0.0	
6									
7									
8			7.5-9.0 Sandy SILT, minor gravel (50% silt, 40% fine to coarse sand, 10% coarse gravel), brown, dry to moist, no odor.	ML		60	5/16/23	0.0	
9									
10			10.0-11.5 Sandy SILT, minor gravel (50% silt, 40% fine to coarse sand, 10% coarse gravel), brown, dry to moist, no odor.	ML		75	3/15/25	0.0	
11									
12									
13			12.5-14.0 Silty SAND and gravel (50% fine to coarse sand, 30% silt, 20% fine to coarse gravel), brown, dry to moist, no odor.	SM		20	28/50 (for 4)	0.0	
14									
15			15.0-16.5 Silty SAND and gravel (50% fine to coarse sand, 30% silt, 20% fine to coarse gravel), brown, dry to moist, no odor.	SM		33	18/50 (for 4)	0.0	
16									
17									
18			17.5-19.0 GRAVEL with silt and sand (50% coarse gravel, 25% fine to coarse sand, 20% silt), brown, moist, no odor.	GM		10	50 (for 6)	0.0	
19									
20			20.0-21.5 Silty SAND, trace gravel (60% fine to coarse sand, 35% silt, 5% coarse gravel), brown, dry to moist, no odor.	SM		80	28/50	0.0	
21									
22									
23			22.5-24.0 Silty SAND, minor gravel (55% fine to coarse sand, 30% silt, 15% fine to coarse gravel), brown, dry to moist, no odor.	SM		40	50 (for 6)	0.0	
24									
25									

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : Matt DeCaro

## LOG OF BORING SB-13

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# LOG OF BORING SB-13

(Page 2 of 5)

Date/Time Started : 1-4-13 / 1000  
 Date/Time Completed : 1-8-13 / 1200  
 Total Boring Depth (bgs) : 111.5'  
 Depth to Water ATD (bgs) : ~52.5'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
25		X	25.0-26.5 Silty SAND, trace gravel (70% fine to coarse sand, 25% silt, 5% fine to coarse gravel), brown, moist, no odor.	SM		100	8/16/21	0.0	SB13-34-36 @1410
26									
27									
28		X	27.5-29.0 Silty SAND, trace gravel (70% fine to coarse sand, 25% silt, 5% fine to coarse gravel), brown, moist, no odor.	SM		33	50 (for 6)	0.0	
29									
30		X	30.0-31.5 Silty SAND, trace gravel (70% fine to coarse sand, 25% silt, 5% fine to coarse gravel), brown, moist, no odor.	SM		50	26/50	0.0	
31									SB13-44-46 @1505
32									
33		X	32.5-34.0 Silty SAND, trace gravel (70% fine to coarse sand, 25% silt, 5% fine to coarse gravel), brown, moist, no odor.	SM		40	50 (for 6)	0.0	
34									
35		X	35.0-36.5 Silty SAND, trace gravel (70% fine to coarse sand, 25% silt, 5% fine to coarse gravel), brown, moist, no odor.	SM		40	50 (for 6)	0.0	
36									
37									SB13-44-46 @1505
38		X	37.5-39.0 Silty SAND, trace gravel (70% fine to coarse sand, 25% silt, 5% fine to coarse gravel), brown, moist, no odor.	SM		40	50 (for 6)	0.0	
39									
40		X	40.0-41.5 SILT, minor sand, trace gravel (80% silt, 15% fine to coarse sand, 5% fine to coarse gravel), grey/brown, dry to moist, no odor.	ML		80	26/50	0.0	
41									
42									
43		X	42.5-44.0 SILT, minor sand, trace gravel (85% silt, 10% fine to coarse sand, 5% coarse gravel), grey/brown, dry to moist, no odor.	ML		90	25/22/21	0.0	SB13-44-46 @1505
44									
45		X	45.0-46.5 SILT, trace sand, trace gravel (90% silt, 5% fine to coarse sand, 5% fine gravel), grey, dry to moist, no odor.	ML		100	8/17/24	0.0	
46									
47									
48		X	47.5-49.0 SILT, trace sand, trace gravel (90% silt, 5% fine to coarse sand, 5% fine gravel), grey, dry to moist, no odor.	ML		60	21/50	0.0	
49									
50									

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : Matt DeCaro

LOG OF BORING SB-13

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# LOG OF BORING SB-13

(Page 3 of 5)

Date/Time Started : 1-4-13 / 1000  
 Date/Time Completed : 1-8-13 / 1200  
 Total Boring Depth (bgs) : 111.5'  
 Depth to Water ATD (bgs) : ~52.5'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
50									
51		X	50.0-51.5 SILT, minor sand, trace gravel (80% silt, 15% fine to coarse sand, 5% fine gravel), greyish brown, moist to wet, no odor.	ML		90	32/50	0.0	
52									
53		X	52.5-54.0 SILT with sand, trace gravel (65% silt, 30% fine to coarse sand, 5% gravel), greyish brown, moist to wet, no odor.	ML		100	13/24/26	0.0	
54									
55		X	55.0-56.5 SILT with sand, trace gravel (65% silt, 30% fine to coarse sand, 5% gravel), greyish brown, moist to wet, no odor.	ML		-	13/15/22	0.0	SB13-54-56 @1600
56									
57									
58		X	57.5-59.0 Sandy SILT (65% silt, 35% fine to coarse sand), grey, wet, no odor.	ML		10	26/50	0.0	
59									
60		X	60.0-61.5 SILT, minor sand (90% silt, 10% fine to coarse sand), grey, moist to wet, no odor.	ML		85	13/19/17	0.0	
61									
62									
63		X	62.5-64.0 SILT, trace gravel (95% silt, 5% coarse gravel), grey, wet, no odor.	ML		75	50 (for 4)	0.0	
64									
65		X	65.0-66.5 SILT, minor sand, trace gravel (80% silt, 15% fine to coarse sand, 5% fine to coarse gravel), grey, wet, no odor.	ML		90	14/20/23	0.0	SB13-64-66 @0950
66									
67									
68		X	67.5-69.0 SILT with sand, trace gravel (65% silt, 30% fine to coarse sand, 5% coarse gravel), grey, moist to wet, no odor.	ML		95	13/20/29	0.0	
69									
70		X	70.0-71.5 Silty SAND, trace gravel (55% fine to coarse sand, 40% silt, 5% fine to coarse gravel), grey, moist to wet, no odor.	SM		90	18/25/50 (for 5)	0.0	
71									
72									
73		X	72.5-74.0 Silty SAND (85% fine to coarse sand, 15% silt), grey/brown, wet, no odor.	SM		90	31/50	0.0	
74									
75									SB13-74-76 @1120

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : Matt DeCaro

## LOG OF BORING SB-13

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# LOG OF BORING SB-13

(Page 4 of 5)

Date/Time Started : 1-4-13 / 1000  
 Date/Time Completed : 1-8-13 / 1200  
 Total Boring Depth (bgs) : 111.5'  
 Depth to Water ATD (bgs) : ~52.5'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
75		X	75.0-76.5 Silty SAND, trace gravel (80% fine to coarse sand, 15% silt, 5% fine to coarse gravel), grey, moist to wet, no odor.	SM		100	-	0.0	SB13-70-80RG @1245
76									
77									
78		X	77.5-79.0 Silty SAND, trace gravel (85% fine to coarse sand, 10% silt, 5% gravel), grey/brown, moist to wet, no odor.	SW/SM		60	21/31/39	0.0	
79									SB13-80-90RG @1400
80		X	80.0-81.5 Silty SAND, trace gravel (85% fine to coarse sand, 10% silt, 5% gravel), grey/brown, moist to wet, no odor.	SW/SM		95	29/37/50	0.0	
81									
82									
83		X	82.5-84.0 Silty SAND (75% fine to coarse sand, 25% silt), grey/green, wet, no odor.	SM		100	33/50	0.0	SB13-86-88 @1335
84									
85		X	85.0-86.5 GRAVEL (100% coarse gravel).	GW		1	50 (for 6)	-	
86									
87									SB13-94-96 @1445
88		X	87.5-89.0 Silty SAND, trace gravel (55% fine to coarse sand, 40% silt, 5% fine to coarse gravel), grey, wet, no odor.	SM		80	13/17/27	0.0	
89									
90		X	90.0-91.5 Silty SAND, trace gravel (70% fine to coarse sand, 25% silt, 5% coarse gravel), grey, wet to moist, no odor.	SM		95	-	0.0	
91									SB13-94-96 @1445
92									
93		X	92.5-94.0 Silty SAND (70% fine to coarse sand, 30% silt), grey, moist to wet, no odor.	SM		50	11/29/50 (for 3)	0.0	
94									
95		X	95.0-96.5 Silty SAND (70% fine to coarse sand, 30% silt), grey, moist to wet, no odor.	SM		60	13/35/50	0.0	SB13-94-96 @1445
96									
97									
98		X	97.5-99.0 Silty SAND (70% fine to coarse sand, 30% silt), grey, moist to wet, no odor.	SM		60	-	0.0	
99									
100									

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : Matt DeCaro

## LOG OF BORING SB-13

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# LOG OF BORING SB-13

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Date/Time Started : 1-4-13 / 1000  
 Date/Time Completed : 1-8-13 / 1200  
 Total Boring Depth (bgs) : 111.5'  
 Depth to Water ATD (bgs) : ~52.5'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
100		X	100.0-101.5 Silty SAND (70% fine to coarse sand, 30% silt), grey, moist to wet, no odor.	SM		60	17/31/36	0.0	SB13-100-110RG @1005
101									
102									SB13-DUP-100-110RG @1010
103		X	102.5-104.0 Silty SAND (70% fine to coarse sand, 30% silt), grey, moist to wet, no odor.	SM		50	24/38/50 (for 2)	0.0	
104									
105		X	105.0-106.5 Silty SAND (70% fine to coarse sand, 30% silt), grey, moist to wet, no odor.	SM		80	19/50 (for 4)	0.0	SB13-104-106 @1550
106									
107									SB13-DUP-104-106 @1555
108		X	107.5-109.0 Silty SAND (60% fine to coarse sand, 40% silt), grey, moist, no odor.	SM		60	16/50 (for 5)	0.0	
109									
110		X	110.0-111.5 Silty SAND (60% fine to coarse sand, 40% silt), grey, moist, no odor.	SM		75	16/35/50	0.0	
111									
112			Bottom of boring at 111.5 feet below ground surface.						
113									
114									
115									
116									
117									
118									
119									
120									
121									
122									
123									
124									
125									

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : Matt DeCaro

## LOG OF BORING SB-13

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# LOG OF BORING SB-14

(Page 1 of 5)

Date/Time Started : 12-26-12 / 1000  
 Date/Time Completed : 12-28-12 / 1630  
 Total Boring Depth (bgs) : 110.0'  
 Depth to Water ATD (bgs) : ~20.0'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
0			0.0-1.5 SILT, trace gravel (95% silt, 5% fine to coarse gravel), brown, moist, no odor	ML		50	1/1/4	0.0	
1									
2									
3			2.5-4.0 SAND, trace silt, trace gravel (90% fine to coarse sand, 5% silt, 5% fine to coarse gravel), brown, moist, no odor.	SW		50	-	-	
4									
5			5.0-6.5 Silty SAND, trace gravel (85% fine to coarse sand, 10% silt, 5% fine to coarse gravel), brown, moist, no odor.	SW/SM		65	3/7/10	-	
6									
7									
8			7.5-9.0 Silty SAND, trace gravel (85% fine to coarse sand, 10% silt, 5% fine to coarse gravel), brown, moist, no odor.	SW/SM		45	9/17/21	0.0	
9									
10			10.0-11.5 Silty SAND, trace gravel (60% fine to medium sand, 35% silt, 5% fine to coarse gravel), brown, moist, no odor.	SM		95	9/32/50	-	
11									
12									
13			12.5-14.0 Silty SAND, trace gravel (75% fine to coarse sand, 20% silt, 5% fine to coarse gravel), brown, moist, no odor.	SM		-	12/50 (for 5)	-	
14									
15			15.0-16.5 Silty SAND, trace gravel (75% fine to coarse sand, 20% silt, 5% fine to coarse gravel), brown, moist, no odor.	SM		-	17/50 (for 5)	-	
16									
17									
18			17.5-19.0 Silty SAND, minor gravel (70% fine to coarse sand, 20% silt, 10% fine to coarse gravel), brown, moist, no odor.	SM		75	-	0.2	
19									
20			20.0-21.5 Silty SAND (85% fine to coarse sand, 15% silt), brown/grey, wet, no odor.	SM		-	19/36/50 (for 5)	-	
21									
22									
23			22.5-24.0 Silty SAND (85% fine to coarse sand, 15% silt), brown/grey, wet, no odor.	SM		-	30/50	-	
24									
25									

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

LOG OF BORING SB-14

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# LOG OF BORING SB-14

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Date/Time Started : 12-26-12 / 1000  
 Date/Time Completed : 12-28-12 / 1630  
 Total Boring Depth (bgs) : 110.0'  
 Depth to Water ATD (bgs) : ~20.0'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
25			25.0-26.5 SILT with sand, trace gravel (75% silt, 20% fine to medium sand, 5% fine to coarse gravel), brown, moist, no odor.	ML		100	7/43/55	-	
26									
27									
28			27.5-29.0 Silty SAND, trace gravel (60% fine to coarse sand, 35% silt, 5% fine gravel), brown, moist, no odor.	SM		-	7/30/50 (for 5)	0.1	
29									
30			30.0-31.5 Silty SAND, trace gravel (80% fine to coarse sand, 15% silt, 5% fine to coarse gravel), brown, wet, no odor.	SM		-	-	-	
31									
32									
33			32.5-34.0 SILT with sand, trace gravel (70% silt, 25% fine sand, 5% fine to coarse gravel), brown, wet, no odor.	ML		50	50 (for 5)	-	
34									
35			35.0-36.5 SILT with sand, trace gravel (70% silt, 25% fine sand, 5% fine to coarse gravel), brown, wet, no odor.	ML		-	27/50 (for 4)	-	SB14-34-36 @1335
36									
37									SB14-30-40RG @1500
38			37.5-39.0 SILT with sand, trace gravel (70% silt, 25% fine sand, 5% fine to coarse gravel), brown, wet, no odor.	ML		-	-	-	
39									
40			40.0-41.5 SILT, trace sand (95% silt, 5% sand), grey, moist, no odor.	ML		-	32/50	0.1	
41									
42									
43			42.5-44.0 SILT, minor sand (90% silt, 10% fine to medium sand), grey, moist, no odor.	ML		-	15/26/34	0.4	
44									
45			45.0-46.5 SILT, trace gravel, trace sand (90% silt, 5% fine to coarse gravel, 5% fine sand), grey, moist, no odor.	ML		40	17/50 (for 4)	-	SB14-44-46 @1600
46									
47									SB14-40-50RG @0915
48			47.5-49.0 SILT, minor gravel, trace sand (85% silt, 10% fine to coarse gravel, 5% fine sand), grey, wet, no odor.	ML		100	-	-	
49									
50									

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-14

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# LOG OF BORING SB-14

(Page 3 of 5)

Date/Time Started : 12-26-12 / 1000  
 Date/Time Completed : 12-28-12 / 1630  
 Total Boring Depth (bgs) : 110.0'  
 Depth to Water ATD (bgs) : ~20.0'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
50		X	50.0-51.5 SILT, minor gravel, trace sand (85% silt, 10% fine to coarse gravel, 5% fine sand), grey, wet, no odor.	ML		-	30/50/50	0.2	
51									
52									
53		X	52.5-54.0 SILT, minor sand, trace gravel (85% silt, 10% fine to medium sand, 5% fine gravel), grey, moist, no odor.	ML		60	16/19/27	-	
54									
55		X	55.0-56.5 SILT, minor sand, trace gravel (85% silt, 10% fine to medium sand, 5% fine gravel), grey, moist, no odor.	ML		100	-	0.2	SB14-54-56 @1050
56									
57									
58		X	57.5-59.0 SILT, minor sand, trace gravel (85% silt, 10% fine to medium sand, 5% fine gravel), grey, moist, no odor.	ML		100	13/14/17	-	
59									
60		X	60.0-61.5 SAND with gravel (80% fine to coarse sand, 20% fine to coarse gravel), brown, wet, no odor.	SP		90	12/23/20	-	
61									
62									
63		X	62.5-64.0 SAND with gravel, trace silt, (75% medium to coarse sand, 20% fine to coarse gravel, 5% silt), brown, wet, no odor.	SP		100	-	0.0	
64									
65		X	65.0-66.5 SAND, trace silt (95% fine to coarse sand, 5% silt), brown/black, wet, no odor.	SP		100	-	-	SB14-64-66 @1250
66									
67									
68		X	67.5-69.0 SAND, trace silt (95% fine to coarse sand, 5% silt), brown/black, wet, no odor.	SP		100	-	-	
69									
70		X	70.0-71.5 SAND, trace silt (95% fine to medium sand, 5% silt), brown/grey, wet, no odor.	SP		100	-	-	
71									
72									
73		X	72.5-74.0 Silty SAND (75% fine to medium sand, 25% silt), brown, wet, no odor.	SM		90	27/50	0.1	
74									
75									SB14-74-76 @1400

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-14

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# LOG OF BORING SB-14

(Page 4 of 5)

Date/Time Started : 12-26-12 / 1000  
 Date/Time Completed : 12-28-12 / 1630  
 Total Boring Depth (bgs) : 110.0'  
 Depth to Water ATD (bgs) : ~20.0'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
75		X	75.0-76.5 Silty SAND (75% fine sand, 25% silt), brown, wet, no odor.	SM		-	-	-	SB14-70-80RG @0900
76									
77									
78		X	77.5-79.0 Silty SAND (75% fine sand, 25% silt), brown, wet, no odor.	SM		-	-	-	
79									
80		X	80.0-81.5 Silty SAND (75% fine sand, 25% silt), brown, wet, no odor.	SM		90	8/13/24	-	
81									
82									
83		X	82.5-84.0 Silty SAND (75% fine sand, 25% silt), brown, wet, no odor.	SM		100	10/23/31	0.0	
84									
85		X	85.0-86.5 Silty SAND (75% fine sand, 25% silt), brown, wet, no odor.	SM		0	11/50 (for 3)	-	
86									
87									SB14-80-90RG @1230
88		X	87.5-89.0 Silty SAND (75% fine sand, 25% silt), brown, wet, no odor.	SM		50	-	-	
89									
90		X	90.0-91.5 Silty SAND (75% fine sand, 25% silt), brown, wet, no odor.	SM		80	12/19/28	-	
91									
92									
93		X	92.5-94.0 Silty SAND (75% fine sand, 25% silt), brown, wet, no odor.	SM		0	-	-	
94									
95		X	95.0-96.5 Silty SAND (75% fine sand, 25% silt), brown, wet, no odor.	SM		70	-	0.0	
96									SB14-95-96 @1340
97									
98		X	97.5-99.0 Silty SAND (75% fine sand, 25% silt), brown, wet, no odor.	SM		90	-	-	
99									
100									

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

## LOG OF BORING SB-14

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# LOG OF BORING SB-14

(Page 5 of 5)

Date/Time Started : 12-26-12 / 1000  
 Date/Time Completed : 12-28-12 / 1630  
 Total Boring Depth (bgs) : 110.0'  
 Depth to Water ATD (bgs) : ~20.0'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
100		X	100.0-101.5 Silty SAND (75% fine sand, 25% silt), brown, wet, no odor.	SM		90	-	0.6	SB14-104-106 @1430  SB14-100-110RG @1600
101									
102									
103		X	102.5-104.0 Silty SAND (75% fine sand, 25% silt), brown, wet, no odor.	SM		90	-	-	
104									
105		X	105.0-106.5 Silty SAND (65% fine sand, 35% silt), brown/grey, wet, no odor.	SM		100	13/29/38		
106									
107									
108		X	107.5-109.0 Silty SAND (65% fine sand, 35% silt), brown/grey, wet, no odor.	SM		100	-	0.2	
109									
110			Bottom of boring at 110.0 feet below ground surface.						
111									
112									
113									
114									
115									
116									
117									
118									
119									
120									
121									
122									
123									
124									
125									

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga

LOG OF BORING SB-14

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# LOG OF BORING SB-15

(Page 1 of 5)

Date/Time Started : 12-31-12 / 1030  
 Date/Time Completed : 1-3-13 / 1630  
 Total Boring Depth (bgs) : 106.5'  
 Depth to Water ATD (bgs) : ~20'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
0		X	0.0-1.5 Clayey SILT, minor gravel (55% silt, 35% clay, 10% fine to coarse gravel), brown/orange, moist, no odor.	ML		50	2/2/5	-	
1									
2									
3		X	2.5-4.0 Clayey SILT, minor gravel (55% silt, 35% clay, 10% fine to coarse gravel), brown/orange, moist, no odor.	ML		25	-	-	
4									
5		X	5.0-6.5 Silty SAND (65% fine to medium sand, 35% silt) brown, moist, no odor.	SM		75	-	-	
6									
7									
8		X	7.5-9.0 Silty SAND (65% fine to medium sand, 35% silt) brown, moist, no odor.	SM		100	-	-	
9									
10		X	10.0-11.5 Silty SAND (65% fine to medium sand, 35% silt) brown, moist, no odor.	SM		100	-	-	
11									
12									
13		X	12.5-14.0 Silty SAND (65% fine to medium sand, 35% silt) brown, moist, no odor.	SM		100	-	-	
14									
15		X	15.0-16.5 Silty SAND, trace gravel (80% fine to coarse sand, 15% silt, 5% fine to coarse gravel), brown, moist, no odor.	SM		100	-	-	
16									
17									
18		X	17.5-19.0 Silty SAND, trace gravel (60% fine to coarse sand, 35% silt, 5% fine to coarse gravel), brown, moist, no odor.	SM		100	-	-	
19									
20	▼	X	20.0-21.5 Silty SAND, trace gravel (60% fine to coarse sand, 35% silt, 5% fine to coarse gravel), brown, wet, no odor.	SM		100	-	-	
21									
22									
23		X	22.5-24.0 Silty SAND, trace gravel (60% fine to coarse sand, 35% silt, 5% fine to coarse gravel), brown, wet, no odor.	SM		100	-	-	
24									
25									

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga/Matt DeCaro

## LOG OF BORING SB-15

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# LOG OF BORING SB-15

(Page 2 of 5)

Date/Time Started : 12-31-12 / 1030  
 Date/Time Completed : 1-3-13 / 1630  
 Total Boring Depth (bgs) : 106.5'  
 Depth to Water ATD (bgs) : ~20'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
25		X	25.0-26.5 Silty SAND, trace gravel (60% fine to coarse sand, 35% silt, 5% fine to coarse gravel), brown, wet, no odor.	SM		85	-	-	
26									
27									
28		X	27.5-29.0 Silty SAND, minor gravel (65% fine to coarse sand, 25% silt, 10% fine to coarse gravel), brown, wet, no odor.	SW/SM		70	-	-	
29									
30		X	30.0-31.5 Silty SAND, minor gravel (80% fine to coarse sand, 10% silt, 10% gravel), brown, wet, no odor.	SW/SM		100	-	-	
31									
32									
33		X	32.5-34.0 Silty SAND, minor gravel (80% fine to coarse sand, 10% silt, 10% gravel), brown, wet, no odor.	SW/SM		100	-	163	
34									
35		X	35.0-36.5 Silty SAND (70% fine to coarse sand, 30% silt), brown, wet, no odor.	SM		25	-	-	
36									
37									
38		X	37.5-39.0 SILT, minor sand, trace gravel (85% silt, 10% fine to coarse sand, 5% fine to coarse gravel), grey, moist to wet, no odor.	ML		90	20 (for 5)	-	
39									
40		X	40.0-41.5 SILT, minor sand, trace gravel (85% silt, 10% fine to coarse sand, 5% fine to coarse gravel), grey, moist to wet, no odor.	ML		25	32/50 (for 5)	414	
41									
42									
43		X	42.5-44.0 SILT, minor sand, trace gravel (85% silt, 10% fine to coarse sand, 5% fine to coarse gravel), grey, moist to wet, no odor.	ML		85	31/50 (for 4)	-	
44									
45		X	45.0-46.5 SILT, minor sand, trace gravel (85% silt, 10% fine to coarse sand, 5% fine to coarse gravel), grey, moist to wet, no odor.	ML		50	12/50 (for 4)	20.3	
46									
47									
48		X	47.5-49.0 SILT, trace sand, trace gravel (90% silt, 5% fine to coarse sand, 5% fine to coarse gravel), grey, moist to wet, no odor.	ML		60	22/50 (for 4)	27.0	
49									
50									

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga/Matt DeCaro

## LOG OF BORING SB-15

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# LOG OF BORING SB-15

(Page 3 of 5)

Date/Time Started : 12-31-12 / 1030  
 Date/Time Completed : 1-3-13 / 1630  
 Total Boring Depth (bgs) : 106.5'  
 Depth to Water ATD (bgs) : ~20'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
50		X	50.0-51.5 SILT, trace sand (95% silt, <5% fine sand), grey, moist to wet, no odor.	ML		20	50 (for 6)	22.0	
51									
52									
53		X	52.5-54.0 SILT, trace sand, trace gravel (90% silt, <5% fine sand, 5% fine to coarse gravel), grey, moist to wet, no odor.	ML		33	50 (for 6)	-	
54									
55		X	55.0-56.5 SILT, trace sand, trace gravel (90% silt, <5% fine sand, 5% fine to coarse gravel), grey, moist to wet, no odor.	ML		33	31/50 (for 3)	9.4	
56									
57									
58		X	57.5-59.0 SILT, trace sand, trace gravel (90% silt, <5% fine sand, 5% fine to coarse gravel), grey, moist to wet, no odor.	ML		100	-	-	
59									
60		X	60.0-61.5 SILT, trace sand, trace gravel (90% silt, <5% fine sand, 5% fine to coarse gravel), grey, moist to wet, no odor.	ML		-	-	-	
61									
62									
63		X	62.5-64.0 SILT, trace sand (95% silt, <5% fine to coarse sand), grey, moist, no odor.	ML		100	17/29/35	0.6	
64									
65		X	65.0-66.5 SILT (100% silt), grey, moist, no odor.	ML		100	12/21/40	0.1	SB15-64-65 @0929
66									
67									
68		X	67.5-69.0 SILT, trace sand (95% silt, <5% fine to coarse sand), grey, moist to wet, no odor.	ML		95	18/23/35	0.4	
69									
70		X	70.0-71.5 SILT, trace sand (95% silt, 5% fine to coarse sand), grey, moist to wet, no odor.	ML		100	12/15/17	0.9	
71									
72									
73		X	72.5-74.0 Sandy SILT (60% silt, 40% fine to coarse sand), dark grey, moist to wet, no odor.	ML		100	23/29/50	2.9	
74									
75									SB15-74-76 @1033

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga/Matt DeCaro

## LOG OF BORING SB-15

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# LOG OF BORING SB-15

(Page 4 of 5)

Date/Time Started : 12-31-12 / 1030  
 Date/Time Completed : 1-3-13 / 1630  
 Total Boring Depth (bgs) : 106.5'  
 Depth to Water ATD (bgs) : ~20'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
75		X	75.0-76.5 Sandy SILT (65% silt, 35% fine to coarse sand), dark grey, moist to wet, no odor.	ML		95	18/27/50	13.5	SB15-70-80RG @1115
76									
77									
78		X	77.5-79.0 Silty SAND (60% fine to coarse sand, 40% silt), dark grey, moist to wet, no odor.	SM		95	14/18/26	10.9	
79									
80		X	80.0-81.5 Silty SAND (90% fine to coarse sand, 10% silt), light grey to dark grey, moist, no odor.	SW/SM		70	21/33/38	14.1	
81									
82									
83		X	82.5-84.0 SAND, trace silt (>95% fine to coarse sand, <5% silt), light gray to dark grey, moist, no odor.	SW		100	8/14/20	12.2	
84									
85		X	85.0-86.5 SAND, trace silt (>95% fine to coarse sand, <5% silt), light grey to dark grey, moist, no odor.	SW		100	7/12/26	0.0	SB15-84-86 @1320
86									
87									SB15-80-90RG @1600
88		X	87.5-89.0 Silty SAND (90% fine to coarse sand, 10% silt), medium grey, moist, no odor.	SW/SM		100	10/22/33	0.0	
89									
90		X	90.0-91.5 Sandy SILT (55% silt, 45% fine to coarse sand), medium grey, moist, no odor.	ML		100	12/18/31	0.0	
91									
92									
93		X	92.5-94.0 Sandy SILT (55% silt, 45% fine to coarse sand), grey, moist, no odor.	ML		100	9/8/10	1.7	
94									
95		X	95.0-96.5 Sandy SILT (55% silt, 45% fine to coarse sand), grey, moist, no odor.	ML		100	8/12/34	0.0	SB15-94-96 @1135
96									
97									
98		X	97.5-99.0 Sandy SILT (55% silt, 45% fine to coarse sand), grey, moist, no odor.	ML		100	5/7/18	0.0	
99									
100									

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga/Matt DeCaro

## LOG OF BORING SB-15

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# LOG OF BORING SB-15

(Page 5 of 5)

Date/Time Started : 12-31-12 / 1030  
 Date/Time Completed : 1-3-13 / 1630  
 Total Boring Depth (bgs) : 106.5'  
 Depth to Water ATD (bgs) : ~20'  
 Elevation (ft) : NA  
 Drilling Method : HSA  
 Sampler Type : 18" Split Spoon



Site Name: Former Penthouse Drapery  
 Client: Forsberg & Umlauf  
 Project #: 105-003

Depth In Feet	Water Level	Sample	Description	USCS	Graphic	% Recovery	Blow Count	PID (ppm)	Sample ID
100		X	100.0-101.5 Sandy SILT (55% silt, 45% fine to coarse sand), grey, moist to wet, no odor.	ML		75	-	0.0	
101									
102									
103		X	102.5-104.0 Sandy SILT (55% silt, 45% fine to coarse sand), grey, moist to wet, no odor.	ML		100	9/17/26	0.0	
104									SB15-104-106 @1420
105		X	105.0-106.5 Sandy SILT (55% silt, 45% fine to coarse sand), grey, moist to wet, no odor.	ML		-	-	-	
106									SB-100-106.5RG @1610
107			Bottom of boring at 106.5 feet below ground surface.						
108									
109									
110									
111									
112									
113									
114									
115									
116									
117									
118									
119									
120									
121									
122									
123									
124									
125									

Drilling Company : Holt Drilling  
 Drilling Foreman : John Bennett  
 Equipment : HSA  
 Backfill Material : Bentonite  
 Pacific Crest Rep. : April Wiebenga/Matt DeCaro

## LOG OF BORING SB-15

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**APPENDIX F**  
**MTCA METHOD B CLEANUP LEVEL AND REMEDIATION**  
**LEVEL CALCULATIONS**

**DRAFT FOR ECOLOGY REVIEW**  
**REMEDIAL INVESTIGATION-FEASIBILITY STUDY REPORT**

**FORMER PENTHOUSE DRAPERY AND BELSHAW SITE**  
**1752 RAINIER AVENUE SOUTH**  
**SEATTLE, WASHINGTON**

**PACIFIC CREST PN: 105-003**

Table F-1  
MTCA Method B and C Screening Levels - Indoor Air - Non-carcinogenic  
Penthouse-Belshaw Site  
Seattle, Washington  
Pacific Crest No: 105-003

COC	Exposure	Cleanup Standard	Hazard Quotient (unitless)	Hcc. Adjusted to 13 C	alpha	AT (yr)	ED Hours per day	ED Days Per Year	ED (yr)	BR (m3/day)	ABW (kg)	ABS (unitless)	EF (unitless)	Rfd (mg/kg-day)	CUL.air (ug/m3)	Screening Level - Air (ug/m3)	Screening Level Water (ug/L)	Soil Vapor Screening - Shallow (ug/m3)	Soil Vapor Screening - Deep (ug/m3)	Comments
PCE	Residential - Indoor Air	Current Method B Cleanup Level - NC	1	3.93E-01	1.00E-03	6	24	365	6	10	16	1	1	1.14E-02	18.2	--	46.4	182	1824	Using 2012 values
	Residential - Indoor Air	Calculated Method C - NC	1	3.93E-01	1.00E-03	6	24	365	6	20	70	1	1	1.14E-02	40		101.5	399	3990	Using 2012 values
	Non-Residential - Indoor Air	Calculated Method B/C Remediation Level - NC	1	3.93E-01	1.00E-03	6	8	250	6	10	70	1	0.228311	1.14E-02	--	349.5	889.4	3495	34952	Using 2012 values
TCE	Residential - Indoor Air	Current Method B Cleanup Level - NC	1	2.38E-01	1.00E-03	6	24	365	6	10	16	1	1	5.70E-04	0.9	--	3.8	9	91	Using 2012 values
	Residential - Indoor Air	Current Method C Cleanup Level - NC	1	2.38E-01	1.00E-03	6	24	365	6	20	70	1	1	5.70E-04	2.0	--	8.4	20	200	Using 2012 values
	Adult Only Non-Residential - Indoor Air	Calculated Method C Remediation Level - NC	1	2.38E-01	1.00E-03	6	8	250	6	20	70	1	0.228311	5.70E-04	--	8.7	36.7	87	874	Using 2012 values
cis-1,2-DCE	Residential - Indoor Air	Current Method B Cleanup Level - NC	1	9.97E-02	1.00E-03	6	24	365	6	10	16	1	1	1.00E-02	16	--	160	160	1600	
	Non-Residential - Indoor Air	Calculated Method C Cleanup Level - NC	1	9.97E-02	1.00E-03	6	24	365	6	20	70	1	1	1.00E-02	35		351	350	3500	
	Non-Residential - Indoor Air	Calculated Method C Remediation Level - NC	1	9.97E-02	1.00E-03	6	8	250	6	20	70	1	0.228311	1.00E-02	--	153	1538	1533	15330	
Vinyl Chloride	Residential - Indoor Air	Current Method B Cleanup Level - NC	1	8.16E-01	1.00E-03	6	24	365	6	10	16	1	1	2.90E-02	55.2	--	67.61	552	5517	Using CLARC Database values for Rfd
	Non-Residential - Indoor Air	Calculated Method C Cleanup Level - NC	1	8.16E-01	1.00E-03	6	24	365	6	20	70	1	1	2.90E-02	120.7	--	147.9	1207	12069	Using CLARC Database values for Rfd
	Non-Residential - Indoor Air	Calculated Method C Remediation Level - NC	1	8.16E-01	1.00E-03	6	8	250	6	20	70	1	0.228311	2.90E-02	--	528.6	647.8	5286	52862	Using CLARC Database values for Rfd

**Notes:**  
COC - Contaminant of concern  
PCE - Tetrachloroethene  
TCE - Trichloroethene  
Residential exposure is based on standard MTCA parameters (WAC 173-340-750 Eq. 750-2)  
Non-residential exposure is based on revised parameters that are consistent with commercial worker (8 hrs per day, 250 days per yr for 25 yrs)  
Cancer Risk - WAC 173-340-750 Eq. 750-2  
Hcc - Henry's Law Constant - CLARC Database  
Alpha - diffusion coefficient soil vapor to indoor air  
AT - Averaging Time - WAC 173-340-750 Eq. 750-2  
IUR - Inhalation Unit Risk - EPA or CAL EPA - see comments  
ADF - Age-dependant adjustment factor - EPA IRIS and Ecology guidance  
NHL - non-Hodgkin lymphoma  
ED - Exposure Duration - WAC 173-340-750 Eq. 750-2  
ED values for commercial/industrial from EPA Risk Assessment Guidance for Superfund (RAGS), Volume I: Human Health Evaluation Manual (Part F, Supplemental Guidance for Inhalation Risk Assessment) 2009  
BR - Breathing Rate  
ABW - Average Body Weight - WAC 173-340-750 Eq. 750-2  
ABS - Inhalation Absorption fraction - WAC 173-340-750 Eq. 750-2  
EF - Exposure Frequency - WAC 173-340-750 Eq. 750-2  
CPF<sub>i</sub>- Carcinogenic Potency Factor - Calculated based on CLARC glossary  
CUL.air - MTCA Method B Air CUL - WAC 173-340-750 Eq 750-2

COC	Exposure	Cleanup Standard	Cancer Risk (unitless)	Hcc. Adjusted to 13 C	alpha	AT (yr)	IUR (m3/ug)	Adjusted Inhalation Factor for ADAF for Early Life Exposure	ED Hours per day	ED Days Per Year	ED (yr)	BR (m3/day)	ABW (kg)	ABS (unitless)	EF (unitless)	UCF	CPF <sub>i</sub> (kg-day/ug)	CUL <sub>air</sub> (ug/m3)	Remediation Level - Air (ug/m3)	Screening Level Water (ug/L)	Soil Vapor Screening - Shallow (ug/m3)	Soil Vapor Screening - Deep (ug/m3)	Comments
PCE	Residential - Indoor Air	Current Method B Cleanup Level	1.00E-06	3.93E-01	1.00E-03	75	2.60E-07	--	24	365	30	20	70	1	1.000	1000	9.10E-04	9.6	--	24.5	96	962	Using 2012 EPA IRIS Database values for IUR
	Non-Residential - Indoor Air	Current Method B Screening Level	1.00E-06	3.93E-01	1.00E-03	75	2.60E-07	--	8	250	25	20	70	1	0.228	1000	9.10E-04	--	50.5	128.6	505	5054	Using 2012 EPA IRIS Database values for IUR
	Residential - Indoor Air	Current Method C Cleanup Level	1.00E-05	3.93E-01	1.00E-03	75	2.60E-07	--	24	365	30	20	70	1	1.000	1000	9.10E-04	96.2	--	244.7	962	9615	Using 2012 EPA IRIS Database values for IUR
	Residential - Indoor Air	Current Method C Screening Level	1.00E-05	3.93E-01	1.00E-03	75	2.60E-07	--	8	250	25	20	70	1	0.228	1000	9.10E-04	--	505.4	1286.0	5054	50538	Using 2012 EPA IRIS Database values for IUR
TCE	Residential - Indoor Air	Current Method B Cleanup Level - (Kidney)	1.00E-06	--	--	75	1.00E-06	3.26E+01	24	365	30	20	70	1	1	1000	3.50E-03	0.66	--	--	--	--	Using 2012 EPA IRIS Database values for IUR
		Current Method B Cleanup Level - (Liver)	1.00E-06	--	--	75	2.00E-06	--	24	365	30	20	70	1	1	1000	7.00E-03	1.3	--	--	--	--	Using 2012 EPA IRIS Database values for IUR
		Current Method B Cleanup Level - (NHL)	1.00E-06	--	--	75	1.00E-06	--	24	365	30	20	70	1	1	1000	3.50E-03	2.5	--	--	--	--	Using 2012 EPA IRIS Database values for IUR
		Method B Cleanup Level - (Kidney)(ADAF)+Liver +NHL)	--	2.38E-01	1.00E-03	--	Combined	--	--	--	--	--	--	--	--	1000	--	0.37	--	1.5	4	37	Using 2012 EPA IRIS Database values for IUR
	Adult Only Non-Residential - Indoor Air	Current Method B Screening Level	1.00E-06	2.38E-01	1.00E-03	75	4.00E-06	--	8	250	25	20	70	1	0.228	1000	1.40E-02	--	3.3	13.8	33	329	Using 2012 EPA IRIS Database values for IUR
	Adult Only Residential - Indoor Air	Current Method C Cleanup Level	1.00E-05	2.38E-01	1.00E-03	75	4.00E-06	--	24	365	30	20	70	1	1.000	1000	1.40E-02	6.3	--	26.3	63	625	Using 2012 EPA IRIS Database values for IUR
	Adult Only Non-Residential - Indoor Air	Current Method C Screening Level	1.00E-05	2.38E-01	1.00E-03	75	4.00E-06	--	8	250	25	20	70	1	0.228	1000	1.40E-02	--	33	138.0	329	3285	Using 2012 EPA IRIS Database values for IUR
	Residential - Indoor Air	Current Method B Cleanup Level	1.00E-06	8.16E-01	1.00E-03	75	8.80E-06	--	24	365	30	20	70	1	1.000	1000	3.08E-02	0.28	--	0.35	3	28	Using CLARC Database values for IUR
Vinyl Chloride	Non-Residential - Indoor Air	Method B Screening Level	1.00E-06	8.16E-01	1.00E-03	75	4.40E-06	--	8	250	25	20	70	1	0.228	1000	1.54E-02	--	3.0	3.7	30	299	Using CLARC Database values for IUR
	Non-Residential - Indoor Air	Method C Cleanup Level	1.00E-05	8.16E-01	1.00E-03	75	4.40E-06	--	24	365	30	20	70	1	1.000	1000	1.54E-02	5.7	--	7.0	57	568	Using CLARC Database values for IUR
	Non-Residential - Indoor Air	Method C Screening Level	1.00E-05	8.16E-01	1.00E-03	75	4.40E-06	--	8	250	25	20	70	1	0.228	1000	1.54E-02	--	30	36.6	299	2986	Using CLARC Database values for IUR
	Non-Residential - Indoor Air	Method C Screening Level	1.00E-05	8.16E-01	1.00E-03	75	4.40E-06	--	8	250	25	20	70	1	0.228	1000	1.54E-02	--	30	36.6	299	2986	Using CLARC Database values for IUR

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CUL<sub>air</sub> - MTCA Method B Air CUL - WAC 173-340-750 Eq 750-2