PHASE II ENVIRONMENTAL SITE ASSESSMENT OF THE JACOBSON PROPERTY

2412, 2428, and 2436 NW Market Street and 5511 24th Avenue NW Seattle, Washington

REPORT

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1.0 INTRODUCTION

At the request of HAL Real Estate Investment (HAL), Golder Associates Inc. (Golder) has performed this Phase II Environmental Site Assessment (Phase II ESA) and prepared this report of the Jacobsen Property (Subject Property) for the purpose of further investigating recognized environmental conditions (RECs) identified during Golder's Phase I Environmental Site Assessment. The Phase II ESA was completed in accordance with Golder's proposal (P03-93320) dated June 23, 2009 and Golder's Change Order #1 signed and dated on October 20, 2010 with some modifications to the proposed scope in response to the encountered field conditions and additional services authorized by HAL.

1.1 Site Description

The Subject Property, collectively known as "the Jacobsen Property," is comprised of six adjoining parcels that include most of the block bounded by NW 56th Street on the north, 24th Avenue NW on the east, and NW Market Street on the south. The Subject Property is located in the Ballard neighborhood of Seattle, Washington. Figure 1 shows the Subject Property location. The Subject Property has the following street addresses:

- 2412 NW Market Street
- 2428 NW Market Street
- 2436 NW Market Street
- 5511 24th Avenue NW

Entry to the Subject Property businesses is available from the adjoining streets (NW Market Street on the south, NW 56th Street on the north, and 24th Avenue on the east).

Based on the Public Land Survey System (PLSS), the Subject Property is located in the southwest quarter of Section 11, Township 25 North, Range 5 East, of the Willamette Meridian. The latitude and longitude coordinates of the Subject Property are 47°40'8.67" North by 122°23'18.87" West.

The Subject Property is rectangular-shaped with a land area of 1.65 acres. The Subject Property is comprised of six adjoining tax lot parcels with the following King County assessor parcel numbers:

276770-1150	276770-1180	276770-1136
276770-1130	276770-1135	276770-1155

The Subject Property is entirely covered by buildings or pavement. The parking lot area on the northeastern corner is surfaced with concrete pavement. The remaining paved areas are surfaced with asphalt. The Subject Property includes six buildings as follows:

Building/Business Name	Street Address	Square Footage	Construction Date (year)	Use
Maritime's Marine Center	2412 NW Market St	9,700	1927	Showroom, repair/service shop
Maritime's Marine Center	2412 NW Market St	1,080	1963	Storage warehouse
Maritime's Marine Center	5511 24th Ave NW	1,080	1959	Storage warehouse
Maritime's Marine Center	2428 NW Market St	5,000	1950	Showroom, repair/service shop
Maritime's Marine Center	2428 NW Market St	2,250	Unknown	Repair/service shop
Vacant retail	2436 NW Market St	6,638	1979	Vacant retail

The Subject Property and vicinity are characterized by commercial and residential developments. The commercial developments are primarily located along NW Market Street and include shops, restaurants, and offices. A gas station, Market Street Spirit Service, is located on the adjoining southeastern property at the corner of NW Market Street and 24th Avenue NW. Residential developments consisting of older single family homes and newer multi-family developments are located to the north. Farther south are commercial and industrial developments that primarily serve the marine industry. The site and immediate surrounding area slope towards the southwest. Salmon Bay, a freshwater embayment that is part of the Lake Washington Ship Canal, is located 600 feet to the south.

Subject Property historical development is summarized as follows:

- After logging and clearing in the late 1800s, the Subject Property was initially developed as residential in the 1890s through the 1910s. Most of the residences were constructed on the northern side of the Subject Property along NW 56th Street. The residences were all removed during the 1950s and the land was then used as paved parking.
- In 1910, a retail store building was constructed on the northeastern corner facing 24th Avenue NW. This retail building was used primarily as a music and appliance store (Gerke's). The building was removed in the late 1980s and the land converted to a concrete-surfaced parking lot.
- The existing building at 2412 NW Market Street was built in 1927 and occupied by vehicle and boat service and sales under the names of Dick Smith's Super Service, Alaska Pacific Supply, and Jacobsen's Boats & Motors.
- The existing building at 2428 NW Market Street was built in 1950 as a grocery store (Thriftway). The building was later occupied by a Washington State Liquor Store (1970s and 1980s) and then by Jacobsen's Boats & Motors (1990s).
- The existing building at 2436 NW Market Street was built in 1979 and was occupied by a Washington State Liquor Store and later as an Archie McPhee's variety store.

Two former gas station sites with confirmed releases of gasoline were located on the adjoining blocks to the north and northeast directly across NW 56th Street. Both of these sites are currently developed with condominium buildings. One of the gas station sites, a former Unocal station, has contaminated

groundwater resulting in a plume of contaminated groundwater that extends southward under 24th Avenue NW and down to at least NW 56th Street.

Two underground storage tanks (UST) were located on the Subject Property at the 2412 NW Market Street building and were both removed in 1995. One was a heating tank and the other was a waste oil tank. The heating oil tank and 72 tons of petroleum-contaminated soil were removed from under the sidewalk in front of the building along NW Market Street. Samples collected from the excavation indicated that remaining soil was less than current regulatory cleanup levels for petroleum hydrocarbons (2,000 ppm). The waste oil tank was located at the northwestern corner of the building. Samples collected from the excavation indicated that remaining soil was less than current regulatory cleanup levels for petroleum hydrocarbons.

A copy of the original building plan obtained at the Seattle Department of Planning and Development (DPD) for the 2428 NW Market Street building indicated the presence of a heating oil tank at the northwestern corner of the building. Golder also observed a vent pipe on the side of the building and a depression in the asphalt-paved surface in the area where the building plan showed the location of the tank.

2.0 SCOPE OF INVESTIGATION

Golder performed the Phase II ESA at the Subject Property in accordance with Golder's proposal (P03-93320) dated June 23, 2009 and Golder's Change Order #1 signed and dated on October 20, 2010 with some modifications to the proposed scope in response to the encountered field conditions and the client's requests for additional services.

The scope of work developed for the Phase II ESA was based on the preliminary findings obtained during the Phase I ESA. Preliminary findings of the Phase I ESA included:

- Historical records that indicated the potential for heating oil tanks associated with historic residences and commercial buildings (previously demolished) on the Subject Property.
- Seattle Fire Department (SFD) and Washington State Department of Ecology (Ecology) records that indicated a previous waste oil tank associated with the building at 2412 NE Market Street was removed in March 1995.
- SFD records indicated a previous heating oil tank associated with the building at 2412 NE Market Street was removed in March 1995.
- Four stormwater catch basins on the Jacobson property that could be point sources of release if used for dumping of waste fluids from prior business operations including marine engine service operations.
- Potential migration of petroleum-impacted groundwater to the Subject Property from the Market Street Spirit Service station on the adjoining property to the east.
- Potential migration of petroleum-impacted groundwater to the Subject Property from the former Unocal station location to the north of the Subject Property.

The scope of Golder's Phase II ESA investigation included the following:

- Geophysical investigation for buried metal objects.
- Drilling nine direct push borings (GP-1 to GP-9), collection of soil samples, and laboratory analysis.
- Drilling three hollow-stem auger (HSA) soil borings (B1, B2, and MW-J2 collection of soil samples, and laboratory analysis.
- Drilling three HSA soil borings (MW-J1, MW-J3, and MW-J4), the collection of soil samples, completion of the borings as monitoring wells for the collection of groundwater samples, and laboratory analysis.

The following sections describe the scope of the investigation in greater detail. The field investigation occurred September, October, and November of 2010. Figure 2 shows the soil boring and monitoring well locations. Appendix A includes the boring and well construction logs.

The scope of work discussed in this report was completed concurrently with a separate investigation on a different property. For this reason, the laboratory reports attached to this Phase II ESA report also present data from the other investigation. This additional data should be disregarded.

The analytical methods used on the soil and groundwater samples were targeted at the most likely contaminants that would be released at the site. These contaminants include gasoline fuel, the related aromatic volatile constituents of benzene, toluene, ethylbenzene and xylenes (BTEX); gasoline fuel additives of lead and methyl tert-butyl ether (MTBE); diesel fuel (including fuel oil); heavy oil (e.g. lube oil, waste oil, and hydraulic oil); and halogenated volatile organic compounds (e.g. chlorinated solvents).

2.1 Geophysical Investigation

Golder conducted a geophysical survey in the northwest and northeast portions of the Subject Property (Figures 3 and 4) on September 10, 2010. The objective of the geophysical survey was to locate subsurface objects, specifically potential USTs, identified in the Phase I ESA as possibly remaining on the Subject Property from former residences and commercial buildings. Below is a brief description of the geophysical methods used in our investigation.

2.1.1 EM-61 Time Domain Electromagnetic

The Geonics EM-61 is a portable instrument with a pair of 1.5 x 0.5 meter coils mounted to wheels in a horizontal configuration. The EM-61 measures subsurface electrical properties using the principle of electromagnetic induction. A primary electromagnetic field produced by the transmitter coil induces ground currents in the subsurface. These induced ground currents generate a secondary electromagnetic field or eddy currents. The eddy currents are measured by the receiver coil at fixed intervals after the primary field is turned off. Electromagnetic (EM) anomalies, caused by nearby metal objects, represent stronger and longer lasting eddy currents than those produced by normal soil. The EM-61 has an effective depth of penetration of approximately 10 feet.

2.1.2 Ground Penetrating Radar

Ground penetrating radar (GPR) consisting of a Geophysical Survey Systems, Inc SIR-2000 Radar unit using a 400 MHz antenna mounted on a cart was used to obtain subsurface data. The GPR system produces electromagnetic (radar) pulses that are directed into the ground from an antenna. Reflections from the subsurface features are produced where there is a contrast between electrical properties of subsurface materials and the surrounding soil. These properties are a function of water content, grain size, mineralogy, and electrical conductivity.

2.2 Direct-Push Probe Boring

Golder advanced nine direct-push probe borings (GP-1 to GP-9) at targeted locations across the Subject Property to evaluate the soil the locations of the former USTs and catch basins as described in Section 2.0. Golder collected and analyzed two soil samples from each of the direct-push borings. These samples were selected based on field screening methods that are described in the following sections. The soil samples were submitted to a laboratory and analyzed for the presence of gasoline-range petroleum hydrocarbons (TPH-G) and benzene, toluene, ethylbenzene and xylenes (BTEX); diesel and

heavy oil-range petroleum hydrocarbons (TPH-D) using Method NWTPH-Dx; and halogenated volatile organic compounds (HVOCs) by EPA Method 8260B.

2.3 Soil Borings

Golder drilled three soil borings using HSA drilling methods as follows:

- B-1: located in the northeast corner of the Subject Property.
- B-2: located in the northeast corner of the Subject Property about 40 feet west of B-1.
- MW-J2: located within the Maritime Marine Center building at 2412 NW Market Street. This boring was originally scheduled to be completed as a groundwater monitoring well but a boulder was encountered during drilling that limited the boring depth to about 7 feet below ground surface (bgs).

Selected soil samples collected from the soil borings were analyzed for the presence of TPH-G, BTEX and MTBE (MW-J2 only) using Method NWTPH-Gx/EPA Method 8021; TPH-D using Method NWTPH-Dx; HVOCs by EPA Method 8260B, and total lead (MW-J2 only) in soil using EPA Method 6010B.

During drilling, soil samples were collected at 2.5 or 5 foot depth intervals and field screened using a photoionization detector (PID). Samples were collected using a 1.5-foot split-spoon sampler driven into undisturbed soil with a 140-pound hammer. One soil sample was retained for laboratory analysis from each well boring.

The soil samples were classified in general accordance with Golder Technical Procedures and the unified soil classification system (USCS). Pertinent information was recorded on field boring logs, including soil sample depths, stratigraphy, groundwater occurrence (if any), and visual indications of petroleum hydrocarbons. Soil samples were field screened for indications of obvious odors, staining, off-color, and for organic vapors using an organic vapor monitor (OVM) equipped with a PID.

The sample containers were provided by the analytical laboratory, OnSite Environmental Inc. (OnSite) located in Redmond, Washington. All soil sample containers were labeled, placed into an ice chest, and maintained in a chilled state until relinquished to OnSite for laboratory analysis.

The drilling and sampling was performed in general accordance with Golder Technical Procedures and Guidelines. The soil cuttings and decontamination rinse water from drilling were placed in 55-gallon or 20-gallon Department of Transportation (DOT) approved drums and stored onsite until analytical testing was completed. Upon completion of drilling, borings were backfilled with bentonite chips then hydrated with clean water, in accordance with Ecology regulations.

The stratigraphic contacts shown on the boring logs (Appendix A) represent the approximate boundaries between soil types; actual transitions may be more gradual. The soil and groundwater conditions shown

are only for the specific dates and locations reported and, therefore, are not necessarily representative of other locations and times.

2.4 Monitoring Wells

Golder drilled three soil borings and completed them as groundwater monitoring wells. The wells are identified as MW-J1, MW-J3, and MW-J4. Figure 2 shows the well locations. An obstruction within the borehole prevented Boring MW-J2 from being completed as a groundwater monitoring well as originally planned.

The well locations were selected to address two of the RECs identified in the Phase I ESA. Monitoring wells MW-J1 and MW-J3 were installed near the southeastern property line which is shared with the Market Street Spirit Service station. These wells were installed to investigate if groundwater affected from a possible release at the Spirit service station could have migrated onto the Subject Property. Monitoring well MW-J4 was installed in the northeast corner of the Subject Property near the location of borings B1 and B2. This well was installed to investigate if the groundwater beneath the site had been affected from an off-site upgradient source.

Soil samples were collected, maintained, and submitted for analysis in a manner as described in Section 2.3. The soil cuttings, decontamination rinse water, and well purge water were placed in 55-gallon DOT approved drums and stored onsite until analytical testing was completed. Selected soil samples collected from the soil borings were analyzed for the presence of TPH-G, BTEX and MTBE using Method NWTPH-Gx/EPA Method 8021; TPH-D using Method NWTPH-Dx; HVOCs by EPA Method 8260B, and total lead in soil using EPA Method 6010B.

The monitoring wells were constructed using 2-inch diameter PVC casing, with 10-feet of 0.010-inch slotted screen at the bottom of the well. Clean silica sand was used for the filter pack around the screen and extended approximately two feet above the top of the screen. Bentonite chips were used to provide a seal above the filter pack. The monitoring wells were completed as flush-mounted monuments set in concrete extending approximately 2 feet bgs. Appendix A includes boring logs and well construction details.

The wells were developed by purging a sufficient volume of water until the purge water became relatively clear and free of suspended solids. Groundwater was sampled from the wells more than 48 hours after installation. Groundwater samples were collected using low flow techniques with either a bladder pump or peristaltic pump system. The groundwater samples were analyzed for the presence of TPH-G, BTEX and MTBE using Method NWTPH-Gx/EPA Method 8021; TPH-D using Method NWTPH-Dx; HVOCs by EPA Method 8260B, and dissolved lead using EPA Method 200.8.

3.0 SUBSURFACE CONDITIONS

3.1 Geologic Setting

The recent geologic history of the Puget Sound Lowland region has been dominated by several glacial episodes. The most recent, the Vashon Stade of the Fraser Glaciation (about 12,000 to 20,000 years ago), is responsible for most of the present day geologic and topographic conditions. As worldwide sea levels lowered and the Puget lobe of the Vashon Stade advanced southward from British Columbia into the Puget Sound Lowland, sediments composed of proglacial lacustrine silt and clay, advance outwash, lodgment till, and recessional outwash were deposited upon either bedrock or older Pre-Vashon sediments. The older Pre-Vashon deposits include predominantly glacial and nonglacial sediments deposited during repeated glacial and interglacial periods during the past 2 million years. As the Puget Lobe of the Vashon Stade glacier retreated northward, it deposited a discontinuous veneer of recessional outwash and local deposits of ablation till upon the glacial landscape. The sculpted landscape was characterized by elongated north-south oriented uplands, and intervening valleys. Post glacial deposits include: alluvium deposited within active stream channels, modern lacustrine deposits, organic silt and local peat deposits within kettle depressions, drainages, and outwash channels; and landslide deposits.

The *Geologic Map of Northwestern Seattle (Part of the Seattle North 7.5' by 15' Quadrangle, King County, Washington*, by Derek B. Booth, Kathy Geotz Troost, and Scott A. Shimel, 2005, published by the U.S. Geologic Survey was reviewed. The geologic map indicates that the site is underlain by Vashon till, described as compact diamict of silt, sand, and subrounded to well-rounded gravel, glacially transported and deposited under the ice.

3.2 Soils

Based on the explorations advanced on the project site, the subsurface conditions encountered during our site investigation indicate areas of fill underlain by dense to very dense Vashon till as described by Booth et al (2005). Underlying the Vashon till, we encountered material interpreted to be advance outwash. The units encountered are described in the following bullets; however, the boring logs in Appendix A should be reviewed for more detailed information.

- Fill: The fill unit refers to soils placed by human activity. Fill was encountered in all of our borings from the ground surface up to about 8 feet bgs. The fill consisted of asphalt, and very loose to compact, brown to dark brown to gray, silty fine to medium sand to sand with trace to little silt with some fine to coarse gravel.
- Vashon Till –The Vashon till is material deposited directly under the glacier and consists of a heterogeneous mixture of clay to boulder sized materials. This material was encountered underlying the fill. Borings B-1, B-2, and MW-J2 were terminated in Vashon till. The till consisted of dense to very dense, gray to olive gray, silt with some fine to medium sand to silty fine to coarse sand with some fine to coarse gravel.

- Advance Outwash - Advance outwash is a fluvial deposit laid down in front of an advancing glacier. Once deposited, the advance outwash was overridden by the glacial ice and consolidated. This material was encountered underlying the Vashon till in MW-J1, MW-J3, and MW-J4. The advance outwash encountered consisted of very dense, fine to medium sand with some silt, trace to little gravel, and lenses of silt and sand.

3.3 Groundwater

Groundwater was encountered in MW-J1, MW-J3, and MW-J4 approximately 20 to 37.5 feet bgs during drilling. The following table summarizes the approximate depth that groundwater was encountered at the time of drilling and as measured after well installation:

Table 3-1: Depths to Groundwater Encountered

Exploration Number	Depth to Groundwater During Drilling (ft bgs)	Depth to Groundwater Measured in October 2010 (ft btc)
MW-J1	34	12.45
MW-J3	20	17.21
MW-J4	37.5	17.35

Groundwater encountered during drilling is interpreted to be part of the regional groundwater table. This groundwater table encountered is interpreted to be a confined aquifer located in the advance outwash deposits bounded by the glacial till above. We returned to measure the groundwater levels in the monitoring wells in October 2010, as indicated in Table 3-1. The water levels taken were measured from the top of the well casing (btc), which is less than 0.5 feet below the ground surface. The well elevations at the ground surface and at the top of the well casing have not been surveyed.

4.0 FINDINGS

4.1 Geophysics Results

The results of the EM survey are shown on Figures 3 and 4. The investigation areas were limited to the colored areas shown on Figures 3 and 4. Figure 3 represents the EM response from the lower coil and is most sensitive to near-surface metal. Figure 4 represents the EM response from the top coil and anomalies in the dataset are typically from deeper metallic sources. While the EM geophysical survey did indicate several areas of metals (EM anomalies), the survey did not identify buried metal objects that resembled typical cylindrical-shaped underground storage tanks. The EM survey indicates one anomalous buried object in the northwestern portion of the property; located in the parking lot north of the former state liquor store/Archie Mcphee's building that has a potential EM response to indicate a tank. This area was further investigated using GPR. GPR scans of the area were completed on an east-west and north-south grid at an interval of approximately five feet. Upon review of the GPR response, the object was classified by the geophysicist as an approximate ten-foot by ten-foot metal object, six to twelve inches below the asphalt surface which presents a grid-like pattern indicating wire mesh or rebar. This pattern suggests a reinforced concrete slab exists at the EM anomaly but does not indicate the presence of an underground tank. No further information about this object was available using geophysical methods.

4.2 Analytical Results

Thirty soil samples were analyzed for the presence of:

- Gasoline-range petroleum hydrocarbons, BTEX by Method NWTPH-Gx/EPA Method 8021
- Diesel- and oil-range petroleum hydrocarbons by Method NWTPH-Dx
- Halogenated volatile organic compounds (HVOCs) by EPA Method 8260B

Eight soil samples were analyzed for the presence of:

- MTBE
- Total lead by EPA 6010B

Three groundwater samples were analyzed for the presence of:

- Gasoline-range petroleum hydrocarbons, BTEX and MTBE by Method NWTPH-Gx/EPA Method 8021
- Diesel- and oil-range petroleum hydrocarbons by Method NWTPH-Dx
- HVOCs by EPA Method 8260B
- Dissolved lead by EPA 200.8

The results of the soil samples analyzed are presented in Table 4-1. The results of the water samples analyzed are presented in Table 4-2. The analytical reports prepared by OnSite are included in Appendix B. As previously mentioned, the laboratory reports in Appendix B include some data that was collected as part as a separate investigation on a different property. This data should not be considered as part of this assessment. Monitoring wells for this investigation include a "J" in the well identification (e.g. MW-**J**2) and also in the sample numbers collected from those well locations.

4.2.1 Soil Analytical Results

Seven soil samples had detectable lube oil-range petroleum hydrocarbons in samples collected from borings B-1, GP-3, GP-4, GP-5, GP-6, GP-7, and GP-9 ranging from 72 to 310 milligrams per kilogram (mg/kg) (or parts per million (ppm)). The concentrations of the lube oil-range petroleum hydrocarbons are less than the MTCA Method A cleanup level of 2,000 mg/kg.

Two soil samples from MW-J2 had detectable tetrachloroethylene (PCE). The PCE concentrations were 0.0018 mg/kg (from 5 feet bgs) and 0.0074 mg/kg (from 2.5 feet bgs) which is less than the MTCA Method A cleanup level of 0.05 mg/kg. No PCE was detected in the deeper 7.5 foot bgs sample in MW-J2.

Three soil samples had detectable total lead. The concentrations of the lead ranged from 6.5 to 25 mg/kg which is less than the MTCA Method A cleanup level of 250 mg/kg and represents typical background lead concentration in soil.

No gasoline-range petroleum hydrocarbons, diesel -range petroleum hydrocarbons, or MTBE were detected above the practical quantitative limits (PQL) in any of the soil samples analyzed.

4.2.2 Groundwater Analytical Results

Benzene was detected in the groundwater sample collected from the monitoring well MW-J4, located near the northeastern corner of the Subject Property. The concentration of benzene was 27 micrograms per liter (µg/L), which exceeds the MTCA Method A cleanup level of 5 µg/L.

No gasoline-range petroleum hydrocarbons, diesel-range petroleum hydrocarbons, lube oil-range petroleum hydrocarbons, HVOCs, MTBE, or dissolved lead were detected above the PQLs in any of the groundwater samples analyzed.

5.0 CONCLUSIONS

Benzene was detected in the groundwater sample collected from monitoring well MW-J4, at a concentration of 27 µg/L. The benzene concentration exceeds the MTCA Method A cleanup level of 5 µg/L. MW-J4 was located at the northeastern corner of the Subject Property close to the northern property line along NW 56th Street. A possible source of benzene is a former Unocal (Union 76) station located on the block directly northeast of the Subject Property which is now developed as a condominium building. A review of Ecology files indicates that a plume of contaminated groundwater from the former Unocal site exists under 24th Avenue NW and extends into the intersection with NW 56th Street. The presence of benzene in groundwater from MW-J4 suggests that the contaminant plume may extend under the Subject Property.

Other compounds in soil and groundwater samples were either not detected or were detected at less than the respective MTCA Method A and B Cleanup Levels. These compounds include gasoline-range petroleum hydrocarbons, diesel and oil-range petroleum hydrocarbons, HVOCs, and lead (total lead in soil and dissolved lead in water).

The geophysical survey indicated several areas of metal anomalies. The survey did not identify buried metal objects that resembled typical cylindrical-shaped underground storage tanks. The survey indicated one anomalous buried object in the northwestern portion of the property; located in the parking lot north of the former state liquor store, Archie Mcphee's. The survey results suggested that the object was a reinforced concrete slab and did not indicate the presence of an underground tank.

6.0 CLOSING

This report is respectfully submitted to HAL Real Estate Investments Inc. If you have questions or require additional information, please us at (425) 883-0777.

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7.0 REFERENCES

Booth, Derek B., Kathy Geotz Troost, and Scott A. Shimel. 2005. *Geologic Map of Northwestern Seattle (Part of the Seattle North 7.5' by 15' Quadrangle, King County, Washington*, US Department of the Interior, US Geologic Survey. Scientific Investigations Map 2903.

TABLES

Table 4-1: Soil Analytical Results - Jacobsen Property (milligrams/kilogram or parts per million)

Boring	Sample Number	Depth	TPH-G	TPH-D	TPH-Oil	Benzene	Toluene	Ethylbenzene	Xylenes	HVOCs	MTBE	Lead
B1	B1-10	10	<5.3	<28	72	<0.020	<0.053	<0.053	<0.053	ND	--	--
B1	B1-30	30	<4.7	<27	<54	<0.020	<0.047	<0.047	<0.047	ND	--	--
B2	B2-11.5	11.5	<5.1	<28	<55	<0.020	<0.051	<0.051	<0.051	ND	--	--
B2	B2-30	30	<5.0	<28	<56	<0.020	<0.050	<0.050	<0.050	ND	--	--
GP1	GP1-3	3	<4.8	<29	<57	<0.020	<0.048	<0.048	<0.048	ND	--	--
GP1	GP1-7	7	<5.4	<29	<59	<0.020	<0.054	<0.054	<0.054	ND	--	--
GP2	GP2-2	2	<6.9	<31	<62	<0.020	<0.069	<0.069	<0.069	ND	--	--
GP2	GP2-10	10	<5.0	<27	<54	<0.020	<0.050	<0.050	<0.050	ND	--	--
GP3	GP3-2	2	<7.8	<39	140	<0.020	<0.078	<0.078	<0.078	ND	--	--
GP3	GP3-10	10	<4.9	<28	<56	<0.020	<0.049	<0.049	<0.049	ND	--	--
GP4	GP4-3	3	<6.3	71	230	<0.020	<0.063	<0.063	<0.063	ND	--	--
GP4	GP4-10	10	<4.9	<27	<55	<0.020	<0.049	<0.049	<0.049	ND	--	--
GP5	GP5-5	5	<7.4	<32	110	<0.020	<0.074	<0.074	<0.074	ND	--	--
GP5	GP5-10	10	<5.6	<28	<56	<0.020	<0.056	<0.056	<0.056	ND	--	--
GP6	GP6-2	2	<4.9	<28	<56	<0.020	<0.049	<0.049	<0.049	ND	--	--
GP6	GP6-6	6	<5.2	<37	310	<0.020	<0.052	<0.052	<0.052	ND	--	--
GP7	GP7-3	3	<4.6	<28	<56	<0.020	<0.046	<0.046	<0.046	ND	--	--
GP7	GP7-10	10	<4.9	<28	160	<0.020	<0.049	<0.049	<0.049	ND	--	--
GP8	GP8-3	3	<7.2	<30	<61	<0.020	<0.072	<0.072	<0.072	ND	--	--
GP8	GP8-10	10	<5.1	<27	<54	<0.020	<0.051	<0.051	<0.051	ND	--	--
GP9	GP9-2	2	<6.7	<43	200	<0.020	<0.067	<0.067	<0.067	ND	--	--
GP9	GP9-7	7	<6.2	<30	<60	<0.020	<0.062	<0.062	<0.062	ND	--	--
MWJ1	MWJ1-5	5	<4.6	<28	<56	<0.020	<0.046	<0.046	<0.046	ND	<0.046	7.8
MWJ1	MWJ1-12.5	12.5	<4.7	<29	<57	<0.020	<0.047	<0.047	<0.047	ND	<0.047	<5.7
MWJ1	MWJ1-25	25	<4.6	<29	<58	<0.020	<0.046	<0.046	<0.046	ND	<0.046	<5.8
MWJ2	MWJ2-2.5	2.5	<4.8	<30	<61	<0.020	<0.048	<0.048	<0.048	0.0074 Tetrachloroethene	<0.048	25
MWJ2	MWJ2-5	5	<6.0	<31	<62	<0.020	<0.060	<0.060	<0.060	0.0018 Tetrachloroethene	<0.060	6.5
MWJ2	MWJ2-7.5	7.5	<4.6	<27	<55	<0.020	<0.046	<0.046	<0.046	ND	<0.046	<5.5
MWJ3	MWJ3-5	5	<4.8	<29	<58	<0.020	<0.048	<0.048	<0.048	ND	<0.048	<5.8
MWJ3	MWJ3-15	15	<4.2	<28	<55	<0.020	<0.042	<0.042	<0.042	ND	<0.042	<5.5
MTCA Method A Cleanup Level			30	2,000	2,000	0.03	7	6	9	0.05 for Tetrachloroethylene	0.1	250

Notes:

Shaded area = result greater than Practical Quantitation Limit (PQL) but less than MTCA Method A Cleanup Level

ND: Non-detect

NA: Not applicable

Table 4-2: Groundwater Analytical Results - Jacobsen Property (micrograms/liter or parts per billion)

Boring	Sample Number	TPH-G	TPH-D	TPH-Oil	Benzene	Toluene	Ethylbenzene	Xylenes	HVOCs	MTBE	Lead
MWJ1	MWJ1-102110	<100	<0.26	<0.42	<1.0	<1.0	<1.0	<1.0	ND	<1.0	<1.0
MW-J3	MWJ3-102710	<100	<0.27	<0.43	<1.0	<1.0	<1.0	<1.0	ND	<1.0	<1.0
MW-J4	MWJ4-102710	<100	<0.26	<0.42	**27**	<1.0	<1.0	<1.0	ND	<1.0	<1.0
MTCA Method A Cleanup Level		800	500		5	1,000	700	1,000	--	20	15

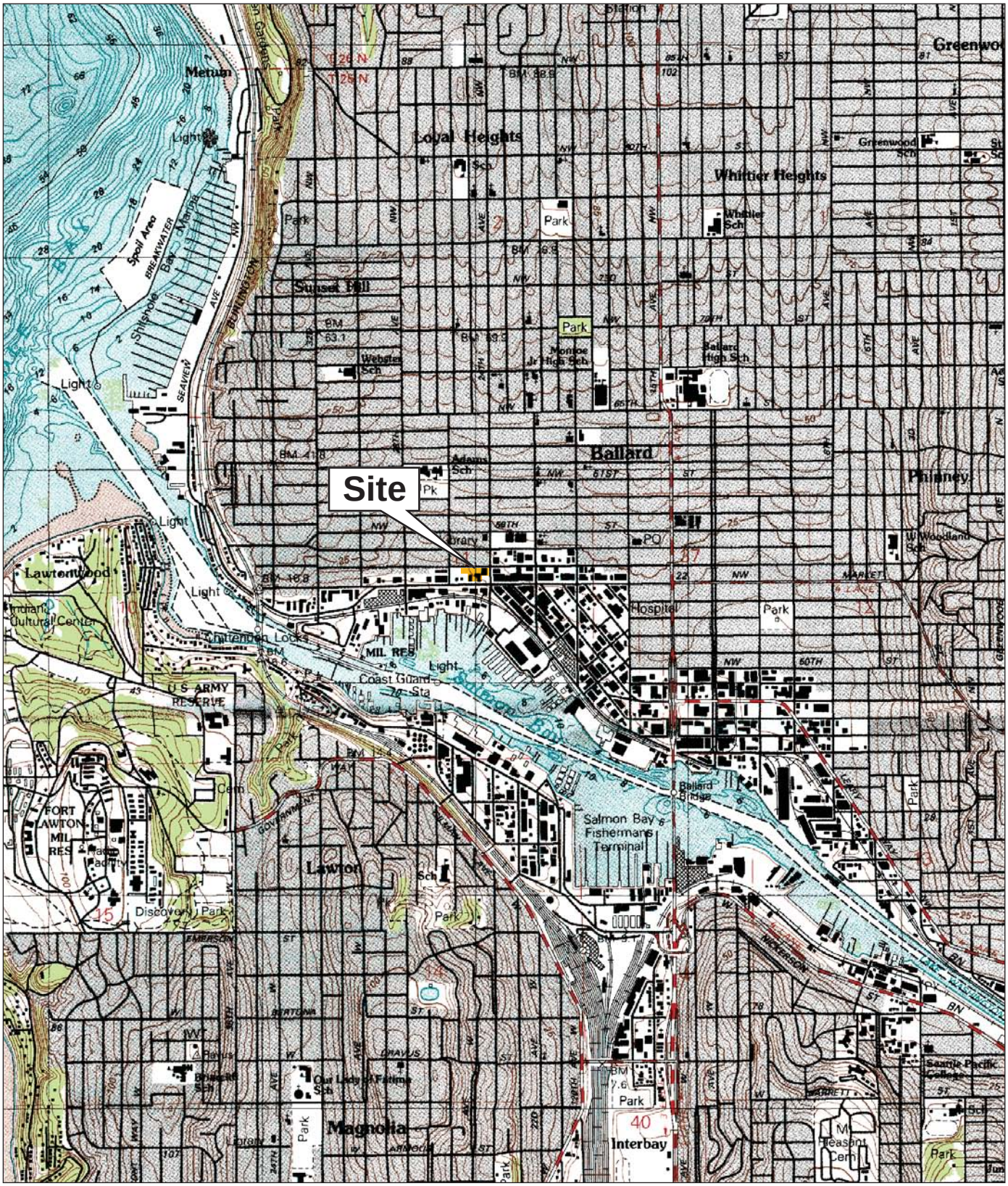
Notes:

Bold/Shaded area = result is greater than MTCA Method A Cleanup Level

ND: Non-detect

NA: Not applicable

FIGURES

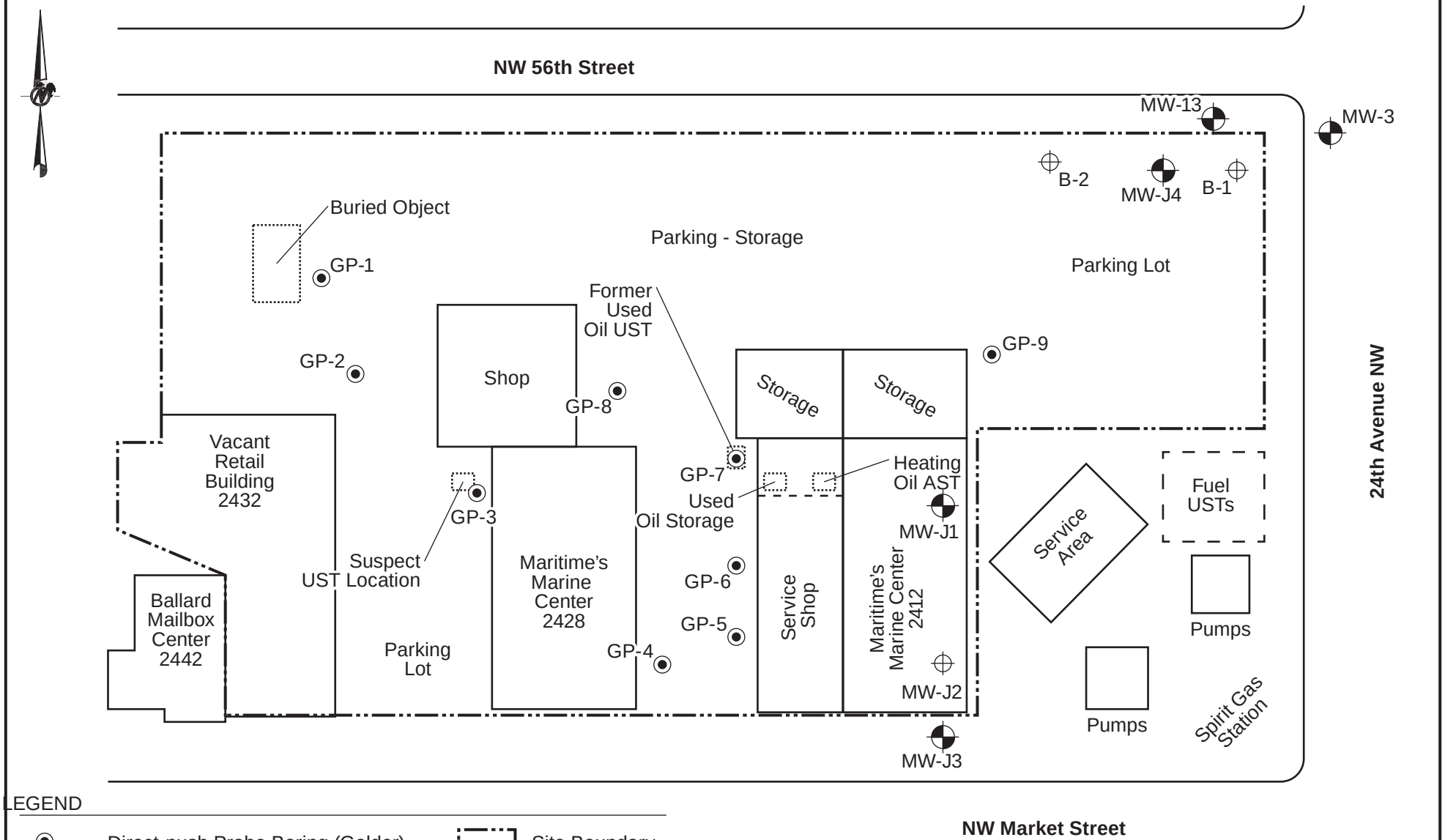


Source: USGS 7.5 Minute Topographic Quadrangle Map, Seattle North, WA, 1983

FIGURE **1**

SITE LOCATION MAP

HAL/BALLARD SITE PHI ESA/WA



LEGEND

- Direct-push Probe Boring (Golder)
- Hollow Stem Auger Boring (Golder)
- MW — Monitoring Well (by others)
- MW-J — Hollow Stem Auger Boring with Monitoring Well Installed (Golder)
- Site Boundary

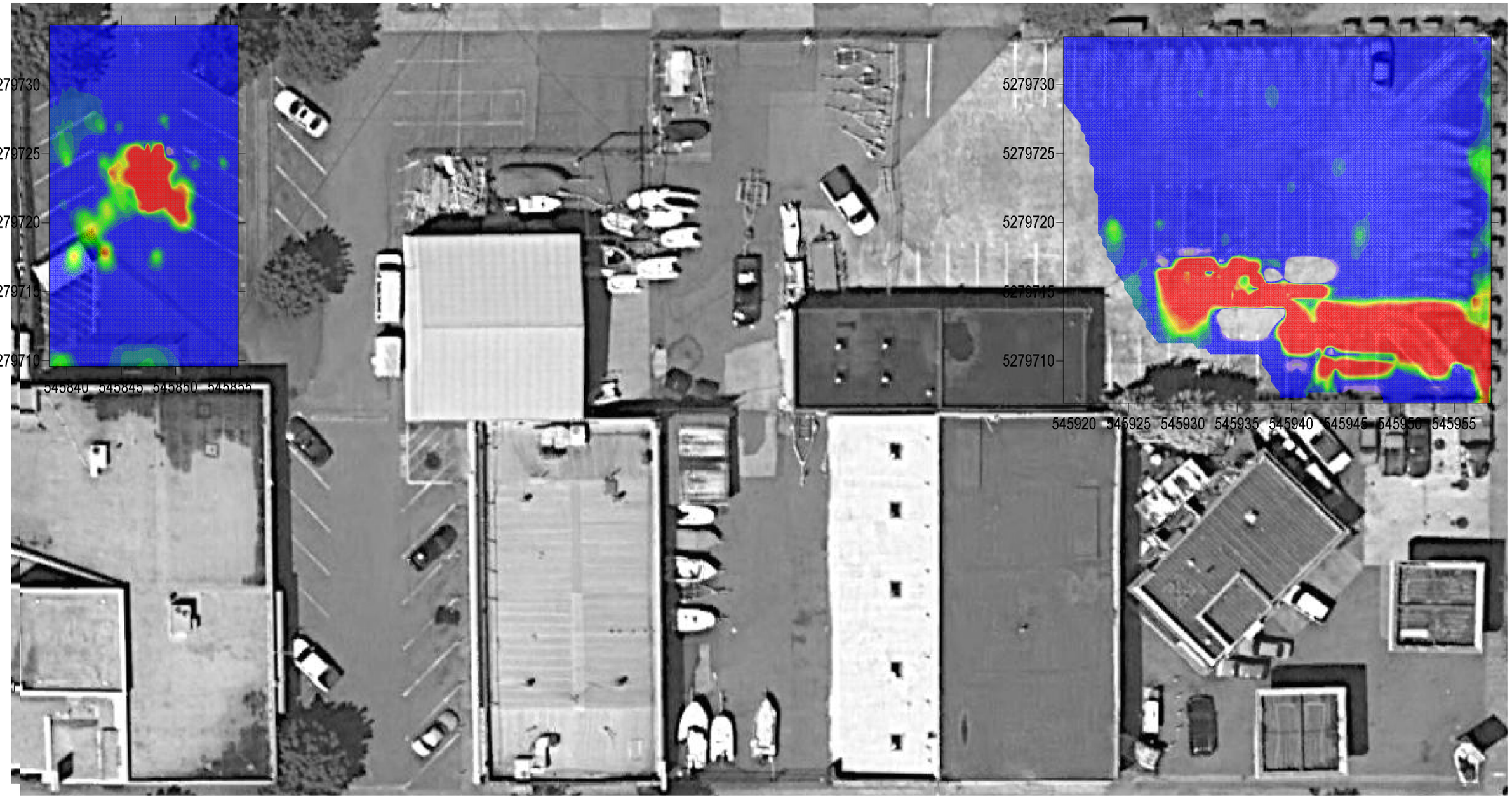
NOT TO SCALE

FIGURE **2**

SITE EXPLORATION PLAN

HAL/BALLARD SITE PHI ESA/WA

Golder Associates



No Metal **Near-Surface Metal**

EM61 Response (mV)

10 90 750 1050 1350 1650 1950 2250 2550 2850

Prepared for:	HAL Real Estate Investments	
Prepared by:	Golder Associates	Golder Associates, Inc. 18300 NE Union Hill Road, Suite 200 Redmond, WA 98052
103-93320 Fig 3_lower.srf		

Aerial Photo Source:
Google Earth Pro, 2010.

Scale and Location
are Approximate

Figure 3
Geonics EM61
Metal Detector
Lower Coil Response
(Shallow Response)

No Metal — **Near-Surface Metal**

EM61 Response (mV)

10 90 750 1050 1350 1650 1950 2250 2550 2850

Prepared for:	HAL Real Estate Investments	
Prepared by:	Golder Associates	Golder Associates, Inc. 18300 NE Union Hill Road, Suite 200 Redmond, WA 98052
103-93320 Fig 4_upper.srf		

Aerial Photo Source:
Google Earth Pro, 2010.

Scale and Location
are Approximate

Figure 4
Geonics EM61
Metal Detector
Upper Coil Response
(Deep Response)

APPENDIX A
SOIL CLASSIFICATION LEGEND
BORING LOGS

Unified Soil Classification System (USCS)

Criteria for Assigning Group Symbols and Names			Soil Classification Generalized Group Descriptions	
COARSE-GRAINED SOILS More than 50% retained on No. 200 sieve	GRAVELS More than 50% of coarse fraction retained on No. 4 Sieve	CLEAN GRAVELS Less than 5% fines	GW	Well-graded Gravels
			GP	Poorly-graded gravels
		GRAVELS WITH FINES More than 12% fines	GM	Gravel and Silt Mixtures
			GC	Gravel and Clay Mixtures
	SANDS 50% or more of coarse fraction passes No. 4 Sieve	CLEAN SANDS Less than 5% fines	SW	Well-graded Sands
			SP	Non-plastic and Low-Poorly-graded Sands
		SANDS WITH FINES More than 12% fines	SM	Sand and Silt Mixtures
			SC	Sand and Clay Mixtures
FINE-GRAINED SOILS 50% or more passes the No. 200 sieve	SILTS AND CLAYS Liquid limit less than 50	INORGANIC	CL	Low-plasticity Clays
			ML	Non-plastic and Low-Plasticity Silts
		ORGANIC	OL	Non-plastic and Low-Plasticity Organic Clays Non-plastic and Low-Plasticity Organic Silts
	SILTS AND CLAYS Liquid limit greater than 50	INORGANIC	CH	High-plasticity Clays
			MH	High-plasticity Silts
		ORGANIC	OH	High-plasticity Organic Clays High-plasticity Organic Silts
HIGHLY ORGANIC SOILS	Primarily organic matter, dark in color, and organic odor		PT	Peat

Based on: ASTM D2487-00

Component Definitions by Gradation

Component	Size Range
Boulders	Above 12 in.
Cobbles	3 in. to 12 in.
Gravel	3 in. to No. 4 (4.76mm)
Coarse gravel	3 in. to 3/4 in.
Fine gravel	3/4 in. to No. 4 (4.76mm)
Sand	No. 4 (4.76mm) to No. 200 (0.074mm)
Coarse sand	No. 4 (4.76mm) to No. 10 (2.0mm)
Medium sand	No. 10 (2.0mm) to No. 40 (0.42mm)
Fine sand	No. 40 (0.42mm) to No. 200 (0.074mm)
Silt and Clay	Smaller than No. 200 (0.074mm)

Sample Types

Symbol	Description
SS	SPT Sampler (2.0" OD)
HD	Heavy Duty Split Spoon
SH	Shelby Tube
CA	California Sampler
B	Bulk
C	Cored
G	Grab
P	Pitcher Sampler

Cohesionless Soils [a]		
Density	N, blows/ft.[c]	Relative Density (%)
Very loose	0 to 4	0 - 15
Loose	4 to 10	15 - 35
Compact	10 to 30	35 - 65
Dense	30 to 50	65 - 85
Very Dense	over 50	>85

Cohesive Soils[b]		
Consistency	N, blows/ft.[c]	Undrained Shear Strength (psf) [d]
Very soft	0 to 2	<250
Soft	2 to 4	250-500
Firm	4 to 8	500-1000
Stiff	8 to 15	1000-2000
Very Stiff	15 to 30	2000-4000
Hard	over 30	>4000

(a) Soils consisting of gravel, sand, and silt, either separately or in combination, possessing no characteristics of plasticity, and exhibiting drained behavior.
(b) Soils possessing the characteristics of plasticity, and exhibiting undrained behavior.
(c) Refer to text of ASTM D 1586-84 for a definition of N; in normally consolidated cohesionless soils. Relative Density terms are based on N values corrected for overburden pressures.
(d) Undrained shear strength = 1/2 unconfined compression strength.

Laboratory Tests

Test	Designation
Moisture	(1)
Density	D
Grain Size	G
Hydrometer	H
Atterberg Limits	(1)
Consolidation	C
Unconfined	U
UU Triax	UU
CU Triax	CU
CD Triax	CD
Permeability	P

(1) Moisture and Atterberg Limits plotted on log.

Silt and Clay Descriptions

Description	Typical Unified Designation
Silt	ML (non-plastic)
Clayey Silt	CL-ML (low plasticity)
Silty Clay	CL
Clay	CH
Plastic Silt	MH
Organic Soils	OL, OH, Pt

Qualitative Descriptive Terminology for Moisture Content

Dry	No discernible moisture present
Damp	Enough moisture present to darken the appearance but no moisture on materials adheres to the hand
Moist	Will moisten the hand
Wet	Visible water present on materials

Descriptive Terminology Denoting Component Proportions

Descriptive Terms	Range of Proportion
Trace	0-5%
Little	5-12%
Some or Adjective (a)	12-30%
And	30-50%

(a) Use Gravelly, Sandy or Silty as appropriate.

SOIL CLASSIFICATION LEGEND

Golder Associates

RECORD OF BOREHOLE B-1

SHEET 1 of 2

PROJECT: HAL/Ballard -Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA

DRILLING METHOD: Hollow Stem Auger
DRILLING DATE: 9/13/2010
DRILL RIG: EC-85 Trailer-Mount

DATUM: Geodetic
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION: 55
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) / WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS / GRAPHIC
0	4 1/4-inch inner diameter hollow stem auger w/ 3-inch split spoon w/ 140 lbs cathead hammer	0.0 - 1.0 Asphalt. (FILL)			54.0							Cold Patch Asphalt
		1.0 - 8.0 Loose, brown, fine SAND, with clay/silt layer at 6 feet, glass debris and brick pieces, no odor, no stain, damp. (SP) (FILL)	SP		1.0							
5						B1-5	HD	3-2-3	5	1.0 / 1.5	■	
					47.0							
		8.0 - 10.5 Very dense, brown, silty SAND, slight odor, no stain, damp. (SM) (VASHON TILL)	SM		8.0							
10					44.5							
		10.5 - 13.0 Very dense, gray, fine SAND, no odor, no stain, damp. (SP) (VASHON TILL) Insufficient quantity of brown, silty, sand to get 8 oz jar. Collected 4 VOA's and 1/2 jar (4 oz).	SP		10.5	B1-10	HD	39-39-37	>50	1.5 / 1.5	>>■	
					42.0							
		13.0 - 18.0 Very dense, gray, fine SAND, trace gravel, no odor, no stain, no sheen, damp. (SP) (VASHON TILL)	SP		13.0	3	HD	50/5"	>50	0.5 / 0.5	>>■	Bentonite Chips →
15					37.0							
		18.0 - 23.0 Very dense, gray, fine SAND, trace wood debris, trace gravel, no odor, no stain, no sheen, damp. (SP) (VASHON TILL)	SP		18.0							
20		Log continued on next page										

1 in to 3 ft
DRILLING CONTRACTOR: Boretec, Inc.
DRILLER: B. Sheldon

LOGGED: A. Cote
CHECKED: A. Dennison
DATE: 10/1/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.BALLARD.GPJ GLDR_WA.GDT 1/18/11

RECORD OF BOREHOLE B-1

SHEET 2 of 2

PROJECT: HAL/Ballard -Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA
DRILLING METHOD: Hollow Stem Auger
DRILLING DATE: 9/13/2010
DRILL RIG: EC-85 Trailer-Mount
DATUM: Geodetic
AZIMUTH: N/A
COORDINATES: not surveyed
ELEVATION: 55
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. DEPTH (ft)	SAMPLES: NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) / WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS / GRAPHIC
20	4 1/4-inch inner diameter hollow stem auger w/ 3-inch split spoon w/ 140 lbs cathead hammer	18.0 - 23.0 Very dense, gray, fine SAND, trace wood debris, trace gravel, no odor, no stain, no sheen, damp. (SP) (VASHON TILL) *(Continued)*	SP		32.0	4	HD	43-50/5"	>50	1.0 / 0.5	>>■	
25		23.0 - 28.0 Very dense, gray, sandy SILT, trace angular and rounded gravel, no odor, no stain, no sheen, dry to damp. (SM) (VASHON TILL)	ML		23.0 27.0	5	HD	41-50/6"	>50	1.0 / 1.0	>>■	
30		28.0 - 30.5 Very dense, gray, fine SAND, trace silt, trace fine rounded gravel, no odor, no stain, no sheen, wet. (SP) (ADVANCE OUTWASH)	SP		28.0 24.5	B1-30	HD	50/6"	>50	0.5 / 0.5	>>■	Groundwater seepage observed at 30 ft at time of drilling.
35		Boring completed at 30.5 ft.			30.5							
40												

1 in to 3 ft
DRILLING CONTRACTOR: Boretec, Inc.
DRILLER: B. Sheldon

LOGGED: A. Cote
CHECKED: A. Dennison
DATE: 10/1/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.BALLARD.GPJ GLDR_WA.GDT 1/18/11

RECORD OF BOREHOLE B-2

SHEET 1 of 2

PROJECT: HAL/Ballard -Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA
DRILLING METHOD: Hollow Stem Auger
DRILLING DATE: 9/13/2010
DRILL RIG: EC-85 Trailer-Mount
DATUM: Geodetic
AZIMUTH: N/A
COORDINATES: not surveyed
ELEVATION: 55
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) / WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS / GRAPHIC
0	4 1/4-inch inner diameter hollow stem auger w/ 3-inch split spoon w/ 140 lbs cathead hammer	0.0 - 1.0 Asphalt. (FILL)			54.0							Cold Patch Asphalt
		1.0 - 8.0 Compact, tan to gray, silty fine SAND, iron-oxide stained, no odor, no stain, damp. (SM) (FILL)	SM		1.0							
5						1	HD	5-7-16	23	1.5/1.5	■	
					47.0							
		8.0 - 13.0 Very dense, tan to gray, silty fine SAND, no odor, no stain, damp. (SM) (VASHON TILL)	SM		8.0							
10						B2-11.5	HD	20-21-50/5"	>50	1.5/1.5	>>■	
					42.0							
		13.0 - 18.0 Very dense, tan to gray, silty fine SAND, trace rounded fine gravel, iron-oxide stained, increasing silt content at 16 feet and changes to gray color, no odor, no stain, no sheen, dry. (SM) (VASHON TILL)	SM		13.0							
15						3	HD	26-50/5"	>50	1.0/1.0	>>■	Bentonite Chips →
					37.0							
		18.0 - 28.0 Very dense, tan to gray, silty fine SAND, iron-oxide stained, trace rounded gravel, no odor, no stain, no sheen, damp. (SM) (VASHON TILL)	SM		18.0							
20		Log continued on next page										

1 in to 3 ft
DRILLING CONTRACTOR: Boretec, Inc.
DRILLER: B. Sheldon

LOGGED: A. Cote
CHECKED: A. Dennison
DATE: 10/1/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.BALLARD.GPJ GLDR_WA.GDT 1/18/11

RECORD OF BOREHOLE B-2

SHEET 2 of 2

PROJECT: HAL/Ballard -Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA
DRILLING METHOD: Hollow Stem Auger
DRILLING DATE: 9/13/2010
DRILL RIG: EC-85 Trailer-Mount
DATUM: Geodetic
AZIMUTH: N/A
COORDINATES: not surveyed
ELEVATION: 55
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) / WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS / GRAPHIC
20	4 1/4-inch inner diameter hollow stem auger w/ 3-inch split spoon w/ 140 lbs cathead hammer	18.0 - 28.0 Very dense, tan to gray, silty fine SAND, iron-oxide stained, trace rounded gravel, no odor, no stain, no sheen, damp. (SM) (VASHON TILL) *(Continued)*	SM			4	HD	24-50/5"	>50	1.0 / 1.0	>>■	
25						5	HD	34-38-46	>50	1.5 / 1.5	>>■	
					27.0							
		28.0 - 31.0 Very dense, gray, fine SAND, some to little silt, trace rounded gravel, no odor, no stain, no sheen, damp. (SP-SM/SM) (ADVANCE OUTWASH)	SP-SM / SM		28.0							
30						B2-30	HD	-27-41	>50	1.0 / 1.0	>>■	▼
					24.0							
		Boring completed at 31.0 ft.			31.0							
35												
40												

Groundwater seepage observed at 30.5 ft at time of drilling.

1 in to 3 ft
DRILLING CONTRACTOR: Boretec, Inc.
DRILLER: B. Sheldon

LOGGED: A. Cote
CHECKED: A. Dennison
DATE: 10/1/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.BALLARD.GPJ GLDR_WA.GDT 1/18/11

RECORD OF BOREHOLE MW-J1

SHEET 1 of 2

PROJECT: HAL/Ballard-Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA

DRILLING METHOD: Hollow Stem Auger
DRILLING DATE: 10/17/2010
DRILL RIG: W136 CME, LA Track Rig

DATUM: MSL
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION:
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE DESCRIPTION	USCS	GRAPHIC LOG	ELEV. DEPTH (ft)	SAMPLES NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS GRAPHIC
0	14" Core HSA 3"DMSS Sampler with 140lb Wireline Hammer	0.0 - 0.3 Concrete Floor Slab			0.3							
		0.3 - 5.2 Dark gray to dark brown, black mottling, iron oxide stained, unstratified, SILT, trace to little fine sand, trace organic wood debris at 2.5 feet, trace fine gravel and trace brick debris at 5 feet, no odor, PID = 0.0, damp to moist with depth, (ML) (FILL)	ML			1	HD	3-8-16	24	1.0 / 1.5	■	Flush Mount Monument Sample MWJ1-2.5
5		5.2 - 13.5 Very dense, olive gray to olive brown to olive with depth, iron oxide staining observed to 8 feet, unstratified, silty, fine SAND, trace fine subangular gravel, no odor, PID = 0.0, moist, (SM) (VASHON TILL)	SM		5.2	2	HD	50/6	>50	0.5 / 0.5	>> ■	Sample MWJ1-5
						3	HD	50/6	>50	0.3 / 0.5	>> ■	Sample MWJ1-7.5
10						4	HD	50/6	>50	0.3 / 0.5	>> ■	Sample MWJ1-10
		Silt lenses up to 1/4-inch thick at 12.5 feet				5	HD	50/6	>50	0.5 / 0.5	>> ■	Bentonite Chip Backfill Sample MWJ1-12.5
		13.5 - 22.5 Very dense, olive, unstratified, SILT, some fine sand, trace fine subrounded gravel, no odor, PID = 0.0, (ML) (VASHON TILL)	ML		13.5							
15						6	HD	50/6	>50	0.1 / 0.5	>> ■	Sample MWJ1-15
20		Log continued on next page										

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, LP
DRILLER: Steve S.

LOGGED: T. Sager
CHECKED: A. Dennison
DATE: 10/25/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.JACOBSEN.GPJ GLDR_WA.GDT 26/10/10

RECORD OF BOREHOLE MW-J1

SHEET 2 of 2

PROJECT: HAL/Ballard-Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA

DRILLING METHOD: Hollow Stem Auger
DRILLING DATE: 10/17/2010
DRILL RIG: W136 CME, LA Track Rig

DATUM: MSL
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION:
INCLINATION: -90

DEPTH (ft)	BORING METHOD	DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) / WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS / GRAPHIC
20	HSA 3"DMSS Sampler with 140lb Wireline Hammer	13.5 - 22.5 Very dense, olive, unstratified, SILT, some fine sand, trace fine subrounded gravel, no odor, PID = 0.0, (ML) (VASHON TILL) *(Continued)*	ML			7	HD	50/6	>50	0.3 / 0.5	>>	Sample MWJ1-20
		22.5 - 35.5 Very dense, gray, unstratified, fine SAND, some to little silt with depth, mostly as lenses up to 1/4-inch thick, trace fine to coarse faceted gravel, no odor, PID = 0.0, (SM) (ADVANCE OUTWASH)	SM		22.5							Sample MWJ1-25
25						8	HD	50/6	>50	0.5 / 0.5	>>	
30						9	HD	50/6	>50	0.5 / 0.5	>>	Slotted PVC Screen Sample MWJ1-30
35						10	HD	50/6	>50	0.5 / 0.5	>>	Sample MWJ1-35 Slough
		Boring completed at 35.5 ft.			35.5							
40												

ATD Measured in Auger

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, LP
DRILLER: Steve S.

LOGGED: T. Sager
CHECKED: A. Dennison
DATE: 10/25/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.JACOBSEN.GPJ GLDR_WA.GDT 26/10/10

RECORD OF BOREHOLE MW-J2

SHEET 1 of 1

PROJECT: HAL/Ballard-Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA
DRILLING METHOD: Hollow Stem Auger
DRILLING DATE: 10/17/2010
DRILL RIG: W136 CME, LA Track Rig
DATUM: MSL
AZIMUTH: N/A
COORDINATES: not surveyed
ELEVATION:
INCLINATION: -90

DEPTH (ft)	BORING METHOD	DESCRIPTION	USCS	GRAPHIC LOG	ELEV. DEPTH (ft)	NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) / WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS / GRAPHIC
0	14" Core	0.0 - 0.3 Concrete Floor Slab			0.3							Quick Set Concrete Patch
	HSA 3"DMSS Sampler with 140lb Wireline Hammer	0.3 - 7.7 Olive brown to black, mottled, iron oxide stained, weakly stratified, SILT, some to little fine to coarse sand, little to trace fine to coarse gravel, trace organic debris, no odor, PID = 0.0, damp to moist, (ML) (FILL)	ML			1	HD	8-20-20	40	1.5 / 1.5	■	Sample MWJ2-2.5
5		Black orgainic lens from 5.3 to 5.5 feet				2	HD	10-11-13	24	1.5 / 1.5	■	Bentonite Chips Sample MWJ2-5
		7.7 - 8.0 Very dense, gray, unstratified, silty, fine SAND, little rock fragments at bottom of sample shoe, no odor, PID = 0.0, damp, (SM) (VASHON TILL) Refusal at 8 feet - Boring Terminated Boring completed at 8.0 ft.	SM		7.7 8.0	3	HD	50/6	>50	0.5 / 0.5	>>■	Sample MWJ2-7.5
10												
15												
20												

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, LP
DRILLER: Steve S.

LOGGED: T. Sager
CHECKED: A. Dennison
DATE: 10/25/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.JACOBSEN.GPJ GLDR_WA.GDT 26/10/10

RECORD OF BOREHOLE MW-J3

SHEET 1 of 2

PROJECT: HAL/Ballard-Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA

DRILLING METHOD: Hollow Stem Auger
DRILLING DATE: 10/22/2010
DRILL RIG: W136 CME, LA Track Rig

DATUM: MSL
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION:
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLES NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) / WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS GRAPHIC
0	14" Core	0.0 - 0.4 Concrete Pavement										
		0.4 - 4.5 Orange-brown, iron oxide stained with light black staining at 3 feet, crudely stratified, silty, fine SAND, and sandy, SILT interbeds of up to 3 inches thick, little fine to coarse subrounded gravel, trace orgainics, no odor, PID = 0.0, damp, (SM) (FILL)	SM		0.4							Flush Mount Monument
						1	HD	10-10-5	15	1.5 / 1.5	■	Sample MWJ3-2.5
		4.5 - 17.5 Compact to very dense, olive brown to olive, unstratified, SILT, some to trace fine to coarse sand, trace sub-rounded to sub-angular fine gravel, no odor, PID = 0.0, damp, (ML) (VASHON TILL) Trace black orgainc flakes observed from 5 feet to 6.5 feet			4.5							
5						2	HD	10-13-14	27	0.8 / 1.5	■	Sample MWJ3-5
						3	HD	50/6	>50	0.5 / 0.5	>>■	Sample MWJ3-7.5
10	HSA DMSS 140 lb Wireline Hammer		ML			4	HD	50/6	>50	0.2 / 0.5	>>■	Bentonite Chips Sample MWJ3-10
		Trace fine sand lenses up to 1/8-inch thick 12.5 feet to 13 feet				5	HD	50/5	>50	0.2 / 0.4	>>■	Sample MWJ3-12.5
15						6	HD	50/3	>50	0.2 / 0.2	>>■	Sample MWJ3-15
		17.5 - 30.5 Very dense, Olive gray to gray, unstratified, silty, fine SAND, trace sub-rounded to sub-angular fine to coarse gravel, no odor, PID = 0.0, moist to wet, (SM) (ADVANCE OUTWASH)	SM		17.5							Silica Sand Sample MWJ3-20
20		Log continued on next page										

Groundwater measured 18.6 ft bgs 3 hours after develoment.
Driller observed groundwater 20 ft bgs durning drilling.

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, LP
DRILLER: Steve S.

LOGGED: T. Sager
CHECKED: A. Dennison
DATE: 10/25/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.JACOBSEN.GPJ GLDR_WA.GDT 26/10/10

RECORD OF BOREHOLE MW-J3

SHEET 2 of 2

PROJECT: HAL/Ballard-Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA
DRILLING METHOD: Hollow Stem Auger
DRILLING DATE: 10/22/2010
DRILL RIG: W136 CME, LA Track Rig
DATUM: MSL
AZIMUTH: N/A
COORDINATES: not surveyed
ELEVATION:
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) / WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS / GRAPHIC
20	HSA DMSS 140 lb Wireline Hammer	17.5 - 30.5 Very dense, Olive gray to gray, unstratified, silty, fine SAND, trace sub-rounded to sub-angular fine to coarse gravel, no odor, PID = 0.0, moist to wet, (SM) (ADVANCE OUTWASH) *(Continued)*	SM			7	HD	50/4	>50	0.3 / 0.3	>>	
25						8	HD	50/6	>50	0.5 / 0.5	>>	Silica Sand - #10 Slotted PVC Screen Sample MWJ3-25
30						9	HD	50/6	>50	0.5 / 0.5	>>	Sample MWJ3-30 Slough
		Boring completed at 30.5 ft.			30.5							
35												
40												

Groundwater measured 21.3 ft bgs at the time of well installation.

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, LP
DRILLER: Steve S.

LOGGED: T. Sager
CHECKED: A. Dennison
DATE: 10/25/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.JACOBSEN.GPJ GLDR_WA.GDT 26/10/10

RECORD OF BOREHOLE MW-J4

SHEET 1 of 3

PROJECT: HAL/Ballard-Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA
DRILLING METHOD: Hollow Stem Auger
DRILLING DATE: 10/22/2010
DRILL RIG: W136 CME, LA Track Rig
DATUM: MSL
AZIMUTH: N/A
COORDINATES: not surveyed
ELEVATION:
INCLINATION: -90

DEPTH (ft)	BORING METHOD	DESCRIPTION	USCS	GRAPHIC LOG	ELEV. DEPTH (ft)	NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) / WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS GRAPHIC
0	Core	0.0 - 0.4 Concrete Pavement										
		0.4 - 5.3 Compact, dark brown to black, unstratified, SILT, some fine sand, trace fine gravel, no odor, damp, (ML) (FILL)	ML		0.4							Flush Mount Monument
5		5.3 - 27.5 Compact to very dense, olive brown to gray, iron oxide staining observed to 16 feet, usntratified, SILT, some to little fine sand, trace sub-rounded to rounded fine gravel, no odor, damp, (ML) (VASHON TILL) Trace organics at 5 to 6 feet			5.3	1	SS	4-7-11	18	0.7 / 1.5	■	Sample MWJ4-5
	HSA w/2" SS STP with 140 lb Auto-hammer	Till silty sand to sandy silt from 5.3 to 11.5 feet				2	SS	6-6-16	22	1.5 / 1.5	■	Sample MWJ4-10
10			ML									
15						3	SS	26-50/6	>50	0.9 / 1.0	>>■	Sample MWJ4-15
												Bentonite Chips
20		Log continued on next page										

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, LP
DRILLER: Steve S.

LOGGED: T. Sager
CHECKED: A. Dennison
DATE: 10/25/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.JACOBSEN.GPJ GLDR_WA.GDT 26/10/10

RECORD OF BOREHOLE MW-J4

PROJECT: HAL/Ballard-Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA
DRILLING METHOD: Hollow Stem Auger
DRILLING DATE: 10/22/2010
DRILL RIG: W136 CME, LA Track Rig
DATUM: MSL
AZIMUTH: N/A
COORDINATES: not surveyed
ELEVATION:
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft / WATER CONTENT (PERCENT)	NOTES WATER LEVELS GRAPHIC
20	HSA w/2" SS STP with 140 lb Auto-hammer	5.3 - 27.5 Compact to very dense, olive brown to gray, iron oxide staining observed to 16 feet, usntratified, SILT, some to little fine sand, trace sub-rounded to rounded fine gravel, no odor, damp, (ML) (VASHON TILL) *(Continued)* Silt and fine to medium sand interbeds observed 20 to 21 feet	ML			4	SS	17-28-50/3	>50	1.2 / 1.2	>>	Sample MWJ4-20
25						5	SS	29-15-50/6	>50	1.5 / 1.5	>>	Sample MWJ4-25
30		27.5 - 46.0 Very dense, gray, unstratified, fine to medium SAND, some silt, trace fine gravel to little fine to coarse rounded gravel at 45 feet, no odor, moist to wet below 37.5 feet, (SM) (ADVANCE OUTWASH)	SM		27.5	6	SS	30-50/5	>50	0.9 / 0.9	>>	Sample MWJ4-30
35						7	SS	30-50/6	>50	1.0 / 1.0	>>	Silica Sand Sample MWJ4-35
40		Log continued on next page										Silica Sand with #10 Water noted by driller at 37.5 feet

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, LP
DRILLER: Steve S.

LOGGED: T. Sager
CHECKED: A. Dennison
DATE: 10/25/2010

Golder Associates

RECORD OF BOREHOLE MW-J4

PROJECT: HAL/Ballard-Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA
DRILLING METHOD: Hollow Stem Auger
DRILLING DATE: 10/22/2010
DRILL RIG: W136 CME, LA Track Rig
DATUM: MSL
AZIMUTH: N/A
COORDINATES: not surveyed
ELEVATION:
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) / WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS / GRAPHIC
40	HSA w/2" SS STP with 140 lb Auto-hammer	27.5 - 46.0 Very dense, gray, unstratified, fine to medium SAND, some silt, trace fine gravel to little fine to coarse rounded gravel at 45 feet, no odor, moist to wet below 37.5 feet, (SM) (ADVANCE OUTWASH) *(Continued)*	SM			8	SS	9-9-50/4	>50	1.3 / 1.3	>>■	Slotted PVC Screen Sample MWJ4-40
45						9	SS	10-50/6	>50	0.8 / 1.0	>>■	Sample MWJ4-45 Slough ▶
		Boring completed at 46.0 ft.			46.0							
50												
55												
60												

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, LP
DRILLER: Steve S.

LOGGED: T. Sager
CHECKED: A. Dennison
DATE: 10/25/2010

Golder Associates

RECORD OF BOREHOLE GP-1

SHEET 1 of 1

PROJECT: HAL/Ballard -Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA

DRILLING METHOD: Direct Push
DRILLING DATE: 9/10/2010
DRILL RIG: Geoprobe

DATUM: Geodetic
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION: 46
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft / WATER CONTENT (PERCENT)	NOTES WATER LEVELS / GRAPHIC
0	Direct Push	0.0 - 0.5 ASPHALT and FILL			45.5							Cold Patch Asphalt
		0.5 - 2.0 Tan, fine SAND, minor mottled iron-oxide staining, no odor, no stain, moist. (SP)	SP		0.5 44.0							
		2.0 - 5.0 Density increasing with depth, gray, fine SAND, no odor, no stain, damp. (SP)	SP		2.0 41.0	GP1-3	GRAB			5.0 5.0		
5		5.0 - 6.5 NO RECOVERY			5.0 39.5							Bentonite Chips
		6.5 - 10.0 Dense, gray, fine SAND, trace rounded gravel, no odor, no stain, damp, moist from 7 feet to 8 feet. (SP)	SP		6.5	GP1-7	GRAB			3.5 5.0		
10		Refusal at 10 feet.			36.0							
		Boring completed at 10.0 ft.			10.0							
15												
20												

PENETRATION RESISTANCE BLOWS / ft ■: 10 20 30 40
WATER CONTENT (PERCENT): W_p W W_l — 20 40 60 80

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, L.P.
DRILLER: Jim

LOGGED: A. Cote
CHECKED: A. Dennison
DATE: 10/1/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.BALLARD.GPJ GLDR_WA.GDT 1/18/11

RECORD OF BOREHOLE GP-2

SHEET 1 of 1

PROJECT: HAL/Ballard -Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA

DRILLING METHOD: Direct Push
DRILLING DATE: 9/10/2010
DRILL RIG: Geoprobe

DATUM: Geodetic
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION: 44
INCLINATION: -90

DEPTH (ft)	BORING METHOD	DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT
0	Direct Push	0.0 - 1.0 ASPHALT and FILL			43.0					
		1.0 - 2.5 Brown, silty, fine SAND, mottled iron-oxide staining, no odor, no stain, wet. (SM)	SM		1.0 41.5	GP2-2	GRAB			5.0 5.0
		2.5 - 5.0 Dense, gray, fine SAND, some silt, no odor, no stain, damp. (SM)	SM		2.5 39.0					
5		5.0 - 6.5 Gray to tan, silty fine SAND, trace gravel, no odor, no stain, moist. (SM)	SM		5.0 37.5					
		6.5 - 10.0 Dense, gray, fine SAND, no odor, no stain, damp. (SP)	SP		6.5 34.0	GP2-10	GRAB			5.0 5.0
10		Boring completed at 10.0 ft.			10.0					
15										
20										

PENETRATION RESISTANCE BLOWS / ft ■
10 20 30 40

WATER CONTENT (PERCENT)
W_p W W_l
20 40 60 80

NOTES WATER LEVELS

GRAPHIC

Cold Patch Asphalt

Bentonite Chips

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, L.P.
DRILLER: Jim

LOGGED: A. Cote
CHECKED: A. Dennison
DATE: 10/1/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.BALLARD.GPJ GLDR_WA.GDT 1/18/11

RECORD OF BOREHOLE GP-3

SHEET 1 of 1

PROJECT: HAL/Ballard -Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA

DRILLING METHOD: Direct Push
DRILLING DATE: 9/10/2010
DRILL RIG: Geoprobe

DATUM: Geodetic
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION: 44
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLES NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft / WATER CONTENT (PERCENT)	NOTES WATER LEVELS GRAPHIC
0	Direct Push	0.0 - 2.0 ASPHALT and FILL			42.0							Cold Patch Asphalt
		2.0 - 3.0 Brown to tan, silty fine SAND, no odor, no stain, wet. (SM)	SM		2.0 41.0	GP3-2	GRAB			5.0/5.0		
		3.0 - 5.0 Dense, gray, fine SAND, no odor, no stain, damp. (SP)	SP		3.0 39.0							
5		5.0 - 10.0 Dense, gray, fine SAND, trace gravel, no odor, no stain, damp. (SP)	SP		5.0					5.0/5.0		Bentonite Chips
10		Boring completed at 10.0 ft.			34.0 10.0	GP3-10	GRAB					
15												
20												

PENETRATION RESISTANCE BLOWS / ft: 10 20 30 40
WATER CONTENT (PERCENT): W_p W W_l 20 40 60 80

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, L.P.
DRILLER: Jim

LOGGED: A. Cote
CHECKED: A. Dennison
DATE: 10/1/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.BALLARD.GPJ GLDR_WA.GDT 1/18/11

RECORD OF BOREHOLE GP-4

SHEET 1 of 1

PROJECT: HAL/Ballard -Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA

DRILLING METHOD: Direct Push
DRILLING DATE: 9/10/2010
DRILL RIG: Geoprobe

DATUM: Geodetic
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION: 44
INCLINATION: -90

DEPTH (ft)	BORING METHOD	DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT
0	Direct Push	0.0 - 1.0 ASPHALT and FILL			43.0					
		1.0 - 4.0 Gray to tan, fine SAND, trace silt, trace organics from 4 feet to 5 feet, no odor, no stain, damp. (SP)	SP		1.0					5.0/5.0
		Slightly darker at 3 feet.			40.0	GP4-4	GRAB			
		4.0 - 10.0 Tan to gray, fine SAND, iron-oxide staining at 7 feet, no odor, no stain, moist. (SP)			4.0					
5		Density increases with depth.	SP							5.0/5.0
					34.0	GP4-10	GRAB			
10		Boring completed at 10.0 ft.			10.0					
15										
20										

PENETRATION RESISTANCE BLOWS / ft ■
10 20 30 40

WATER CONTENT (PERCENT)
W_p W W_l
20 40 60 80

NOTES WATER LEVELS

GRAPHIC

Cold Patch Asphalt

Bentonite Chips

1 in to 3 ft

DRILLING CONTRACTOR: Cascade Drilling, L.P.
DRILLER: Jim

LOGGED: A. Cote
CHECKED: A. Dennison
DATE: 10/1/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.BALLARD.GPJ GLDR_WA.GDT 1/18/11

RECORD OF BOREHOLE GP-5

SHEET 1 of 1

PROJECT: HAL/Ballard -Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA

DRILLING METHOD: Direct Push
DRILLING DATE: 9/10/2010
DRILL RIG: Geoprobe

DATUM: Geodetic
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION: 45
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) / WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS GRAPHIC
0	Direct Push	0.0 - 1.0 ASPHALT and FILL			44.0							Cold Patch Asphalt
		1.0 - 4.0 Gray to tan, fine SAND, some rounded gravel, minor iron-oxide staining, no odor, no stain. (SP)	SP		1.0 41.0					5.0/5.0		
		4.0 - 5.0 Gray to tan, fine SAND, some rounded gravel, some dark brown organics, minor iron-oxide staining, no odor, no stain. (SP)	SP		4.0 40.0	GP5-4	GRAB					
5		5.0 - 10.0 Dense, gray to tan, fine SAND, some rounded to subangular gravel, iron-oxide stained, no odor, no stain, damp. (SP)	SP		5.0					5.0/5.0		Bentonite Chips
10		Boring completed at 10.0 ft.			35.0 10.0	GP5-10	GRAB					
15												
20												

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, L.P.
DRILLER: Jim

LOGGED: A. Cote
CHECKED: A. Dennison
DATE: 10/1/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.BALLARD.GPJ GLDR_WA.GDT 1/18/11

RECORD OF BOREHOLE GP-6

SHEET 1 of 1

PROJECT: HAL/Ballard -Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA

DRILLING METHOD: Direct Push
DRILLING DATE: 9/10/2010
DRILL RIG: Geoprobe

DATUM: Geodetic
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION: 45
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) / WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS / GRAPHIC
0		0.0 - 1.0 ASPHALT and FILL			44.0							Cold Patch Asphalt
		1.0 - 3.0 Gray, fine to medium SAND, trace rounded gravel, trace silt from 2.5 feet to 3 feet, no odor, no stain, damp. (SP)	SP		1.0 42.0	GP6-2	GRAB			5.0 5.0		
		3.0 - 6.0 Gray, silty SAND, dark brown wood debris, no odor, no stain, moist. (SM)	SM		3.0 39.0							
5												Bentonite Chips
		6.0 - 10.0 Dense, gray, fine SAND, some silty-clay, iron-oxide staining, no odor, no stain, damp. (SM)	SM		6.0 35.0	GP6-6	GRAB			5.0 5.0		
10		Boring completed at 10.0 ft.			10.0							
15												
20												

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, L.P.
DRILLER: Jim

LOGGED: A. Cote
CHECKED: A. Dennison
DATE: 10/1/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.BALLARD.GPJ GLDR_WA.GDT 1/18/11

RECORD OF BOREHOLE GP-7

SHEET 1 of 1

PROJECT: HAL/Ballard -Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA

DRILLING METHOD: Direct Push
DRILLING DATE: 9/10/2010
DRILL RIG: Geoprobe

DATUM: Geodetic
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION: 46
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. DEPTH (ft)	SAMPLES: NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS GRAPHIC
0	Direct Push	0.0 - 1.0 ASPHALT and FILL			45.0							Cold Patch Asphalt
		1.0 - 5.0 Gray to tan, fine SAND, trace rounded gravel, iron-oxide stained, no odor, no stain, damp. (SP)	SP		1.0	GP7-2.5	GRAB			5.0/5.0		
5		5.0 - 10.0 Dense, gray, fine SAND, trace gravel, no odor, no stain, damp. (SP)	SP		41.0 5.0					5.0/5.0		Bentonite Chips
10		Boring completed at 10.0 ft.			36.0 10.0	GP7-10	GRAB					
15												
20												

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, L.P.
DRILLER: Jim

LOGGED: A. Cote
CHECKED: A. Dennison
DATE: 10/1/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.BALLARD.GPJ GLDR_WA.GDT 1/18/11

RECORD OF BOREHOLE GP-8

SHEET 1 of 1

PROJECT: HAL/Ballard -Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA

DRILLING METHOD: Direct Push
DRILLING DATE: 9/10/2010
DRILL RIG: Geoprobe

DATUM: Geodetic
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION: 46
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLES NUMBER	SAMPLES TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) / WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS / GRAPHIC
0		0.0 - 1.0 ASPHALT and FILL			45.0							Cold Patch Asphalt
		1.0 - 2.0 Gray to dark brown, fine SAND, some silt, no odor, no stain, damp. (SM)	SM		1.0 44.0							
		2.0 - 3.0 Tan, sandy SILT, little organics as 1-inch thick dark brown layer at 2 feet, iron-oxide stained, no odor, no stain, damp. (ML)	ML		2.0 43.0					5.0/5.0		
		3.0 - 5.0 Gray, fine SAND, iron-oxide stained, trace rounded gravel, no odor, no stain, damp. (SP)	SP		3.0 41.0	GP8-3	GRAB					
5		5.0 - 6.5 Tan, silty SAND, iron-oxide stained, trace gravel, no odor, no stain. (SM)	SP		5.0 39.5							Bentonite Chips
		6.5 - 10.0 Dense, gray, fine SAND, no odor, no stain. (SP)	SP		6.5 36.0	GP8-10	GRAB			5.0/5.0		
10		Boring completed at 10.0 ft.			10.0							
15												
20												

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, L.P.
DRILLER: Jim

LOGGED: A. Cote
CHECKED: A. Dennison
DATE: 10/1/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.BALLARD.GPJ GLDR_WA.GDT 1/18/11

RECORD OF BOREHOLE GP-9

SHEET 1 of 1

PROJECT: HAL/Ballard -Phase II ESA/WA
PROJECT NUMBER: 103-93320-10.02
LOCATION: Ballard, Seattle, WA

DRILLING METHOD: Direct Push
DRILLING DATE: 9/10/2010
DRILL RIG: Geoprobe

DATUM: Geodetic
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION: 51
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	BLOWS per 6 in (140 lb hammer 30 inch drop)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) / WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS / GRAPHIC
0		0.0 - 0.3 CONCRETE SLAB			50.7 0.3							Cold Patch Asphalt
		0.3 - 4.0 Dark greenish gray, silty fine SAND, trace rounded fine gravel, trace wood debris at 3 feet, organic odor, no stain, moist. (SM)	SM							5.0 5.0		
		4.0 - 5.0 Gray, silty fine SAND, no odor, no stain, moist. (SM)	SM		47.0 4.0 46.0							
5		5.0 - 6.5 Dark gray, sandy SILT, trace rounded gravel, no odor, no stain, wet. (ML)	ML		5.0 44.5							Bentonite Chips
		6.5 - 10.0 Gray, fine SAND, trace rounded fine gravel, no odor, no stain, damp. (SP)	SP		6.5 41.0	GP9-6.5				5.0 5.0		
10		Boring completed at 10.0 ft.			10.0							
15												
20												

1 in to 3 ft
DRILLING CONTRACTOR: Cascade Drilling, L.P.
DRILLER: Jim

LOGGED: A. Cote
CHECKED: A. Dennison
DATE: 10/1/2010

Golder Associates

BOREHOLE RECORD 103-9332010.02.BALLARD.GPJ GLDR_WA.GDT 1/18/11

APPENDIX B
ANALYTICAL TESTING RESULTS

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

September 23, 2010

Chris King
Golder Associates Inc.
18300 NE Union Hill Road
Suite 200
Redmond, WA 98052-3333

Re: Analytical Data for Project 103-93320
Laboratory Reference No. 1009-121

Dear Chris:

Enclosed are the analytical results and associated quality control data for samples submitted on September 15, 2010.

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,

David Baumeister
Project Manager

Enclosures

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

Case Narrative

Samples were collected on September 13 and 14, 2010 and received by the laboratory on September 15, 2010. 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.

NWTPH Gx/BTEX (soils) 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 (waters) EPA 8260B Analysis

Some MTCA Method A cleanup levels are non-achievable for samples MW3 and MW5 due to the necessary dilution of the samples.

Halogenated Volatiles (soils) 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.

Some MTCA Method A cleanup levels are non-achievable for samples B3-7.5, B3-16.5, B5-5 and B5-10 due to the necessary dilution of the samples.

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 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Gx/BTEX

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW3**					
Laboratory ID:	09-121-01					
Benzene	**66**	10	EPA 8021	9-16-10	9-16-10	
Toluene	**ND**	50	EPA 8021	9-16-10	9-16-10	U1
Ethyl Benzene	**48**	10	EPA 8021	9-16-10	9-16-10	
m,p-Xylene	**91**	10	EPA 8021	9-16-10	9-16-10	
o-Xylene	**22**	10	EPA 8021	9-16-10	9-16-10	
Gasoline	**1400**	1000	NWTPH-Gx	9-16-10	9-16-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*90*	*74-121*				
Client ID:	**MW4**					
Laboratory ID:	09-121-02					
Benzene	**ND**	1.0	EPA 8021	9-16-10	9-16-10	
Toluene	**ND**	1.0	EPA 8021	9-16-10	9-16-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	9-16-10	9-16-10	
m,p-Xylene	**1.3**	1.0	EPA 8021	9-16-10	9-16-10	
o-Xylene	**ND**	1.0	EPA 8021	9-16-10	9-16-10	
Gasoline	**290**	100	NWTPH-Gx	9-16-10	9-16-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*89*	*74-121*				
Client ID:	**MW5**					
Laboratory ID:	09-121-03					
Benzene	**ND**	4.0	EPA 8021	9-16-10	9-16-10	
Toluene	**15**	4.0	EPA 8021	9-16-10	9-16-10	
Ethyl Benzene	**15**	4.0	EPA 8021	9-16-10	9-16-10	
m,p-Xylene	**25**	4.0	EPA 8021	9-16-10	9-16-10	
o-Xylene	**15**	4.0	EPA 8021	9-16-10	9-16-10	
Gasoline	**920**	400	NWTPH-Gx	9-16-10	9-16-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*89*	*74-121*				

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Gx/BTEX

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW6**					
Laboratory ID:	09-121-04					
Benzene	**ND**	1.0	EPA 8021	9-16-10	9-16-10	
Toluene	**ND**	1.0	EPA 8021	9-16-10	9-16-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	9-16-10	9-16-10	
m,p-Xylene	**ND**	1.0	EPA 8021	9-16-10	9-16-10	
o-Xylene	**ND**	1.0	EPA 8021	9-16-10	9-16-10	
Gasoline	**ND**	100	NWTPH-Gx	9-16-10	9-16-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*74-121*				

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Gx/BTEX
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0916W2					
Benzene	**ND**	1.0	EPA 8021	9-16-10	9-16-10	
Toluene	**ND**	1.0	EPA 8021	9-16-10	9-16-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	9-16-10	9-16-10	
m,p-Xylene	**ND**	1.0	EPA 8021	9-16-10	9-16-10	
o-Xylene	**ND**	1.0	EPA 8021	9-16-10	9-16-10	
Gasoline	**ND**	100	NWTPH-Gx	9-16-10	9-16-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*89*	*74-121*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-145-01										
	ORIG	DUP									
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**1.21**	**1.10**	NA	NA		NA		NA	10	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**2.68**	**2.50**	NA	NA		NA		NA	7	30	
o-Xylene	**1.16**	**1.08**	NA	NA		NA		NA	7	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*90*	*90*	*74-121*			
MATRIX SPIKES											
Laboratory ID:	09-129-01										
	MS	MSD	MS	MSD		MS	MSD				
Benzene	**49.7**	**51.4**	50.0	50.0	ND	**99**	**103**	78-118	3	8	
Toluene	**48.5**	**50.5**	50.0	50.0	ND	**97**	**101**	81-119	4	8	
Ethyl Benzene	**49.8**	**52.1**	50.0	50.0	ND	**100**	**104**	81-121	5	8	
m,p-Xylene	**49.9**	**52.7**	50.0	50.0	ND	**100**	**105**	79-123	5	8	
o-Xylene	**50.3**	**53.2**	50.0	50.0	ND	**101**	**106**	79-121	6	8	
Surrogate:											
Fluorobenzene						*91*	*89*	*74-121*			

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP10-9**					
Laboratory ID:	09-121-05					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-21-10	
Toluene	**ND**	0.045	EPA 8021	9-21-10	9-21-10	
Ethyl Benzene	**ND**	0.045	EPA 8021	9-21-10	9-21-10	
m,p-Xylene	**ND**	0.045	EPA 8021	9-21-10	9-21-10	
o-Xylene	**ND**	0.045	EPA 8021	9-21-10	9-21-10	
Gasoline	**ND**	4.5	NWTPH-Gx	9-21-10	9-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*98*	*55-127*				
Client ID:	**GP10-11**					
Laboratory ID:	09-121-06					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-22-10	
Toluene	**ND**	0.043	EPA 8021	9-21-10	9-22-10	
Ethyl Benzene	**ND**	0.043	EPA 8021	9-21-10	9-22-10	
m,p-Xylene	**ND**	0.043	EPA 8021	9-21-10	9-22-10	
o-Xylene	**ND**	0.043	EPA 8021	9-21-10	9-22-10	
Gasoline	**ND**	4.3	NWTPH-Gx	9-21-10	9-22-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*97*	*55-127*				
Client ID:	**B1-10**					
Laboratory ID:	09-121-08					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-21-10	
Toluene	**ND**	0.053	EPA 8021	9-21-10	9-21-10	
Ethyl Benzene	**ND**	0.053	EPA 8021	9-21-10	9-21-10	
m,p-Xylene	**ND**	0.053	EPA 8021	9-21-10	9-21-10	
o-Xylene	**ND**	0.053	EPA 8021	9-21-10	9-21-10	
Gasoline	**ND**	5.3	NWTPH-Gx	9-21-10	9-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*95*	*55-127*				

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B1-30**					
Laboratory ID:	09-121-09					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-21-10	
Toluene	**ND**	0.047	EPA 8021	9-21-10	9-21-10	
Ethyl Benzene	**ND**	0.047	EPA 8021	9-21-10	9-21-10	
m,p-Xylene	**ND**	0.047	EPA 8021	9-21-10	9-21-10	
o-Xylene	**ND**	0.047	EPA 8021	9-21-10	9-21-10	
Gasoline	**ND**	4.7	NWTPH-Gx	9-21-10	9-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*55-127*				
Client ID:	**B2-11.5**					
Laboratory ID:	09-121-10					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-21-10	
Toluene	**ND**	0.051	EPA 8021	9-21-10	9-21-10	
Ethyl Benzene	**ND**	0.051	EPA 8021	9-21-10	9-21-10	
m,p-Xylene	**ND**	0.051	EPA 8021	9-21-10	9-21-10	
o-Xylene	**ND**	0.051	EPA 8021	9-21-10	9-21-10	
Gasoline	**ND**	5.1	NWTPH-Gx	9-21-10	9-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*99*	*55-127*				
Client ID:	**B2-30**					
Laboratory ID:	09-121-11					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-21-10	
Toluene	**ND**	0.050	EPA 8021	9-21-10	9-21-10	
Ethyl Benzene	**ND**	0.050	EPA 8021	9-21-10	9-21-10	
m,p-Xylene	**ND**	0.050	EPA 8021	9-21-10	9-21-10	
o-Xylene	**ND**	0.050	EPA 8021	9-21-10	9-21-10	
Gasoline	**ND**	5.0	NWTPH-Gx	9-21-10	9-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*55-127*				

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B3-7.5**					
Laboratory ID:	09-121-12					
Benzene	**ND**	0.024	EPA 8021	9-21-10	9-22-10	
Toluene	**ND**	0.12	EPA 8021	9-21-10	9-22-10	
Ethyl Benzene	**ND**	0.12	EPA 8021	9-21-10	9-22-10	
m,p-Xylene	**ND**	0.12	EPA 8021	9-21-10	9-22-10	
o-Xylene	**ND**	0.12	EPA 8021	9-21-10	9-22-10	
Gasoline	**72**	12	NWTPH-Gx	9-21-10	9-22-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*101*	*55-127*				
Client ID:	**B3-16.5**					
Laboratory ID:	09-121-14					
Benzene	**0.17**	0.020	EPA 8021	9-21-10	9-22-10	
Toluene	**0.39**	0.096	EPA 8021	9-21-10	9-22-10	
Ethyl Benzene	**5.9**	0.096	EPA 8021	9-21-10	9-22-10	
m,p-Xylene	**15**	0.96	EPA 8021	9-21-10	9-22-10	
o-Xylene	**5.4**	0.096	EPA 8021	9-21-10	9-22-10	
Gasoline	**910**	9.6	NWTPH-Gx	9-21-10	9-22-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*93*	*55-127*				
Client ID:	**B3-25**					
Laboratory ID:	09-121-16					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-21-10	
Toluene	**ND**	0.045	EPA 8021	9-21-10	9-21-10	
Ethyl Benzene	**ND**	0.045	EPA 8021	9-21-10	9-21-10	
m,p-Xylene	**ND**	0.045	EPA 8021	9-21-10	9-21-10	
o-Xylene	**ND**	0.045	EPA 8021	9-21-10	9-21-10	
Gasoline	**ND**	4.5	NWTPH-Gx	9-21-10	9-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*100*	*55-127*				

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B4-11.5**					
Laboratory ID:	09-121-17					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-21-10	
Toluene	**ND**	0.051	EPA 8021	9-21-10	9-21-10	
Ethyl Benzene	**ND**	0.051	EPA 8021	9-21-10	9-21-10	
m,p-Xylene	**ND**	0.051	EPA 8021	9-21-10	9-21-10	
o-Xylene	**ND**	0.051	EPA 8021	9-21-10	9-21-10	
Gasoline	**ND**	5.1	NWTPH-Gx	9-21-10	9-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*55-127*				
Client ID:	**B4-24**					
Laboratory ID:	09-121-18					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-21-10	
Toluene	**ND**	0.044	EPA 8021	9-21-10	9-21-10	
Ethyl Benzene	**ND**	0.044	EPA 8021	9-21-10	9-21-10	
m,p-Xylene	**ND**	0.044	EPA 8021	9-21-10	9-21-10	
o-Xylene	**ND**	0.044	EPA 8021	9-21-10	9-21-10	
Gasoline	**ND**	4.4	NWTPH-Gx	9-21-10	9-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*97*	*55-127*				
Client ID:	**B5-5**					
Laboratory ID:	09-121-19					
Benzene	**0.24**	0.020	EPA 8021	9-21-10	9-22-10	
Toluene	**0.11**	0.095	EPA 8021	9-21-10	9-22-10	
Ethyl Benzene	**0.89**	0.095	EPA 8021	9-21-10	9-22-10	
m,p-Xylene	**3.3**	0.095	EPA 8021	9-21-10	9-22-10	
o-Xylene	**1.3**	0.095	EPA 8021	9-21-10	9-22-10	
Gasoline	**180**	9.5	NWTPH-Gx	9-21-10	9-22-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*98*	*55-127*				

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B5-10**					
Laboratory ID:	09-121-20					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-22-10	
Toluene	**ND**	0.095	EPA 8021	9-21-10	9-22-10	
Ethyl Benzene	**0.11**	0.095	EPA 8021	9-21-10	9-22-10	
m,p-Xylene	**0.24**	0.095	EPA 8021	9-21-10	9-22-10	
o-Xylene	**0.11**	0.095	EPA 8021	9-21-10	9-22-10	
Gasoline	**21**	9.5	NWTPH-Gx	9-21-10	9-22-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*98*	*55-127*				
Client ID:	**B5-25**					
Laboratory ID:	09-121-22					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-21-10	
Toluene	**ND**	0.058	EPA 8021	9-21-10	9-21-10	
Ethyl Benzene	**ND**	0.058	EPA 8021	9-21-10	9-21-10	
m,p-Xylene	**ND**	0.058	EPA 8021	9-21-10	9-21-10	
o-Xylene	**ND**	0.058	EPA 8021	9-21-10	9-21-10	
Gasoline	**ND**	5.8	NWTPH-Gx	9-21-10	9-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*103*	*55-127*				
Client ID:	**B6-6**					
Laboratory ID:	09-121-23					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-21-10	
Toluene	**ND**	0.041	EPA 8021	9-21-10	9-21-10	
Ethyl Benzene	**ND**	0.041	EPA 8021	9-21-10	9-21-10	
m,p-Xylene	**ND**	0.041	EPA 8021	9-21-10	9-21-10	
o-Xylene	**ND**	0.041	EPA 8021	9-21-10	9-21-10	
Gasoline	**ND**	4.1	NWTPH-Gx	9-21-10	9-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*103*	*55-127*				

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B6-21**					
Laboratory ID:	09-121-25					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-21-10	
Toluene	**ND**	0.043	EPA 8021	9-21-10	9-21-10	
Ethyl Benzene	**ND**	0.043	EPA 8021	9-21-10	9-21-10	
m,p-Xylene	**ND**	0.043	EPA 8021	9-21-10	9-21-10	
o-Xylene	**ND**	0.043	EPA 8021	9-21-10	9-21-10	
Gasoline	**ND**	4.3	NWTPH-Gx	9-21-10	9-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*96*	*55-127*				
Client ID:	**B6-30**					
Laboratory ID:	09-121-26					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-21-10	
Toluene	**ND**	0.042	EPA 8021	9-21-10	9-21-10	
Ethyl Benzene	**ND**	0.042	EPA 8021	9-21-10	9-21-10	
m,p-Xylene	**ND**	0.042	EPA 8021	9-21-10	9-21-10	
o-Xylene	**ND**	0.042	EPA 8021	9-21-10	9-21-10	
Gasoline	**ND**	4.2	NWTPH-Gx	9-21-10	9-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*96*	*55-127*				

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Gx/BTEX
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0921S2					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-21-10	
Toluene	**ND**	0.050	EPA 8021	9-21-10	9-21-10	
Ethyl Benzene	**ND**	0.050	EPA 8021	9-21-10	9-21-10	
m,p-Xylene	**ND**	0.050	EPA 8021	9-21-10	9-21-10	
o-Xylene	**ND**	0.050	EPA 8021	9-21-10	9-21-10	
Gasoline	**ND**	5.0	NWTPH-Gx	9-21-10	9-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*55-127*				
Laboratory ID:	MB0921S3					
Benzene	**ND**	0.020	EPA 8021	9-21-10	9-22-10	
Toluene	**ND**	0.050	EPA 8021	9-21-10	9-22-10	
Ethyl Benzene	**ND**	0.050	EPA 8021	9-21-10	9-22-10	
m,p-Xylene	**ND**	0.050	EPA 8021	9-21-10	9-22-10	
o-Xylene	**ND**	0.050	EPA 8021	9-21-10	9-22-10	
Gasoline	**ND**	5.0	NWTPH-Gx	9-21-10	9-22-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*93*	*55-127*				

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Gx/BTEX
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-121-05										
	ORIG	DUP									
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*97*	*99*	*55-127*			
Laboratory ID:	09-121-06										
	ORIG	DUP									
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*98*	*95*	*55-127*			
SPIKE BLANKS											
Laboratory ID:	SB0921S1										
	SB	SBD	SB	SBD		SB	SBD				
Benzene	**0.849**	**0.902**	1.00	1.00		**85**	**90**	75-113	6	9	
Toluene	**0.911**	**0.965**	1.00	1.00		**91**	**97**	75-116	6	10	
Ethyl Benzene	**0.967**	**1.02**	1.00	1.00		**97**	**102**	82-117	5	10	
m,p-Xylene	**0.964**	**1.02**	1.00	1.00		**96**	**102**	81-122	6	10	
o-Xylene	**0.975**	**1.03**	1.00	1.00		**98**	**103**	83-118	5	10	
Surrogate:											
Fluorobenzene						*91*	*96*	*55-127*			

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Dx
(with acid/silica gel clean-up)

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW3**					
Laboratory ID:	09-121-01					
Diesel Range Organics	**ND**	0.29	NWTPH-Dx	9-20-10	9-20-10	U1
Lube Oil Range Organics	**ND**	0.41	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*103*	*50-150*				
Client ID:	**MW4**					
Laboratory ID:	09-121-02					
Diesel Range Organics	**ND**	0.27	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**0.55**	0.43	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*109*	*50-150*				
Client ID:	**MW5**					
Laboratory ID:	09-121-03					
Diesel Range Organics	**ND**	0.35	NWTPH-Dx	9-20-10	9-20-10	U1
Lube Oil Range Organics	**ND**	0.43	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*95*	*50-150*				
Client ID:	**MW6**					
Laboratory ID:	09-121-04					
Diesel Range Organics	**ND**	0.27	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	0.43	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*104*	*50-150*				

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Dx
QUALITY CONTROL
(with acid/silica gel clean-up)

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0920W1					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	0.40	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*102*	*50-150*				

Analyte	Result		Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE							
Laboratory ID:	09-121-01						
	ORIG	DUP					
Diesel Range Organics	**ND**	**ND**			NA	NA	U1
Lube Oil Range Organics	**ND**	**ND**			NA	NA	
Surrogate:							
o-Terphenyl			*103* *107*	*50-150*			

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Dx
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP10-9**					
Laboratory ID:	09-121-05					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	55	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*106*	*50-150*				
Client ID:	**GP10-11**					
Laboratory ID:	09-121-06					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*105*	*50-150*				
Client ID:	**B1-10**					
Laboratory ID:	09-121-08					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil	**72**	55	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*105*	*50-150*				
Client ID:	**B1-30**					
Laboratory ID:	09-121-09					
Diesel Range Organics	**ND**	27	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	54	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*91*	*50-150*				
Client ID:	**B2-11.5**					
Laboratory ID:	09-121-10					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	55	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*112*	*50-150*				
Client ID:	**B2-30**					
Laboratory ID:	09-121-11					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*103*	*50-150*				

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Dx
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B3-7.5**					
Laboratory ID:	09-121-12					
Diesel Range Organics	**ND**	30	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	59	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*90*	*50-150*				
Client ID:	**B3-16.5**					
Laboratory ID:	09-121-14					
Diesel Range Organics	**ND**	420	NWTPH-Dx	9-20-10	9-20-10	U1
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*110*	*50-150*				
Client ID:	**B3-25**					
Laboratory ID:	09-121-16					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	57	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*89*	*50-150*				
Client ID:	**B4-11.5**					
Laboratory ID:	09-121-17					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	55	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*93*	*50-150*				
Client ID:	**B4-24**					
Laboratory ID:	09-121-18					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	57	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*81*	*50-150*				
Client ID:	**B5-5**					
Laboratory ID:	09-121-19					
Diesel Range Organics	**ND**	200	NWTPH-Dx	9-20-10	9-20-10	U1
Lube Oil	**500**	55	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*103*	*50-150*				

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Dx
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B5-10**					
Laboratory ID:	09-121-20					
Diesel Range Organics	**ND**	39	NWTPH-Dx	9-20-10	9-20-10	U1
Lube Oil	**140**	53	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*108*	*50-150*				
Client ID:	**B5-25**					
Laboratory ID:	09-121-22					
Diesel Range Organics	**ND**	30	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	61	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*95*	*50-150*				
Client ID:	**B6-6**					
Laboratory ID:	09-121-23					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	55	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*113*	*50-150*				
Client ID:	**B6-21**					
Laboratory ID:	09-121-25					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	55	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*114*	*50-150*				
Client ID:	**B6-30**					
Laboratory ID:	09-121-26					
Diesel Range Organics	**ND**	27	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	55	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*119*	*50-150*				

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

NWTPH-Dx
QUALITY CONTROL
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0920S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	9-20-10	9-20-10	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	9-20-10	9-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*101*	*50-150*				

Analyte	Result		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	09-121-06							
	ORIG	DUP						
Diesel Range Organics	**ND**	**ND**				NA	NA	
Lube Oil Range Organics	**ND**	**ND**				NA	NA	
Surrogate:								
o-Terphenyl			*105*	*99*	*50-150*			
Laboratory ID:	09-121-17							
	ORIG	DUP						
Diesel Range Organics	**ND**	**ND**				NA	NA	
Lube Oil Range Organics	**ND**	**ND**				NA	NA	
Surrogate:								
o-Terphenyl			*93*	*95*	*50-150*			

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

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Date Extracted:	9-15-10
Date Analyzed:	9-15-10
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	09-121-01
Client ID:	**MW3**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.40
Chloromethane	ND		2.0
Vinyl Chloride	ND		0.40
Bromomethane	ND		0.40
Chloroethane	ND		2.0
Trichlorofluoromethane	ND		0.40
1,1-Dichloroethene	ND		0.40
Iodomethane	ND		2.0
Methylene Chloride	ND		2.0
(trans) 1,2-Dichloroethene	ND		0.40
Methyl t-Butyl Ether	2.1		0.40
1,1-Dichloroethane	ND		0.40
2,2-Dichloropropane	ND		0.40
(cis) 1,2-Dichloroethene	ND		0.40
Bromochloromethane	ND		0.40
Chloroform	ND		0.40
1,1,1-Trichloroethane	ND		0.40
Carbon Tetrachloride	ND		0.40
1,1-Dichloropropene	ND		0.40
1,2-Dichloroethane	ND		0.40
Trichloroethene	ND		0.40
1,2-Dichloropropane	ND		0.40
Dibromomethane	ND		0.40
Bromodichloromethane	ND		0.40
2-Chloroethyl Vinyl Ether	ND		2.0
(cis) 1,3-Dichloropropene	ND		0.40
(trans) 1,3-Dichloropropene	ND		0.40

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Lab ID: 09-121-01
Client ID: MW3

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.40
Tetrachloroethene	ND		0.40
1,3-Dichloropropane	ND		0.40
Dibromochloromethane	ND		0.40
1,2-Dibromoethane	ND		0.40
Chlorobenzene	ND		0.40
1,1,1,2-Tetrachloroethane	ND		0.40
Bromoform	ND		2.0
Bromobenzene	ND		0.40
1,1,2,2-Tetrachloroethane	ND		0.40
1,2,3-Trichloropropane	ND		0.40
2-Chlorotoluene	ND		0.40
4-Chlorotoluene	ND		0.40
1,3-Dichlorobenzene	ND		0.40
1,4-Dichlorobenzene	ND		0.40
1,2-Dichlorobenzene	ND		0.40
1,2-Dibromo-3-chloropropane	ND		2.0
1,2,4-Trichlorobenzene	ND		0.40
Hexachlorobutadiene	ND		0.40
1,2,3-Trichlorobenzene	ND		0.40

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	93	71-126
Toluene-d8	103	76-116
4-Bromofluorobenzene	98	70-123

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Date Extracted:	9-15-10
Date Analyzed:	9-15-10
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	09-121-02
Client ID:	**MW4**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	0.95		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	0.54		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Lab ID: 09-121-02
Client ID: MW4

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	96	71-126
Toluene-d8	102	76-116
4-Bromofluorobenzene	93	70-123

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Date Extracted:	9-15-10
Date Analyzed:	9-15-10
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	09-121-03
Client ID:	**MW5**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.40
Chloromethane	ND		2.0
Vinyl Chloride	ND		0.40
Bromomethane	ND		0.40
Chloroethane	ND		2.0
Trichlorofluoromethane	ND		0.40
1,1-Dichloroethene	ND		0.40
Iodomethane	ND		2.0
Methylene Chloride	ND		2.0
(trans) 1,2-Dichloroethene	ND		0.40
1,1-Dichloroethane	ND		0.40
2,2-Dichloropropane	ND		0.40
(cis) 1,2-Dichloroethene	0.53		0.40
Bromochloromethane	ND		0.40
Chloroform	ND		0.40
1,1,1-Trichloroethane	ND		0.40
Carbon Tetrachloride	ND		0.40
1,1-Dichloropropene	ND		0.40
1,2-Dichloroethane	ND		0.40
Trichloroethene	ND		0.40
1,2-Dichloropropane	ND		0.40
Dibromomethane	ND		0.40
Bromodichloromethane	ND		0.40
2-Chloroethyl Vinyl Ether	ND		2.0
(cis) 1,3-Dichloropropene	ND		0.40
(trans) 1,3-Dichloropropene	ND		0.40

Date of Report: September 23, 2010
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Project: 103-93320

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Lab ID: 09-121-03
Client ID: MW5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.40
Tetrachloroethene	ND		0.40
1,3-Dichloropropane	ND		0.40
Dibromochloromethane	ND		0.40
1,2-Dibromoethane	ND		0.40
Chlorobenzene	ND		0.40
1,1,1,2-Tetrachloroethane	ND		0.40
Bromoform	ND		2.0
Bromobenzene	ND		0.40
1,1,2,2-Tetrachloroethane	ND		0.40
1,2,3-Trichloropropane	ND		0.40
2-Chlorotoluene	ND		0.40
4-Chlorotoluene	ND		0.40
1,3-Dichlorobenzene	ND		0.40
1,4-Dichlorobenzene	ND		0.40
1,2-Dichlorobenzene	ND		0.40
1,2-Dibromo-3-chloropropane	ND		2.0
1,2,4-Trichlorobenzene	ND		0.40
Hexachlorobutadiene	ND		0.40
1,2,3-Trichlorobenzene	ND		0.40

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	97	71-126
Toluene-d8	98	76-116
4-Bromofluorobenzene	100	70-123

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

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Date Extracted:	9-15-10
Date Analyzed:	9-15-10
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	09-121-04
Client ID:	**MW6**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: September 23, 2010
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Lab ID: 09-121-04
Client ID: MW6

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	100	71-126
Toluene-d8	99	76-116
4-Bromofluorobenzene	93	70-123

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
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HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
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Date Extracted: 9-15-10
Date Analyzed: 9-15-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0915W1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
Methyl t-Butyl Ether	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: September 23, 2010
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Laboratory Reference: 1009-121
Project: 103-93320

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METHOD BLANK QUALITY CONTROL
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Lab ID: MB0915W1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	108	71-126
Toluene-d8	98	76-116
4-Bromofluorobenzene	82	70-123

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 9-15-10
Date Analyzed: 9-15-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: SB0915W1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	10.0	12.2	122	12.0	120	70-130	
Benzene	10.0	11.4	114	11.2	112	73-130	
Trichloroethene	10.0	9.46	95	9.36	94	79-122	
Toluene	10.0	9.77	98	9.60	96	80-121	
Chlorobenzene	10.0	10.2	102	10.1	101	83-116	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	2	15	
Benzene	2	14	
Trichloroethene	1	14	
Toluene	2	13	
Chlorobenzene	1	13	

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Date Extracted:	9-17-10
Date Analyzed:	9-17-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-121-05
Client ID:	**GP10-9**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00086
Chloromethane	ND		0.0043
Vinyl Chloride	ND		0.00086
Bromomethane	ND		0.00086
Chloroethane	ND		0.0043
Trichlorofluoromethane	ND		0.00086
1,1-Dichloroethene	ND		0.00086
Iodomethane	ND		0.0043
Methylene Chloride	ND		0.0043
(trans) 1,2-Dichloroethene	ND		0.00086
1,1-Dichloroethane	ND		0.00086
2,2-Dichloropropane	ND		0.00086
(cis) 1,2-Dichloroethene	ND		0.00086
Bromochloromethane	ND		0.00086
Chloroform	ND		0.00086
1,1,1-Trichloroethane	ND		0.00086
Carbon Tetrachloride	ND		0.00086
1,1-Dichloropropene	ND		0.00086
1,2-Dichloroethane	ND		0.00086
Trichloroethene	ND		0.00086
1,2-Dichloropropane	ND		0.00086
Dibromomethane	ND		0.00086
Bromodichloromethane	ND		0.00086
2-Chloroethyl Vinyl Ether	ND		0.0043
(cis) 1,3-Dichloropropene	ND		0.00086
(trans) 1,3-Dichloropropene	ND		0.00086

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
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HALOGENATED VOLATILES by EPA 8260B
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Lab ID: 09-121-05
Client ID: GP10-9

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00086
Tetrachloroethene	ND		0.00086
1,3-Dichloropropane	ND		0.00086
Dibromochloromethane	ND		0.00086
1,2-Dibromoethane	ND		0.00086
Chlorobenzene	ND		0.00086
1,1,1,2-Tetrachloroethane	ND		0.00086
Bromoform	ND		0.00086
Bromobenzene	ND		0.00086
1,1,2,2-Tetrachloroethane	ND		0.00086
1,2,3-Trichloropropane	ND		0.00086
2-Chlorotoluene	ND		0.00086
4-Chlorotoluene	ND		0.00086
1,3-Dichlorobenzene	ND		0.00086
1,4-Dichlorobenzene	ND		0.00086
1,2-Dichlorobenzene	ND		0.00086
1,2-Dibromo-3-chloropropane	ND		0.0043
1,2,4-Trichlorobenzene	ND		0.00086
Hexachlorobutadiene	ND		0.0043
1,2,3-Trichlorobenzene	ND		0.00086

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	91	66-128
Toluene-d8	108	68-126
4-Bromofluorobenzene	88	53-134

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

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Date Extracted:	9-17-10
Date Analyzed:	9-17-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-121-06
Client ID:	**GP10-11**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00076
Chloromethane	ND		0.0038
Vinyl Chloride	ND		0.00076
Bromomethane	ND		0.00076
Chloroethane	ND		0.0038
Trichlorofluoromethane	ND		0.00076
1,1-Dichloroethene	ND		0.00076
Iodomethane	ND		0.0038
Methylene Chloride	ND		0.0038
(trans) 1,2-Dichloroethene	ND		0.00076
1,1-Dichloroethane	ND		0.00076
2,2-Dichloropropane	ND		0.00076
(cis) 1,2-Dichloroethene	ND		0.00076
Bromochloromethane	ND		0.00076
Chloroform	ND		0.00076
1,1,1-Trichloroethane	ND		0.00076
Carbon Tetrachloride	ND		0.00076
1,1-Dichloropropene	ND		0.00076
1,2-Dichloroethane	ND		0.00076
Trichloroethene	ND		0.00076
1,2-Dichloropropane	ND		0.00076
Dibromomethane	ND		0.00076
Bromodichloromethane	ND		0.00076
2-Chloroethyl Vinyl Ether	ND		0.0038
(cis) 1,3-Dichloropropene	ND		0.00076
(trans) 1,3-Dichloropropene	ND		0.00076

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

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Lab ID: 09-121-06
Client ID: GP10-11

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00076
Tetrachloroethene	ND		0.00076
1,3-Dichloropropane	ND		0.00076
Dibromochloromethane	ND		0.00076
1,2-Dibromoethane	ND		0.00076
Chlorobenzene	ND		0.00076
1,1,1,2-Tetrachloroethane	ND		0.00076
Bromoform	ND		0.00076
Bromobenzene	ND		0.00076
1,1,2,2-Tetrachloroethane	ND		0.00076
1,2,3-Trichloropropane	ND		0.00076
2-Chlorotoluene	ND		0.00076
4-Chlorotoluene	ND		0.00076
1,3-Dichlorobenzene	ND		0.00076
1,4-Dichlorobenzene	ND		0.00076
1,2-Dichlorobenzene	ND		0.00076
1,2-Dibromo-3-chloropropane	ND		0.0038
1,2,4-Trichlorobenzene	ND		0.00076
Hexachlorobutadiene	ND		0.0038
1,2,3-Trichlorobenzene	ND		0.00076

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	92	66-128
Toluene-d8	108	68-126
4-Bromofluorobenzene	88	53-134

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
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Date Extracted: 9-16-10
Date Analyzed: 9-16-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-121-08
Client ID: B1-10

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0050
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0050
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Iodomethane	ND		0.0050
Methylene Chloride	ND		0.0050
(trans) 1,2-Dichloroethene	ND		0.0010
1,1-Dichloroethane	ND		0.0010
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0050
(cis) 1,3-Dichloropropene	ND		0.0010
(trans) 1,3-Dichloropropene	ND		0.0010

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
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Lab ID: 09-121-08
Client ID: B1-10

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.0010
1,3-Dichloropropane	ND		0.0010
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Bromoform	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0050
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0050
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	87	66-128
Toluene-d8	109	68-126
4-Bromofluorobenzene	83	53-134

Date of Report: September 23, 2010
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Date Extracted: 9-16-10
Date Analyzed: 9-16-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-121-09
Client ID: B1-30

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00086
Chloromethane	ND		0.0043
Vinyl Chloride	ND		0.00086
Bromomethane	ND		0.00086
Chloroethane	ND		0.0043
Trichlorofluoromethane	ND		0.00086
1,1-Dichloroethene	ND		0.00086
Iodomethane	ND		0.0043
Methylene Chloride	ND		0.0043
(trans) 1,2-Dichloroethene	ND		0.00086
1,1-Dichloroethane	ND		0.00086
2,2-Dichloropropane	ND		0.00086
(cis) 1,2-Dichloroethene	ND		0.00086
Bromochloromethane	ND		0.00086
Chloroform	ND		0.00086
1,1,1-Trichloroethane	ND		0.00086
Carbon Tetrachloride	ND		0.00086
1,1-Dichloropropene	ND		0.00086
1,2-Dichloroethane	ND		0.00086
Trichloroethene	ND		0.00086
1,2-Dichloropropane	ND		0.00086
Dibromomethane	ND		0.00086
Bromodichloromethane	ND		0.00086
2-Chloroethyl Vinyl Ether	ND		0.0043
(cis) 1,3-Dichloropropene	ND		0.00086
(trans) 1,3-Dichloropropene	ND		0.00086

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

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Lab ID: 09-121-09
Client ID: B1-30

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00086
Tetrachloroethene	ND		0.00086
1,3-Dichloropropane	ND		0.00086
Dibromochloromethane	ND		0.00086
1,2-Dibromoethane	ND		0.00086
Chlorobenzene	ND		0.00086
1,1,1,2-Tetrachloroethane	ND		0.00086
Bromoform	ND		0.00086
Bromobenzene	ND		0.00086
1,1,2,2-Tetrachloroethane	ND		0.00086
1,2,3-Trichloropropane	ND		0.00086
2-Chlorotoluene	ND		0.00086
4-Chlorotoluene	ND		0.00086
1,3-Dichlorobenzene	ND		0.00086
1,4-Dichlorobenzene	ND		0.00086
1,2-Dichlorobenzene	ND		0.00086
1,2-Dibromo-3-chloropropane	ND		0.0043
1,2,4-Trichlorobenzene	ND		0.00086
Hexachlorobutadiene	ND		0.0043
1,2,3-Trichlorobenzene	ND		0.00086

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	84	66-128
Toluene-d8	101	68-126
4-Bromofluorobenzene	80	53-134

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Date Extracted:	9-16-10
Date Analyzed:	9-16-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-121-10
Client ID:	**B2-11.5**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00077
Chloromethane	ND		0.0039
Vinyl Chloride	ND		0.00077
Bromomethane	ND		0.00077
Chloroethane	ND		0.0039
Trichlorofluoromethane	ND		0.00077
1,1-Dichloroethene	ND		0.00077
Iodomethane	ND		0.0039
Methylene Chloride	ND		0.0039
(trans) 1,2-Dichloroethene	ND		0.00077
1,1-Dichloroethane	ND		0.00077
2,2-Dichloropropane	ND		0.00077
(cis) 1,2-Dichloroethene	ND		0.00077
Bromochloromethane	ND		0.00077
Chloroform	ND		0.00077
1,1,1-Trichloroethane	ND		0.00077
Carbon Tetrachloride	ND		0.00077
1,1-Dichloropropene	ND		0.00077
1,2-Dichloroethane	ND		0.00077
Trichloroethene	ND		0.00077
1,2-Dichloropropane	ND		0.00077
Dibromomethane	ND		0.00077
Bromodichloromethane	ND		0.00077
2-Chloroethyl Vinyl Ether	ND		0.0039
(cis) 1,3-Dichloropropene	ND		0.00077
(trans) 1,3-Dichloropropene	ND		0.00077

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Lab ID: 09-121-10
Client ID: B2-11.5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00077
Tetrachloroethene	ND		0.00077
1,3-Dichloropropane	ND		0.00077
Dibromochloromethane	ND		0.00077
1,2-Dibromoethane	ND		0.00077
Chlorobenzene	ND		0.00077
1,1,1,2-Tetrachloroethane	ND		0.00077
Bromoform	ND		0.00077
Bromobenzene	ND		0.00077
1,1,2,2-Tetrachloroethane	ND		0.00077
1,2,3-Trichloropropane	ND		0.00077
2-Chlorotoluene	ND		0.00077
4-Chlorotoluene	ND		0.00077
1,3-Dichlorobenzene	ND		0.00077
1,4-Dichlorobenzene	ND		0.00077
1,2-Dichlorobenzene	ND		0.00077
1,2-Dibromo-3-chloropropane	ND		0.0039
1,2,4-Trichlorobenzene	ND		0.00077
Hexachlorobutadiene	ND		0.0039
1,2,3-Trichlorobenzene	ND		0.00077

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	82	66-128
Toluene-d8	104	68-126
4-Bromofluorobenzene	84	53-134

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Date Extracted:	9-17-10
Date Analyzed:	9-17-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-121-11
Client ID:	**B2-30**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00082
Chloromethane	ND		0.0041
Vinyl Chloride	ND		0.00082
Bromomethane	ND		0.00082
Chloroethane	ND		0.0041
Trichlorofluoromethane	ND		0.00082
1,1-Dichloroethene	ND		0.00082
Iodomethane	ND		0.0041
Methylene Chloride	ND		0.0041
(trans) 1,2-Dichloroethene	ND		0.00082
1,1-Dichloroethane	ND		0.00082
2,2-Dichloropropane	ND		0.00082
(cis) 1,2-Dichloroethene	ND		0.00082
Bromochloromethane	ND		0.00082
Chloroform	ND		0.00082
1,1,1-Trichloroethane	ND		0.00082
Carbon Tetrachloride	ND		0.00082
1,1-Dichloropropene	ND		0.00082
1,2-Dichloroethane	ND		0.00082
Trichloroethene	ND		0.00082
1,2-Dichloropropane	ND		0.00082
Dibromomethane	ND		0.00082
Bromodichloromethane	ND		0.00082
2-Chloroethyl Vinyl Ether	ND		0.0041
(cis) 1,3-Dichloropropene	ND		0.00082
(trans) 1,3-Dichloropropene	ND		0.00082

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Lab ID: 09-121-11
Client ID: B2-30

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00082
Tetrachloroethene	ND		0.00082
1,3-Dichloropropane	ND		0.00082
Dibromochloromethane	ND		0.00082
1,2-Dibromoethane	ND		0.00082
Chlorobenzene	ND		0.00082
1,1,1,2-Tetrachloroethane	ND		0.00082
Bromoform	ND		0.00082
Bromobenzene	ND		0.00082
1,1,2,2-Tetrachloroethane	ND		0.00082
1,2,3-Trichloropropane	ND		0.00082
2-Chlorotoluene	ND		0.00082
4-Chlorotoluene	ND		0.00082
1,3-Dichlorobenzene	ND		0.00082
1,4-Dichlorobenzene	ND		0.00082
1,2-Dichlorobenzene	ND		0.00082
1,2-Dibromo-3-chloropropane	ND		0.0041
1,2,4-Trichlorobenzene	ND		0.00082
Hexachlorobutadiene	ND		0.0041
1,2,3-Trichlorobenzene	ND		0.00082

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	89	66-128
Toluene-d8	105	68-126
4-Bromofluorobenzene	83	53-134

Date of Report: September 23, 2010
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Date Extracted:	9-17-10
Date Analyzed:	9-17-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-121-12
Client ID:	**B3-7.5**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.067
Chloromethane	ND		0.34
Vinyl Chloride	ND		0.067
Bromomethane	ND		0.067
Chloroethane	ND		0.34
Trichlorofluoromethane	ND		0.067
1,1-Dichloroethene	ND		0.067
Iodomethane	ND		0.34
Methylene Chloride	ND		0.34
(trans) 1,2-Dichloroethene	ND		0.067
1,1-Dichloroethane	ND		0.067
2,2-Dichloropropane	ND		0.067
(cis) 1,2-Dichloroethene	ND		0.067
Bromochloromethane	ND		0.067
Chloroform	ND		0.067
1,1,1-Trichloroethane	ND		0.067
Carbon Tetrachloride	ND		0.067
1,1-Dichloropropene	ND		0.067
1,2-Dichloroethane	ND		0.067
Trichloroethene	ND		0.067
1,2-Dichloropropane	ND		0.067
Dibromomethane	ND		0.067
Bromodichloromethane	ND		0.067
2-Chloroethyl Vinyl Ether	ND		0.34
(cis) 1,3-Dichloropropene	ND		0.067
(trans) 1,3-Dichloropropene	ND		0.067

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Lab ID: 09-121-12
Client ID: B3-7.5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.067
Tetrachloroethene	ND		0.067
1,3-Dichloropropane	ND		0.067
Dibromochloromethane	ND		0.067
1,2-Dibromoethane	ND		0.067
Chlorobenzene	ND		0.067
1,1,1,2-Tetrachloroethane	ND		0.067
Bromoform	ND		0.067
Bromobenzene	ND		0.067
1,1,2,2-Tetrachloroethane	ND		0.067
1,2,3-Trichloropropane	ND		0.067
2-Chlorotoluene	ND		0.067
4-Chlorotoluene	ND		0.067
1,3-Dichlorobenzene	ND		0.067
1,4-Dichlorobenzene	ND		0.067
1,2-Dichlorobenzene	ND		0.067
1,2-Dibromo-3-chloropropane	ND		0.34
1,2,4-Trichlorobenzene	ND		0.067
Hexachlorobutadiene	ND		0.34
1,2,3-Trichlorobenzene	ND		0.067

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	88	66-128
Toluene-d8	112	68-126
4-Bromofluorobenzene	89	53-134

Date of Report: September 23, 2010
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Date Extracted:	9-17-10
Date Analyzed:	9-17-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-121-14
Client ID:	**B3-16.5**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.23
Chloromethane	ND		1.2
Vinyl Chloride	ND		0.23
Bromomethane	ND		0.23
Chloroethane	ND		1.2
Trichlorofluoromethane	ND		0.23
1,1-Dichloroethene	ND		0.23
Iodomethane	ND		1.2
Methylene Chloride	ND		1.2
(trans) 1,2-Dichloroethene	ND		0.23
1,1-Dichloroethane	ND		0.23
2,2-Dichloropropane	ND		0.23
(cis) 1,2-Dichloroethene	ND		0.23
Bromochloromethane	ND		0.23
Chloroform	ND		0.23
1,1,1-Trichloroethane	ND		0.23
Carbon Tetrachloride	ND		0.23
1,1-Dichloropropene	ND		0.23
1,2-Dichloroethane	ND		0.23
Trichloroethene	ND		0.23
1,2-Dichloropropane	ND		0.23
Dibromomethane	ND		0.23
Bromodichloromethane	ND		0.23
2-Chloroethyl Vinyl Ether	ND		1.2
(cis) 1,3-Dichloropropene	ND		0.23
(trans) 1,3-Dichloropropene	ND		0.23

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
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Lab ID: 09-121-14
Client ID: B3-16.5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.23
Tetrachloroethene	ND		0.23
1,3-Dichloropropane	ND		0.23
Dibromochloromethane	ND		0.23
1,2-Dibromoethane	ND		0.23
Chlorobenzene	ND		0.23
1,1,1,2-Tetrachloroethane	ND		0.23
Bromoform	ND		0.23
Bromobenzene	ND		0.23
1,1,2,2-Tetrachloroethane	ND		0.23
1,2,3-Trichloropropane	ND		0.23
2-Chlorotoluene	ND		0.23
4-Chlorotoluene	ND		0.23
1,3-Dichlorobenzene	ND		0.23
1,4-Dichlorobenzene	ND		0.23
1,2-Dichlorobenzene	ND		0.23
1,2-Dibromo-3-chloropropane	ND		1.2
1,2,4-Trichlorobenzene	ND		0.23
Hexachlorobutadiene	ND		1.2
1,2,3-Trichlorobenzene	ND		0.23

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	84	66-128
Toluene-d8	93	68-126
4-Bromofluorobenzene	99	53-134

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Laboratory Reference: 1009-121
Project: 103-93320

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Date Extracted:	9-17-10
Date Analyzed:	9-17-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-121-16
Client ID:	**B3-25**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00095
Chloromethane	ND		0.0048
Vinyl Chloride	ND		0.00095
Bromomethane	ND		0.00095
Chloroethane	ND		0.0048
Trichlorofluoromethane	ND		0.00095
1,1-Dichloroethene	ND		0.00095
Iodomethane	ND		0.0048
Methylene Chloride	ND		0.0048
(trans) 1,2-Dichloroethene	ND		0.00095
1,1-Dichloroethane	ND		0.00095
2,2-Dichloropropane	ND		0.00095
(cis) 1,2-Dichloroethene	ND		0.00095
Bromochloromethane	ND		0.00095
Chloroform	ND		0.00095
1,1,1-Trichloroethane	ND		0.00095
Carbon Tetrachloride	ND		0.00095
1,1-Dichloropropene	ND		0.00095
1,2-Dichloroethane	ND		0.00095
Trichloroethene	ND		0.00095
1,2-Dichloropropane	ND		0.00095
Dibromomethane	ND		0.00095
Bromodichloromethane	ND		0.00095
2-Chloroethyl Vinyl Ether	ND		0.0048
(cis) 1,3-Dichloropropene	ND		0.00095
(trans) 1,3-Dichloropropene	ND		0.00095

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Lab ID: 09-121-16
Client ID: B3-25

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00095
Tetrachloroethene	ND		0.00095
1,3-Dichloropropane	ND		0.00095
Dibromochloromethane	ND		0.00095
1,2-Dibromoethane	ND		0.00095
Chlorobenzene	ND		0.00095
1,1,1,2-Tetrachloroethane	ND		0.00095
Bromoform	ND		0.00095
Bromobenzene	ND		0.00095
1,1,2,2-Tetrachloroethane	ND		0.00095
1,2,3-Trichloropropane	ND		0.00095
2-Chlorotoluene	ND		0.00095
4-Chlorotoluene	ND		0.00095
1,3-Dichlorobenzene	ND		0.00095
1,4-Dichlorobenzene	ND		0.00095
1,2-Dichlorobenzene	ND		0.00095
1,2-Dibromo-3-chloropropane	ND		0.0048
1,2,4-Trichlorobenzene	ND		0.00095
Hexachlorobutadiene	ND		0.0048
1,2,3-Trichlorobenzene	ND		0.00095

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	94	66-128
Toluene-d8	105	68-126
4-Bromofluorobenzene	92	53-134

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Project: 103-93320

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Date Extracted:	9-16-10
Date Analyzed:	9-16-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-121-17
Client ID:	**B4-11.5**

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00087
Chloromethane	ND		0.0043
Vinyl Chloride	ND		0.00087
Bromomethane	ND		0.00087
Chloroethane	ND		0.0043
Trichlorofluoromethane	ND		0.00087
1,1-Dichloroethene	ND		0.00087
Iodomethane	ND		0.0043
Methylene Chloride	ND		0.0043
(trans) 1,2-Dichloroethene	ND		0.00087
1,1-Dichloroethane	ND		0.00087
2,2-Dichloropropane	ND		0.00087
(cis) 1,2-Dichloroethene	ND		0.00087
Bromochloromethane	ND		0.00087
Chloroform	ND		0.00087
1,1,1-Trichloroethane	ND		0.00087
Carbon Tetrachloride	ND		0.00087
1,1-Dichloropropene	ND		0.00087
1,2-Dichloroethane	ND		0.00087
Trichloroethene	ND		0.00087
1,2-Dichloropropane	ND		0.00087
Dibromomethane	ND		0.00087
Bromodichloromethane	ND		0.00087
2-Chloroethyl Vinyl Ether	ND		0.0043
(cis) 1,3-Dichloropropene	ND		0.00087
(trans) 1,3-Dichloropropene	ND		0.00087

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
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Lab ID: 09-121-17
Client ID: B4-11.5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00087
Tetrachloroethene	ND		0.00087
1,3-Dichloropropane	ND		0.00087
Dibromochloromethane	ND		0.00087
1,2-Dibromoethane	ND		0.00087
Chlorobenzene	ND		0.00087
1,1,1,2-Tetrachloroethane	ND		0.00087
Bromoform	ND		0.00087
Bromobenzene	ND		0.00087
1,1,2,2-Tetrachloroethane	ND		0.00087
1,2,3-Trichloropropane	ND		0.00087
2-Chlorotoluene	ND		0.00087
4-Chlorotoluene	ND		0.00087
1,3-Dichlorobenzene	ND		0.00087
1,4-Dichlorobenzene	ND		0.00087
1,2-Dichlorobenzene	ND		0.00087
1,2-Dibromo-3-chloropropane	ND		0.0043
1,2,4-Trichlorobenzene	ND		0.00087
Hexachlorobutadiene	ND		0.0043
1,2,3-Trichlorobenzene	ND		0.00087

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	90	66-128
Toluene-d8	108	68-126
4-Bromofluorobenzene	88	53-134

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
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Date Extracted:	9-16-10
Date Analyzed:	9-16-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-121-18
Client ID:	**B4-24**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.0011
Chloromethane	ND		0.0054
Vinyl Chloride	ND		0.0011
Bromomethane	ND		0.0011
Chloroethane	ND		0.0054
Trichlorofluoromethane	ND		0.0011
1,1-Dichloroethene	ND		0.0011
Iodomethane	ND		0.0054
Methylene Chloride	ND		0.0054
(trans) 1,2-Dichloroethene	ND		0.0011
1,1-Dichloroethane	ND		0.0011
2,2-Dichloropropane	ND		0.0011
(cis) 1,2-Dichloroethene	ND		0.0011
Bromochloromethane	ND		0.0011
Chloroform	ND		0.0011
1,1,1-Trichloroethane	ND		0.0011
Carbon Tetrachloride	ND		0.0011
1,1-Dichloropropene	ND		0.0011
1,2-Dichloroethane	ND		0.0011
Trichloroethene	ND		0.0011
1,2-Dichloropropane	ND		0.0011
Dibromomethane	ND		0.0011
Bromodichloromethane	ND		0.0011
2-Chloroethyl Vinyl Ether	ND		0.0054
(cis) 1,3-Dichloropropene	ND		0.0011
(trans) 1,3-Dichloropropene	ND		0.0011

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
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Lab ID: 09-121-18
Client ID: B4-24

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0011
Tetrachloroethene	ND		0.0011
1,3-Dichloropropane	ND		0.0011
Dibromochloromethane	ND		0.0011
1,2-Dibromoethane	ND		0.0011
Chlorobenzene	ND		0.0011
1,1,1,2-Tetrachloroethane	ND		0.0011
Bromoform	ND		0.0011
Bromobenzene	ND		0.0011
1,1,2,2-Tetrachloroethane	ND		0.0011
1,2,3-Trichloropropane	ND		0.0011
2-Chlorotoluene	ND		0.0011
4-Chlorotoluene	ND		0.0011
1,3-Dichlorobenzene	ND		0.0011
1,4-Dichlorobenzene	ND		0.0011
1,2-Dichlorobenzene	ND		0.0011
1,2-Dibromo-3-chloropropane	ND		0.0054
1,2,4-Trichlorobenzene	ND		0.0011
Hexachlorobutadiene	ND		0.0054
1,2,3-Trichlorobenzene	ND		0.0011

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	84	66-128
Toluene-d8	102	68-126
4-Bromofluorobenzene	84	53-134

Date of Report: September 23, 2010
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Date Extracted: 9-17-10
Date Analyzed: 9-17-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-121-19
Client ID: B5-5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.044
Chloromethane	ND		0.22
Vinyl Chloride	ND		0.044
Bromomethane	ND		0.044
Chloroethane	ND		0.22
Trichlorofluoromethane	ND		0.044
1,1-Dichloroethene	ND		0.044
Iodomethane	ND		0.22
Methylene Chloride	ND		0.22
(trans) 1,2-Dichloroethene	ND		0.044
1,1-Dichloroethane	ND		0.044
2,2-Dichloropropane	ND		0.044
(cis) 1,2-Dichloroethene	ND		0.044
Bromochloromethane	ND		0.044
Chloroform	ND		0.044
1,1,1-Trichloroethane	ND		0.044
Carbon Tetrachloride	ND		0.044
1,1-Dichloropropene	ND		0.044
1,2-Dichloroethane	ND		0.044
Trichloroethene	ND		0.044
1,2-Dichloropropane	ND		0.044
Dibromomethane	ND		0.044
Bromodichloromethane	ND		0.044
2-Chloroethyl Vinyl Ether	ND		0.22
(cis) 1,3-Dichloropropene	ND		0.044
(trans) 1,3-Dichloropropene	ND		0.044

Date of Report: September 23, 2010
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Lab ID: 09-121-19
Client ID: B5-5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.044
Tetrachloroethene	ND		0.044
1,3-Dichloropropane	ND		0.044
Dibromochloromethane	ND		0.044
1,2-Dibromoethane	ND		0.044
Chlorobenzene	ND		0.044
1,1,1,2-Tetrachloroethane	ND		0.044
Bromoform	ND		0.044
Bromobenzene	ND		0.044
1,1,2,2-Tetrachloroethane	ND		0.044
1,2,3-Trichloropropane	ND		0.044
2-Chlorotoluene	ND		0.044
4-Chlorotoluene	ND		0.044
1,3-Dichlorobenzene	ND		0.044
1,4-Dichlorobenzene	ND		0.044
1,2-Dichlorobenzene	ND		0.044
1,2-Dibromo-3-chloropropane	ND		0.22
1,2,4-Trichlorobenzene	ND		0.044
Hexachlorobutadiene	ND		0.22
1,2,3-Trichlorobenzene	ND		0.044

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	85	66-128
Toluene-d8	104	68-126
4-Bromofluorobenzene	80	53-134

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

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Date Extracted: 9-17-10
Date Analyzed: 9-17-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-121-20
Client ID: B5-10

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.052
Chloromethane	ND		0.26
Vinyl Chloride	ND		0.052
Bromomethane	ND		0.052
Chloroethane	ND		0.26
Trichlorofluoromethane	ND		0.052
1,1-Dichloroethene	ND		0.052
Iodomethane	ND		0.26
Methylene Chloride	ND		0.26
(trans) 1,2-Dichloroethene	ND		0.052
1,1-Dichloroethane	ND		0.052
2,2-Dichloropropane	ND		0.052
(cis) 1,2-Dichloroethene	ND		0.052
Bromochloromethane	ND		0.052
Chloroform	ND		0.052
1,1,1-Trichloroethane	ND		0.052
Carbon Tetrachloride	ND		0.052
1,1-Dichloropropene	ND		0.052
1,2-Dichloroethane	ND		0.052
Trichloroethene	ND		0.052
1,2-Dichloropropane	ND		0.052
Dibromomethane	ND		0.052
Bromodichloromethane	ND		0.052
2-Chloroethyl Vinyl Ether	ND		0.26
(cis) 1,3-Dichloropropene	ND		0.052
(trans) 1,3-Dichloropropene	ND		0.052

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

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Lab ID: 09-121-20
Client ID: B5-10

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.052
Tetrachloroethene	ND		0.052
1,3-Dichloropropane	ND		0.052
Dibromochloromethane	ND		0.052
1,2-Dibromoethane	ND		0.052
Chlorobenzene	ND		0.052
1,1,1,2-Tetrachloroethane	ND		0.052
Bromoform	ND		0.052
Bromobenzene	ND		0.052
1,1,2,2-Tetrachloroethane	ND		0.052
1,2,3-Trichloropropane	ND		0.052
2-Chlorotoluene	ND		0.052
4-Chlorotoluene	ND		0.052
1,3-Dichlorobenzene	ND		0.052
1,4-Dichlorobenzene	ND		0.052
1,2-Dichlorobenzene	ND		0.052
1,2-Dibromo-3-chloropropane	ND		0.26
1,2,4-Trichlorobenzene	ND		0.052
Hexachlorobutadiene	ND		0.26
1,2,3-Trichlorobenzene	ND		0.052

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	81	66-128
Toluene-d8	97	68-126
4-Bromofluorobenzene	79	53-134

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Date Extracted: 9-16-10
Date Analyzed: 9-16-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-121-22
Client ID: B5-25

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0012
Chloromethane	ND		0.0058
Vinyl Chloride	ND		0.0012
Bromomethane	ND		0.0012
Chloroethane	ND		0.0058
Trichlorofluoromethane	ND		0.0012
1,1-Dichloroethene	ND		0.0012
Iodomethane	ND		0.0058
Methylene Chloride	ND		0.0058
(trans) 1,2-Dichloroethene	ND		0.0012
1,1-Dichloroethane	ND		0.0012
2,2-Dichloropropane	ND		0.0012
(cis) 1,2-Dichloroethene	ND		0.0012
Bromochloromethane	ND		0.0012
Chloroform	ND		0.0012
1,1,1-Trichloroethane	ND		0.0012
Carbon Tetrachloride	ND		0.0012
1,1-Dichloropropene	ND		0.0012
1,2-Dichloroethane	ND		0.0012
Trichloroethene	ND		0.0012
1,2-Dichloropropane	ND		0.0012
Dibromomethane	ND		0.0012
Bromodichloromethane	ND		0.0012
2-Chloroethyl Vinyl Ether	ND		0.0058
(cis) 1,3-Dichloropropene	ND		0.0012
(trans) 1,3-Dichloropropene	ND		0.0012

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Lab ID: 09-121-22
Client ID: B5-25

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0012
Tetrachloroethene	ND		0.0012
1,3-Dichloropropane	ND		0.0012
Dibromochloromethane	ND		0.0012
1,2-Dibromoethane	ND		0.0012
Chlorobenzene	ND		0.0012
1,1,1,2-Tetrachloroethane	ND		0.0012
Bromoform	ND		0.0012
Bromobenzene	ND		0.0012
1,1,2,2-Tetrachloroethane	ND		0.0012
1,2,3-Trichloropropane	ND		0.0012
2-Chlorotoluene	ND		0.0012
4-Chlorotoluene	ND		0.0012
1,3-Dichlorobenzene	ND		0.0012
1,4-Dichlorobenzene	ND		0.0012
1,2-Dichlorobenzene	ND		0.0012
1,2-Dibromo-3-chloropropane	ND		0.0058
1,2,4-Trichlorobenzene	ND		0.0012
Hexachlorobutadiene	ND		0.0058
1,2,3-Trichlorobenzene	ND		0.0012

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	79	66-128
Toluene-d8	97	68-126
4-Bromofluorobenzene	83	53-134

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Date Extracted: 9-16-10
Date Analyzed: 9-16-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-121-23
Client ID: B6-6

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00086
Chloromethane	ND		0.0043
Vinyl Chloride	ND		0.00086
Bromomethane	ND		0.00086
Chloroethane	ND		0.0043
Trichlorofluoromethane	ND		0.00086
1,1-Dichloroethene	ND		0.00086
Iodomethane	ND		0.0043
Methylene Chloride	ND		0.0043
(trans) 1,2-Dichloroethene	ND		0.00086
1,1-Dichloroethane	ND		0.00086
2,2-Dichloropropane	ND		0.00086
(cis) 1,2-Dichloroethene	ND		0.00086
Bromochloromethane	ND		0.00086
Chloroform	ND		0.00086
1,1,1-Trichloroethane	ND		0.00086
Carbon Tetrachloride	ND		0.00086
1,1-Dichloropropene	ND		0.00086
1,2-Dichloroethane	ND		0.00086
Trichloroethene	ND		0.00086
1,2-Dichloropropane	ND		0.00086
Dibromomethane	ND		0.00086
Bromodichloromethane	ND		0.00086
2-Chloroethyl Vinyl Ether	ND		0.0043
(cis) 1,3-Dichloropropene	ND		0.00086
(trans) 1,3-Dichloropropene	ND		0.00086

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Lab ID: 09-121-23
Client ID: B6-6

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00086
Tetrachloroethene	ND		0.00086
1,3-Dichloropropane	ND		0.00086
Dibromochloromethane	ND		0.00086
1,2-Dibromoethane	ND		0.00086
Chlorobenzene	ND		0.00086
1,1,1,2-Tetrachloroethane	ND		0.00086
Bromoform	ND		0.00086
Bromobenzene	ND		0.00086
1,1,2,2-Tetrachloroethane	ND		0.00086
1,2,3-Trichloropropane	ND		0.00086
2-Chlorotoluene	ND		0.00086
4-Chlorotoluene	ND		0.00086
1,3-Dichlorobenzene	ND		0.00086
1,4-Dichlorobenzene	ND		0.00086
1,2-Dichlorobenzene	ND		0.00086
1,2-Dibromo-3-chloropropane	ND		0.0043
1,2,4-Trichlorobenzene	ND		0.00086
Hexachlorobutadiene	ND		0.0043
1,2,3-Trichlorobenzene	ND		0.00086

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	80	66-128
Toluene-d8	118	68-126
4-Bromofluorobenzene	87	53-134

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Date Extracted: 9-17-10
Date Analyzed: 9-17-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-121-25
Client ID: B6-21

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00091
Chloromethane	ND		0.0046
Vinyl Chloride	ND		0.00091
Bromomethane	ND		0.00091
Chloroethane	ND		0.0046
Trichlorofluoromethane	ND		0.00091
1,1-Dichloroethene	ND		0.00091
Iodomethane	ND		0.0046
Methylene Chloride	ND		0.0046
(trans) 1,2-Dichloroethene	ND		0.00091
1,1-Dichloroethane	ND		0.00091
2,2-Dichloropropane	ND		0.00091
(cis) 1,2-Dichloroethene	ND		0.00091
Bromochloromethane	ND		0.00091
Chloroform	ND		0.00091
1,1,1-Trichloroethane	ND		0.00091
Carbon Tetrachloride	ND		0.00091
1,1-Dichloropropene	ND		0.00091
1,2-Dichloroethane	ND		0.00091
Trichloroethene	ND		0.00091
1,2-Dichloropropane	ND		0.00091
Dibromomethane	ND		0.00091
Bromodichloromethane	ND		0.00091
2-Chloroethyl Vinyl Ether	ND		0.0046
(cis) 1,3-Dichloropropene	ND		0.00091
(trans) 1,3-Dichloropropene	ND		0.00091

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Lab ID: 09-121-25
Client ID: B6-21

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00091
Tetrachloroethene	ND		0.00091
1,3-Dichloropropane	ND		0.00091
Dibromochloromethane	ND		0.00091
1,2-Dibromoethane	ND		0.00091
Chlorobenzene	ND		0.00091
1,1,1,2-Tetrachloroethane	ND		0.00091
Bromoform	ND		0.00091
Bromobenzene	ND		0.00091
1,1,2,2-Tetrachloroethane	ND		0.00091
1,2,3-Trichloropropane	ND		0.00091
2-Chlorotoluene	ND		0.00091
4-Chlorotoluene	ND		0.00091
1,3-Dichlorobenzene	ND		0.00091
1,4-Dichlorobenzene	ND		0.00091
1,2-Dichlorobenzene	ND		0.00091
1,2-Dibromo-3-chloropropane	ND		0.0046
1,2,4-Trichlorobenzene	ND		0.00091
Hexachlorobutadiene	ND		0.0046
1,2,3-Trichlorobenzene	ND		0.00091

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	83	66-128
Toluene-d8	100	68-126
4-Bromofluorobenzene	79	53-134

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Date Extracted:	9-16-10
Date Analyzed:	9-16-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-121-26
Client ID:	**B6-30**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00081
Chloromethane	ND		0.0041
Vinyl Chloride	ND		0.00081
Bromomethane	ND		0.00081
Chloroethane	ND		0.0041
Trichlorofluoromethane	ND		0.00081
1,1-Dichloroethene	ND		0.00081
Iodomethane	ND		0.0041
Methylene Chloride	ND		0.0041
(trans) 1,2-Dichloroethene	ND		0.00081
1,1-Dichloroethane	ND		0.00081
2,2-Dichloropropane	ND		0.00081
(cis) 1,2-Dichloroethene	ND		0.00081
Bromochloromethane	ND		0.00081
Chloroform	ND		0.00081
1,1,1-Trichloroethane	ND		0.00081
Carbon Tetrachloride	ND		0.00081
1,1-Dichloropropene	ND		0.00081
1,2-Dichloroethane	ND		0.00081
Trichloroethene	ND		0.00081
1,2-Dichloropropane	ND		0.00081
Dibromomethane	ND		0.00081
Bromodichloromethane	ND		0.00081
2-Chloroethyl Vinyl Ether	ND		0.0041
(cis) 1,3-Dichloropropene	ND		0.00081
(trans) 1,3-Dichloropropene	ND		0.00081

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Lab ID: 09-121-26
Client ID: B6-30

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00081
Tetrachloroethene	ND		0.00081
1,3-Dichloropropane	ND		0.00081
Dibromochloromethane	ND		0.00081
1,2-Dibromoethane	ND		0.00081
Chlorobenzene	ND		0.00081
1,1,1,2-Tetrachloroethane	ND		0.00081
Bromoform	ND		0.00081
Bromobenzene	ND		0.00081
1,1,2,2-Tetrachloroethane	ND		0.00081
1,2,3-Trichloropropane	ND		0.00081
2-Chlorotoluene	ND		0.00081
4-Chlorotoluene	ND		0.00081
1,3-Dichlorobenzene	ND		0.00081
1,4-Dichlorobenzene	ND		0.00081
1,2-Dichlorobenzene	ND		0.00081
1,2-Dibromo-3-chloropropane	ND		0.0041
1,2,4-Trichlorobenzene	ND		0.00081
Hexachlorobutadiene	ND		0.0041
1,2,3-Trichlorobenzene	ND		0.00081

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	83	66-128
Toluene-d8	96	68-126
4-Bromofluorobenzene	77	53-134

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
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Date Extracted: 9-16-10
Date Analyzed: 9-16-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0916S1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0050
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0050
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Iodomethane	ND		0.0050
Methylene Chloride	ND		0.0050
(trans) 1,2-Dichloroethene	ND		0.0010
1,1-Dichloroethane	ND		0.0010
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0050
(cis) 1,3-Dichloropropene	ND		0.0010
(trans) 1,3-Dichloropropene	ND		0.0010

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
page 2 of 2

Lab ID: MB0916S1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.0010
1,3-Dichloropropane	ND		0.0010
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Bromoform	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0050
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0050
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	86	66-128
Toluene-d8	100	68-126
4-Bromofluorobenzene	84	53-134

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
page 1 of 2

Date Extracted: 9-17-10
Date Analyzed: 9-17-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0917S1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0050
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0050
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Iodomethane	ND		0.0050
Methylene Chloride	ND		0.0050
(trans) 1,2-Dichloroethene	ND		0.0010
1,1-Dichloroethane	ND		0.0010
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0050
(cis) 1,3-Dichloropropene	ND		0.0010
(trans) 1,3-Dichloropropene	ND		0.0010

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
page 2 of 2

Lab ID: MB0917S1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.0010
1,3-Dichloropropane	ND		0.0010
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Bromoform	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0050
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0050
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	93	66-128
Toluene-d8	111	68-126
4-Bromofluorobenzene	86	53-134

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 9-16-10
Date Analyzed: 9-16-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB0916S1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	0.0500	0.0525	105	0.0538	108	70-130	
Benzene	0.0500	0.0413	83	0.0417	83	70-121	
Trichloroethene	0.0500	0.0481	96	0.0505	101	70-124	
Toluene	0.0500	0.0456	91	0.0470	94	70-123	
Chlorobenzene	0.0500	0.0444	89	0.0480	96	71-119	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	2	14	
Benzene	1	10	
Trichloroethene	5	12	
Toluene	3	12	
Chlorobenzene	8	9	

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 9-17-10
Date Analyzed: 9-17-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB0917S1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	0.0500	0.0520	104	0.0525	105	70-130	
Benzene	0.0500	0.0392	78	0.0408	82	70-121	
Trichloroethene	0.0500	0.0463	93	0.0485	97	70-124	
Toluene	0.0500	0.0436	87	0.0462	92	70-123	
Chlorobenzene	0.0500	0.0432	86	0.0450	90	71-119	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	1	14	
Benzene	4	10	
Trichloroethene	5	12	
Toluene	6	12	
Chlorobenzene	4	9	

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

TOTAL LEAD
EPA 6010B

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	09-121-05					
Client ID:	**GP10-9**					
Lead	**ND**	5.5	6010B	9-22-10	9-22-10	
Lab ID:	09-121-06					
Client ID:	**GP10-11**					
Lead	**ND**	5.6	6010B	9-22-10	9-22-10	
Lab ID:	09-121-17					
Client ID:	**B4-11.5**					
Lead	**ND**	5.5	6010B	9-22-10	9-22-10	
Lab ID:	09-121-18					
Client ID:	**B4-24**					
Lead	**ND**	5.7	6010B	9-22-10	9-22-10	
Lab ID:	09-121-19					
Client ID:	**B5-5**					
Lead	**16**	5.5	6010B	9-22-10	9-22-10	
Lab ID:	09-121-20					
Client ID:	**B5-10**					
Lead	**ND**	5.3	6010B	9-22-10	9-22-10	

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

TOTAL LEAD
EPA 6010B

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	09-121-22					
Client ID:	**B5-25**					
Lead	**ND**	6.1	6010B	9-22-10	9-22-10	
Lab ID:	09-121-23					
Client ID:	**B6-6**					
Lead	**ND**	5.5	6010B	9-22-10	9-22-10	
Lab ID:	09-121-25					
Client ID:	**B6-21**					
Lead	**ND**	5.5	6010B	9-22-10	9-22-10	
Lab ID:	09-121-26					
Client ID:	**B6-30**					
Lead	**ND**	5.5	6010B	9-22-10	9-22-10	

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

TOTAL LEAD
EPA 6010B
METHOD BLANK QUALITY CONTROL

Date Extracted:	9-22-10
Date Analyzed:	9-22-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0922S3

Analyte	Method	Result	PQL
Lead	6010B	**ND**	5.0

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

TOTAL LEAD
EPA 6010B
DUPLICATE QUALITY CONTROL

Date Extracted: 9-22-10
Date Analyzed: 9-22-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-200-03

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	**ND**	**ND**	NA	5.0	

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

TOTAL LEAD
EPA 6010B
MS/MSD QUALITY CONTROL

Date Extracted: 9-22-10
Date Analyzed: 9-22-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-200-03

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	250	**218**	87	**221**	88	1	

Date of Report: September 23, 2010
Samples Submitted: September 15, 2010
Laboratory Reference: 1009-121
Project: 103-93320

% MOISTURE

Date Analyzed: 9-16-10

Client ID	Lab ID	% Moisture
GP10-9	09-121-05	9
GP10-11	09-121-06	11
B1-10	09-121-08	10
B1-30	09-121-09	8
B2-11.5	09-121-10	9
B2-30	09-121-11	11
B3-7.5	09-121-12	15
B3-16.5	09-121-14	10
B3-25	09-121-16	12
B4-11.5	09-121-17	9
B4-24	09-121-18	12
B5-5	09-121-19	10
B5-10	09-121-20	6
B5-25	09-121-22	18
B6-6	09-121-23	10
B6-21	09-121-25	9
B6-30	09-121-26	9

OnSite Environmental Inc.

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-napthalene) 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

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

Company: GAI
Project Number: Bellard
Project Name: 103-93320
Project Manager: Chris King / Ned Gilham
Sampled by: Amanda Cote

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Day
- ☐ 3 Day
- ☒ Standard (7 working days)
  (TPH analysis 5 working days)
- ☐ _____ (other)

Laboratory Number: 09-121

Requested Analysis

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 / SIM	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total ~~BCRA~~ Metals (8) LEAD	TCLP Metals	HEM by 1664	% Moisture
1	MW 3	9-14-10	7:45	H_2O	5		X	X		X									
2	MW 4	9-14-10	1:15		5		X	X		X									
3	MW 5	9-14-10	1:50		5		X	X		X									
4	MW6	9-14-10	4:45	↓	5		X	X		X									
5	GP10-9	9-14-10	10:45	soil	~~6~~ 5		X	X		X						⊗			X
6	GP10-11	9-14-10	10:50	soil	~~6~~ 5		X	X		X						⊗			↓
7	B1-5	9-13-10	8:20	soil	~~6~~ 5		H	H		H									
8	B1-10	9-13-10	8:30	soil	~~6~~ 5		X	X		X									X
9	B1-30	9-13-10	11:00	soil	~~6~~ 5		X	X		X									↓
10	B2-11.5	9-13-10	11:45	soil	~~6~~ 5		X	X		X									

	Signature	Company	Date	Time
Relinquished by		GAI	9-14-10	10:10
Received by		OnSite Env.	9/15/10	1010
Relinquished by				
Received by				
Relinquished by				
Received by				

Comments/Special Instructions:
H = HOLD
⊗ Added 9/20/10 DB

Reviewed by/Date

Reviewed by/Date

Chromatograms with final report ☐

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Chain of Custody

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

Company: GAI
Project Number: 103-93320
Project Name: Ballard
Project Manager: Chris Kay / Nick Gilham
Sampled by: Amanda Cole

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Day
- ☐ 3 Day
- ☒ Standard (7 working days)
  (TPH analysis 5 working days)
- ☐ _____ (other)

Laboratory Number: 09-121

Requested Analysis

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 / SIM	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total ~~RCRA~~ Metals (8) LEAD	TCLP Metals	HEM by 1664	% Moisture
11	B2-30	9-13-10	1:00	Soil	5		X	X		X									X
12	B3-7.5	9-13-10	~~2:30~~ 2:20 DB	X	5		X	X		X									↓
13	B3-11.5	9-13-10	2:30	X	5		H	H		H									
14	B3-16.5	9-13-10	3:00	X	5		X	X		X									X
15	B3-21.5	9-13-10	3:15	X	5		H	H		H									
16	B3-25	9-13-10	3:30	X	5		X	X		X									X
17	B4-11.5	9-14-10	8:00	X	5		X	X		X						⊗			↓
18	B4-24	9-14-10	9:10	X	5		X	X		X						⊗			
19	B5-5	9-14-10	11:05	X	5		X	X		X						⊗			
20	B5-10	9-14-10	11:15	X	5		X	X		X						⊗			↓

	Signature	Company	Date	Time
Relinquished by		GAI	9-14-10	1010
Received by			9/15/10	1010
Relinquished by				
Received by				
Relinquished by				
Received by				
Reviewed by/Date		Reviewed by/Date		

Comments/Special Instructions:

H = Hold
⊗ Added 9/20/10. DB

Chromatograms with final report ☐

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Phone: (425) 883-3881 • www.onsite-env.com

Company: GAI
Project Number: Ballard
Project Name: 103-93320
Project Manager: Chris King / Neil Gilham
Sampled by: Amanda Cote

Turnaround Request (in working days)

(Check One)

☐ Same Day ☐ 1 Day
☐ 2 Day ☐ 3 Day
☒ Standard (7 working days)
(TPH analysis 5 working days)
☐ _____ (other)

Laboratory Number: 09-121

Requested Analysis

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 / SIM	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8) LOAD	TCLP Metals	HEM by 1664	% Moisture
21	B5-21	9-14-10	11:45	soil	5		H	H		H									
22	B5-25	9-14-10	12:00		5		X	X		X						⊗			X
23	B6-6	9-14-10	1:30		5		X	X		X						⊗			↓
24	B6-16	9-14-10	2:05		4		H	H		H									
25	B6-21	9-14-10	2:15		5		X	X		X						⊗			X
26	B6-30	9-14-10	2:30	↓	5		X	X		X						⊗			↓

	Signature	Company	Date	Time
Relinquished by		GAI	9-14-10	10:10
Received by		OnSite Env.	9/15/10	1000
Relinquished by				
Received by				
Relinquished by				
Received by				
Reviewed by/Date		Reviewed by/Date		

Comments/Special Instructions:

H = Hold
⊗ Add

Chromatograms with final report ☐

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OnSite Environmental Inc.

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

November 4, 2010

Chris King
Golder Associates Inc.
18300 NE Union Hill Road
Suite 200
Redmond, WA 98052-3333

Re: Analytical Data for Project 103-93320-10
Laboratory Reference No. 1010-235

Dear Chris:

Enclosed are the analytical results and associated quality control data for samples submitted on October 27, 2010.

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,

David Baumeister
Project Manager

Enclosures

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

Case Narrative

Samples were collected on October 27, 2010 and received by the laboratory on October 27, 2010. 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: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

NWTPH-Gx/BTEX + MTBE

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWJ3-102710**					
Laboratory ID:	10-235-01					
MTBE	**ND**	10	EPA 8021	10-28-10	10-28-10	
Benzene	**ND**	1.0	EPA 8021	10-28-10	10-28-10	
Toluene	**ND**	1.0	EPA 8021	10-28-10	10-28-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	10-28-10	10-28-10	
m,p-Xylene	**ND**	1.0	EPA 8021	10-28-10	10-28-10	
o-Xylene	**ND**	1.0	EPA 8021	10-28-10	10-28-10	
Gasoline	**ND**	100	NWTPH-Gx	10-28-10	10-28-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*88*	*74-121*				
Client ID:	**MWJ4-102710**					
Laboratory ID:	10-235-02					
MTBE	**ND**	10	EPA 8021	10-28-10	10-28-10	
Benzene	**27**	1.0	EPA 8021	10-28-10	10-28-10	
Toluene	**ND**	1.0	EPA 8021	10-28-10	10-28-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	10-28-10	10-28-10	
m,p-Xylene	**ND**	1.0	EPA 8021	10-28-10	10-28-10	
o-Xylene	**ND**	1.0	EPA 8021	10-28-10	10-28-10	
Gasoline	**ND**	100	NWTPH-Gx	10-28-10	10-28-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*74-121*				

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

NWTPH-Gx/BTEX + MTBE
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1028W1					
MTBE	**ND**	10	EPA 8021	10-28-10	10-28-10	
Benzene	**ND**	1.0	EPA 8021	10-28-10	10-28-10	
Toluene	**ND**	1.0	EPA 8021	10-28-10	10-28-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	10-28-10	10-28-10	
m,p-Xylene	**ND**	1.0	EPA 8021	10-28-10	10-28-10	
o-Xylene	**ND**	1.0	EPA 8021	10-28-10	10-28-10	
Gasoline	**ND**	100	NWTPH-Gx	10-28-10	10-28-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*88*	*74-121*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-235-01										
	ORIG	DUP									
MTBE	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*88*	*89*	*74-121*			
MATRIX SPIKES											
Laboratory ID:	10-235-01										
	MS	MSD	MS	MSD		MS	MSD				
Benzene	**48.4**	**47.0**	50.0	50.0	ND	**97**	**94**	78-118	3	8	
Toluene	**49.8**	**48.1**	50.0	50.0	ND	**100**	**96**	81-119	3	8	
Ethyl Benzene	**49.0**	**46.7**	50.0	50.0	ND	**98**	**93**	81-121	5	8	
m,p-Xylene	**50.3**	**48.2**	50.0	50.0	ND	**101**	**96**	79-123	4	8	
o-Xylene	**50.6**	**47.9**	50.0	50.0	ND	**101**	**96**	79-121	5	8	
Surrogate:											
Fluorobenzene						*99*	*99*	*74-121*			

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

NWTPH-Dx
(with acid/silica gel clean-up)

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWJ3-102710**					
Laboratory ID:	10-235-01					
Diesel Range Organics	**ND**	0.27	NWTPH-Dx	11-2-10	11-2-10	
Lube Oil Range Organics	**ND**	0.43	NWTPH-Dx	11-2-10	11-2-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*114*	*50-150*				
Client ID:	**MWJ4-102710**					
Laboratory ID:	10-235-02					
Diesel Range Organics	**ND**	0.26	NWTPH-Dx	11-2-10	11-2-10	
Lube Oil Range Organics	**ND**	0.42	NWTPH-Dx	11-2-10	11-2-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*109*	*50-150*				

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

NWTPH-Dx
QUALITY CONTROL
(with acid/silica gel clean-up)

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1102W1					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	11-2-10	11-2-10	
Lube Oil Range Organics	**ND**	0.40	NWTPH-Dx	11-2-10	11-2-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				

Analyte	Result		Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE							
Laboratory ID:	10-235-01						
	ORIG	DUP					
Diesel Range Organics	**ND**	**ND**			NA	NA	
Lube Oil Range Organics	**ND**	**ND**			NA	NA	
Surrogate:							
o-Terphenyl			*114* *106*	*50-150*			

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted:	11-3-10
Date Analyzed:	11-3-10
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	10-235-01
Client ID:	**MWJ3-102710**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 10-235-01
Client ID: MWJ3-102710

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	96	71-126
Toluene-d8	90	76-116
4-Bromofluorobenzene	91	70-123

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted:	11-3-10
Date Analyzed:	11-3-10
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	10-235-02
Client ID:	**MWJ4-102710**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 10-235-02
Client ID: MWJ4-102710

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	93	71-126
Toluene-d8	86	76-116
4-Bromofluorobenzene	87	70-123

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
page 1 of 2

Date Extracted: 11-3-10
Date Analyzed: 11-3-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB1103W1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
page 2 of 2

Lab ID: MB1103W1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	99	71-126
Toluene-d8	89	76-116
4-Bromofluorobenzene	91	70-123

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
MS/MSD QUALITY CONTROL

Date Extracted: 11-3-10
Date Analyzed: 11-3-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 10-251-05

Compound	Sample Amount	Spike Amount	MS	Percent Recovery	MSD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	ND	10.0	12.2	122	11.9	119	70-130	
Benzene	ND	10.0	11.1	111	11.2	112	74-125	
Trichloroethene	ND	10.0	10.2	102	9.83	98	77-117	
Toluene	ND	10.0	10.4	104	10.3	103	79-119	
Chlorobenzene	ND	10.0	10.6	106	10.2	102	85-112	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	3	13	
Benzene	1	11	
Trichloroethene	4	11	
Toluene	1	11	
Chlorobenzene	5	10	

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

DISSOLVED LEAD
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	10-235-01					
Client ID:	**MWJ3-102710**					
Lead	**ND**	1.0	200.8		10-28-10	
Lab ID:	10-235-02					
Client ID:	**MWJ4-102710**					
Lead	**ND**	1.0	200.8		10-28-10	

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

DISSOLVED LEAD
EPA 200.8
METHOD BLANK QUALITY CONTROL

Date Analyzed: 10-28-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB1028D1

Analyte	Method	Result	PQL
Lead	200.8	**ND**	1.0

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

DISSOLVED LEAD
EPA 200.8
DUPLICATE QUALITY CONTROL

Date Analyzed: 10-28-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 10-235-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	**ND**	**ND**	NA	1.0	

Date of Report: November 4, 2010
Samples Submitted: October 27, 2010
Laboratory Reference: 1010-235
Project: 103-93320-10

DISSOLVED LEAD
EPA 200.8
MS/MSD QUALITY CONTROL

Date Analyzed: 10-28-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 10-235-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	200	**195**	98	**196**	98	0	

OnSite Environmental Inc.

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-napthalene) 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

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

Company: Golder Associates
Project Number: 103-93320-10
Project Name: HAL Ballard
Project Manager: Chris King
Sampled by: Kirsi Longley

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: 10-235

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX / MTBE	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	Dissolved lead						% Moisture
1	MWJ3-102710	10/27/10	930	W	9		X		X		X										X						
2	MWJ4-102710	"	1145	W	9		X		X		X										X						

	Signature	Company	Date	Time
Relinquished		Golder	10/27/10	1500
Received		CDE	10/27/10	1500
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions

field filtered

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

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

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 2, 2010

Chris King
Golder Associates Inc.
18300 NE Union Hill Road
Suite 200
Redmond, WA 98052-3333

Re: Analytical Data for Project 103-93320-10
Laboratory Reference No. 1010-200

Dear Chris:

Enclosed are the analytical results and associated quality control data for samples submitted on October 23, 2010.

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,

David Baumeister
Project Manager

Enclosures

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

Case Narrative

Samples were collected on October 22, 2010 and received by the laboratory on October 23, 2010. 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.

NWTPH Gx/BTEX 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: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

NWTPH-Gx/BTEX + MTBE

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWJ3-5**					
Laboratory ID:	10-200-02					
MTBE	**ND**	0.048	EPA 8021	10-28-10	10-28-10	
Benzene	**ND**	0.020	EPA 8021	10-28-10	10-29-10	
Toluene	**ND**	0.048	EPA 8021	10-28-10	10-29-10	
Ethyl Benzene	**ND**	0.048	EPA 8021	10-28-10	10-29-10	
m,p-Xylene	**ND**	0.048	EPA 8021	10-28-10	10-29-10	
o-Xylene	**ND**	0.048	EPA 8021	10-28-10	10-29-10	
Gasoline	**ND**	4.8	NWTPH-Gx	10-28-10	10-29-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*55-127*				
Client ID:	**MWJ3-15**					
Laboratory ID:	10-200-06					
MTBE	**ND**	0.042	EPA 8021	10-28-10	10-28-10	
Benzene	**ND**	0.020	EPA 8021	10-28-10	10-28-10	
Toluene	**ND**	0.042	EPA 8021	10-28-10	10-28-10	
Ethyl Benzene	**ND**	0.042	EPA 8021	10-28-10	10-28-10	
m,p-Xylene	**ND**	0.042	EPA 8021	10-28-10	10-28-10	
o-Xylene	**ND**	0.042	EPA 8021	10-28-10	10-28-10	
Gasoline	**ND**	4.2	NWTPH-Gx	10-28-10	10-28-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*55-127*				

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

NWTPH-Gx/BTEX + MTBE
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1028S2					
MTBE	**ND**	0.050	EPA 8021	10-28-10	10-28-10	
Benzene	**ND**	0.020	EPA 8021	10-28-10	10-29-10	
Toluene	**ND**	0.050	EPA 8021	10-28-10	10-29-10	
Ethyl Benzene	**ND**	0.050	EPA 8021	10-28-10	10-29-10	
m,p-Xylene	**ND**	0.050	EPA 8021	10-28-10	10-29-10	
o-Xylene	**ND**	0.050	EPA 8021	10-28-10	10-29-10	
Gasoline	**ND**	5.0	NWTPH-Gx	10-28-10	10-29-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*100*	*55-127*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-200-06										
	ORIG	DUP									
MTBE	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*91*	*88*	*55-127*			
SPIKE BLANKS											
Laboratory ID:	SB1028S1										
	SB	SBD	SB	SBD		SB	SBD				
Benzene	**0.859**	**0.882**	1.00	1.00		**86**	**88**	75-113	3	9	
Toluene	**0.898**	**0.918**	1.00	1.00		**90**	**92**	75-116	2	10	
Ethyl Benzene	**0.920**	**0.938**	1.00	1.00		**92**	**94**	82-117	2	10	
m,p-Xylene	**0.932**	**0.948**	1.00	1.00		**93**	**95**	81-122	2	10	
o-Xylene	**0.923**	**0.939**	1.00	1.00		**92**	**94**	83-118	2	10	
Surrogate:											
Fluorobenzene						*92*	*91*	*55-127*			

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

NWTPH-Dx
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWJ3-5**					
Laboratory ID:	10-200-02					
Diesel Range Organics	**ND**	29	NWTPH-Dx	10-25-10	10-25-10	
Lube Oil Range Organics	**ND**	58	NWTPH-Dx	10-25-10	10-25-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*96*	*50-150*				
Client ID:	**MWJ3-15**					
Laboratory ID:	10-200-06					
Diesel Range Organics	**ND**	28	NWTPH-Dx	10-25-10	10-25-10	
Lube Oil Range Organics	**ND**	55	NWTPH-Dx	10-25-10	10-25-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*88*	*50-150*				

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

NWTPH-Dx
QUALITY CONTROL
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1025S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	10-25-10	10-25-10	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	10-25-10	10-25-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*113*	*50-150*				

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result		Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE							
Laboratory ID:	10-187-07						
	ORIG	DUP					
Diesel Range Organics	**ND**	**ND**			NA	NA	
Lube Oil Range Organics	**ND**	**ND**			NA	NA	
Surrogate:							
o-Terphenyl			*103* *113*	*50-150*			

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted:	10-27-10
Date Analyzed:	10-27-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	10-200-02
Client ID:	**MWJ3-5**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00081
Chloromethane	ND		0.0041
Vinyl Chloride	ND		0.00081
Bromomethane	ND		0.00081
Chloroethane	ND		0.0041
Trichlorofluoromethane	ND		0.00081
1,1-Dichloroethene	ND		0.00081
Iodomethane	ND		0.0041
Methylene Chloride	ND		0.0041
(trans) 1,2-Dichloroethene	ND		0.00081
1,1-Dichloroethane	ND		0.00081
2,2-Dichloropropane	ND		0.00081
(cis) 1,2-Dichloroethene	ND		0.00081
Bromochloromethane	ND		0.00081
Chloroform	ND		0.00081
1,1,1-Trichloroethane	ND		0.00081
Carbon Tetrachloride	ND		0.00081
1,1-Dichloropropene	ND		0.00081
1,2-Dichloroethane	ND		0.00081
Trichloroethene	ND		0.00081
1,2-Dichloropropane	ND		0.00081
Dibromomethane	ND		0.00081
Bromodichloromethane	ND		0.00081
2-Chloroethyl Vinyl Ether	ND		0.0041
(cis) 1,3-Dichloropropene	ND		0.00081
(trans) 1,3-Dichloropropene	ND		0.00081

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 10-200-02
Client ID: MWJ3-5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00081
Tetrachloroethene	ND		0.016
1,3-Dichloropropane	ND		0.00081
Dibromochloromethane	ND		0.00081
1,2-Dibromoethane	ND		0.00081
Chlorobenzene	ND		0.00081
1,1,1,2-Tetrachloroethane	ND		0.00081
Bromoform	ND		0.00081
Bromobenzene	ND		0.00081
1,1,2,2-Tetrachloroethane	ND		0.00081
1,2,3-Trichloropropane	ND		0.00081
2-Chlorotoluene	ND		0.00081
4-Chlorotoluene	ND		0.00081
1,3-Dichlorobenzene	ND		0.00081
1,4-Dichlorobenzene	ND		0.00081
1,2-Dichlorobenzene	ND		0.00081
1,2-Dibromo-3-chloropropane	ND		0.0041
1,2,4-Trichlorobenzene	ND		0.00081
Hexachlorobutadiene	ND		0.0041
1,2,3-Trichlorobenzene	ND		0.00081

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	82	66-128
Toluene-d8	97	68-126
4-Bromofluorobenzene	92	53-134

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted:	10-27-10
Date Analyzed:	10-27-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	10-200-06
Client ID:	**MWJ3-15**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00077
Chloromethane	ND		0.0039
Vinyl Chloride	ND		0.00077
Bromomethane	ND		0.00077
Chloroethane	ND		0.0039
Trichlorofluoromethane	ND		0.00077
1,1-Dichloroethene	ND		0.00077
Iodomethane	ND		0.0039
Methylene Chloride	ND		0.0039
(trans) 1,2-Dichloroethene	ND		0.00077
1,1-Dichloroethane	ND		0.00077
2,2-Dichloropropane	ND		0.00077
(cis) 1,2-Dichloroethene	ND		0.00077
Bromochloromethane	ND		0.00077
Chloroform	ND		0.00077
1,1,1-Trichloroethane	ND		0.00077
Carbon Tetrachloride	ND		0.00077
1,1-Dichloropropene	ND		0.00077
1,2-Dichloroethane	ND		0.00077
Trichloroethene	ND		0.00077
1,2-Dichloropropane	ND		0.00077
Dibromomethane	ND		0.00077
Bromodichloromethane	ND		0.00077
2-Chloroethyl Vinyl Ether	ND		0.0039
(cis) 1,3-Dichloropropene	ND		0.00077
(trans) 1,3-Dichloropropene	ND		0.00077

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 10-200-06
Client ID: MWJ3-15

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00077
Tetrachloroethene	ND		0.015
1,3-Dichloropropane	ND		0.00077
Dibromochloromethane	ND		0.00077
1,2-Dibromoethane	ND		0.00077
Chlorobenzene	ND		0.00077
1,1,1,2-Tetrachloroethane	ND		0.00077
Bromoform	ND		0.00077
Bromobenzene	ND		0.00077
1,1,2,2-Tetrachloroethane	ND		0.00077
1,2,3-Trichloropropane	ND		0.00077
2-Chlorotoluene	ND		0.00077
4-Chlorotoluene	ND		0.00077
1,3-Dichlorobenzene	ND		0.00077
1,4-Dichlorobenzene	ND		0.00077
1,2-Dichlorobenzene	ND		0.00077
1,2-Dibromo-3-chloropropane	ND		0.0039
1,2,4-Trichlorobenzene	ND		0.00077
Hexachlorobutadiene	ND		0.0039
1,2,3-Trichlorobenzene	ND		0.00077

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	90	66-128
Toluene-d8	87	68-126
4-Bromofluorobenzene	87	53-134

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 1 of 2

Date Extracted: 10-27-10
Date Analyzed: 10-27-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB1027S1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0050
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0050
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Iodomethane	ND		0.0050
Methylene Chloride	ND		0.0050
(trans) 1,2-Dichloroethene	ND		0.0010
1,1-Dichloroethane	ND		0.0010
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0050
(cis) 1,3-Dichloropropene	ND		0.0010
(trans) 1,3-Dichloropropene	ND		0.0010

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Lab ID: MB1027S1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.020
1,3-Dichloropropane	ND		0.0010
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Bromoform	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0050
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0050
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	91	66-128
Toluene-d8	89	68-126
4-Bromofluorobenzene	91	53-134

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 10-27-10
Date Analyzed: 10-27-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB1027S1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	0.0500	0.0463	93	0.0465	93	70-130	
Benzene	0.0500	0.0457	91	0.0466	93	70-121	
Trichloroethene	0.0500	0.0466	93	0.0498	100	70-124	
Toluene	0.0500	0.0466	93	0.0516	103	70-123	
Chlorobenzene	0.0500	0.0446	89	0.0480	96	71-119	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	0	14	
Benzene	2	10	
Trichloroethene	7	12	
Toluene	10	12	
Chlorobenzene	7	9	

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

TOTAL LEAD
EPA 6010B

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	10-200-02					
Client ID:	**MWJ3-5**					
Lead	**ND**	5.8	6010B	10-27-10	10-27-10	
Lab ID:	10-200-06					
Client ID:	**MWJ3-15**					
Lead	**ND**	5.5	6010B	10-27-10	10-27-10	

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

TOTAL LEAD
EPA 6010B
METHOD BLANK QUALITY CONTROL

Date Extracted:	10-27-10
Date Analyzed:	10-27-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB1027S2

Analyte	Method	Result	PQL
Lead	6010B	**ND**	5.0

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

TOTAL LEAD
EPA 6010B
DUPLICATE QUALITY CONTROL

Date Extracted: 10-27-10
Date Analyzed: 10-27-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-206-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	**46.6**	**44.3**	5	5.0	

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

TOTAL LEAD
EPA 6010B
MS/MSD QUALITY CONTROL

Date Extracted: 10-27-10
Date Analyzed: 10-27-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-206-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	250	**256**	84	**240**	77	7	

Date of Report: November 2, 2010
Samples Submitted: October 23, 2010
Laboratory Reference: 1010-200
Project: 103-93320-10

% MOISTURE

Date Analyzed: 10-26-10

Client ID	Lab ID	% Moisture
MWJ3-5	10-200-02	13
MWJ3-15	10-200-06	9

OnSite Environmental Inc.

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-napthalene) 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.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 27, 2010

Chris King
Golder Associates Inc.
18300 NE Union Hill Road
Suite 200
Redmond, WA 98052-3333

Re: Analytical Data for Project 103-93320-10
Laboratory Reference No. 1010-144

Dear Chris:

Enclosed are the analytical results and associated quality control data for samples submitted on October 18, 2010.

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,

David Baumeister
Project Manager

Enclosures

Date of Report: October 27, 2010
Samples Submitted: October 18, 2010
Laboratory Reference: 1010-144
Project: 103-93320-10

Case Narrative

Samples were collected on October 17, 2010 and received by the laboratory on October 18, 2010. 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.

NWTPH Gx/BTEX 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.

The continuing calibration verification standards for MTBE are outside of the control limits on the high end. This could result in a high sample bias for MTBE; since all samples are non-detect for MTBE no further action was taken.

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.

Internal Standard 1,4-Dichlorobenzene-d4 does not meet acceptance criteria for sample MWJ2-2.5 due to sample matrix effects. The sample was re-analyzed with similar results. All results, including Practical Quantitation Limits, from Bromobenzene onward should be considered estimates.

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: October 27, 2010
Samples Submitted: October 18, 2010
Laboratory Reference: 1010-144
Project: 103-93320-10

NWTPH-Gx/BTEX + MTBE

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWJ1-5**					
Laboratory ID:	10-144-02					
MTBE	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
Benzene	**ND**	0.020	EPA 8021	10-20-10	10-20-10	
Toluene	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
Ethyl Benzene	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
m,p-Xylene	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
o-Xylene	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
Gasoline	**ND**	4.6	NWTPH-Gx	10-20-10	10-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*101*	*55-127*				
Client ID:	**MWJ1-12.5**					
Laboratory ID:	10-144-05					
MTBE	**ND**	0.047	EPA 8021	10-20-10	10-20-10	
Benzene	**ND**	0.020	EPA 8021	10-20-10	10-20-10	
Toluene	**ND**	0.047	EPA 8021	10-20-10	10-20-10	
Ethyl Benzene	**ND**	0.047	EPA 8021	10-20-10	10-20-10	
m,p-Xylene	**ND**	0.047	EPA 8021	10-20-10	10-20-10	
o-Xylene	**ND**	0.047	EPA 8021	10-20-10	10-20-10	
Gasoline	**ND**	4.7	NWTPH-Gx	10-20-10	10-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*103*	*55-127*				
Client ID:	**MWJ1-25**					
Laboratory ID:	10-144-08					
MTBE	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
Benzene	**ND**	0.020	EPA 8021	10-20-10	10-20-10	
Toluene	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
Ethyl Benzene	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
m,p-Xylene	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
o-Xylene	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
Gasoline	**ND**	4.6	NWTPH-Gx	10-20-10	10-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*105*	*55-127*				

Date of Report: October 27, 2010
Samples Submitted: October 18, 2010
Laboratory Reference: 1010-144
Project: 103-93320-10

NWTPH-Gx/BTEX + MTBE

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWJ2-2.5**					
Laboratory ID:	10-144-11					
MTBE	**ND**	0.048	EPA 8021	10-20-10	10-20-10	
Benzene	**ND**	0.020	EPA 8021	10-20-10	10-20-10	
Toluene	**ND**	0.048	EPA 8021	10-20-10	10-20-10	
Ethyl Benzene	**ND**	0.048	EPA 8021	10-20-10	10-20-10	
m,p-Xylene	**ND**	0.048	EPA 8021	10-20-10	10-20-10	
o-Xylene	**ND**	0.048	EPA 8021	10-20-10	10-20-10	
Gasoline	**ND**	4.8	NWTPH-Gx	10-20-10	10-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*113*	*55-127*				
Client ID:	**MWJ2-5**					
Laboratory ID:	10-144-12					
MTBE	**ND**	0.060	EPA 8021	10-20-10	10-20-10	
Benzene	**ND**	0.020	EPA 8021	10-20-10	10-20-10	
Toluene	**ND**	0.060	EPA 8021	10-20-10	10-20-10	
Ethyl Benzene	**ND**	0.060	EPA 8021	10-20-10	10-20-10	
m,p-Xylene	**ND**	0.060	EPA 8021	10-20-10	10-20-10	
o-Xylene	**ND**	0.060	EPA 8021	10-20-10	10-20-10	
Gasoline	**ND**	6.0	NWTPH-Gx	10-20-10	10-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*108*	*55-127*				
Client ID:	**MWJ2-7.5**					
Laboratory ID:	10-144-13					
MTBE	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
Benzene	**ND**	0.020	EPA 8021	10-20-10	10-20-10	
Toluene	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
Ethyl Benzene	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
m,p-Xylene	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
o-Xylene	**ND**	0.046	EPA 8021	10-20-10	10-20-10	
Gasoline	**ND**	4.6	NWTPH-Gx	10-20-10	10-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*103*	*55-127*				

Date of Report: October 27, 2010
Samples Submitted: October 18, 2010
Laboratory Reference: 1010-144
Project: 103-93320-10

NWTPH-Gx/BTEX + MTBE
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1020S2					
MTBE	**ND**	0.050	EPA 8021	10-20-10	10-22-10	
Benzene	**ND**	0.020	EPA 8021	10-20-10	10-22-10	
Toluene	**ND**	0.050	EPA 8021	10-20-10	10-22-10	
Ethyl Benzene	**ND**	0.050	EPA 8021	10-20-10	10-22-10	
m,p-Xylene	**ND**	0.050	EPA 8021	10-20-10	10-22-10	
o-Xylene	**ND**	0.050	EPA 8021	10-20-10	10-22-10	
Gasoline	**ND**	5.0	NWTPH-Gx	10-20-10	10-22-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*55-127*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-144-02										
	ORIG	DUP									
MTBE	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*101*	*99*	*55-127*			

SPIKE BLANKS										
Laboratory ID:	SB1020S1									
	SB	SBD	SB	SBD		SB	SBD			
Benzene	**0.998**	**1.00**	1.00	1.00		**100**	**100**	75-113	0	9
Toluene	**1.02**	**1.02**	1.00	1.00		**102**	**102**	75-116	0	10
Ethyl Benzene	**1.02**	**1.02**	1.00	1.00		**102**	**102**	82-117	0	10
m,p-Xylene	**1.03**	**1.03**	1.00	1.00		**103**	**103**	81-122	0	10
o-Xylene	**1.02**	**1.02**	1.00	1.00		**102**	**102**	83-118	0	10
Surrogate:										
Fluorobenzene						*102*	*101*	*55-127*		

Date of Report: October 27, 2010
Samples Submitted: October 18, 2010
Laboratory Reference: 1010-144
Project: 103-93320-10

NWTPH-Dx
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWJ1-5**					
Laboratory ID:	10-144-02					
Diesel Range Organics	**ND**	28	NWTPH-Dx	10-20-10	10-20-10	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	10-20-10	10-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				
Client ID:	**MWJ1-12.5**					
Laboratory ID:	10-144-05					
Diesel Range Organics	**ND**	29	NWTPH-Dx	10-20-10	10-20-10	
Lube Oil Range Organics	**ND**	57	NWTPH-Dx	10-20-10	10-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*101*	*50-150*				
Client ID:	**MWJ1-25**					
Laboratory ID:	10-144-08					
Diesel Range Organics	**ND**	29	NWTPH-Dx	10-20-10	10-20-10	
Lube Oil Range Organics	**ND**	58	NWTPH-Dx	10-20-10	10-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*95*	*50-150*				
Client ID:	**MWJ2-2.5**					
Laboratory ID:	10-144-11					
Diesel Range Organics	**ND**	30	NWTPH-Dx	10-20-10	10-20-10	
Lube Oil Range Organics	**ND**	60	NWTPH-Dx	10-20-10	10-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*103*	*50-150*				
Client ID:	**MWJ2-5**					
Laboratory ID:	10-144-12					
Diesel Range Organics	**ND**	31	NWTPH-Dx	10-20-10	10-20-10	
Lube Oil Range Organics	**ND**	62	NWTPH-Dx	10-20-10	10-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*100*	*50-150*				
Client ID:	**MWJ2-7.5**					
Laboratory ID:	10-144-13					
Diesel Range Organics	**ND**	27	NWTPH-Dx	10-20-10	10-20-10	
Lube Oil Range Organics	**ND**	55	NWTPH-Dx	10-20-10	10-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*101*	*50-150*				

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NWTPH-Dx
QUALITY CONTROL
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1020S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	10-20-10	10-20-10	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	10-20-10	10-20-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*112*	*50-150*				

Analyte	Result		Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE							
Laboratory ID:	10-144-13						
	ORIG	DUP					
Diesel Range Organics	**ND**	**ND**			NA	NA	
Lube Oil Range Organics	**ND**	**ND**			NA	NA	
Surrogate:							
o-Terphenyl			*101* *102*	*50-150*			

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Date Extracted:	10-19-10
Date Analyzed:	10-19-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	10-144-02
Client ID:	**MWJ1-5**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00081
Chloromethane	ND		0.0041
Vinyl Chloride	ND		0.00081
Bromomethane	ND		0.00081
Chloroethane	ND		0.0041
Trichlorofluoromethane	ND		0.00081
1,1-Dichloroethene	ND		0.00081
Iodomethane	ND		0.0041
Methylene Chloride	ND		0.0041
(trans) 1,2-Dichloroethene	ND		0.00081
1,1-Dichloroethane	ND		0.00081
2,2-Dichloropropane	ND		0.00081
(cis) 1,2-Dichloroethene	ND		0.00081
Bromochloromethane	ND		0.00081
Chloroform	ND		0.00081
1,1,1-Trichloroethane	ND		0.00081
Carbon Tetrachloride	ND		0.00081
1,1-Dichloropropene	ND		0.00081
1,2-Dichloroethane	ND		0.00081
Trichloroethene	ND		0.00081
1,2-Dichloropropane	ND		0.00081
Dibromomethane	ND		0.00081
Bromodichloromethane	ND		0.00081
2-Chloroethyl Vinyl Ether	ND		0.0041
(cis) 1,3-Dichloropropene	ND		0.00081
(trans) 1,3-Dichloropropene	ND		0.00081

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Lab ID: 10-144-02
Client ID: MWJ1-5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00081
Tetrachloroethene	ND		0.00081
1,3-Dichloropropane	ND		0.00081
Dibromochloromethane	ND		0.00081
1,2-Dibromoethane	ND		0.00081
Chlorobenzene	ND		0.00081
1,1,1,2-Tetrachloroethane	ND		0.00081
Bromoform	ND		0.00081
Bromobenzene	ND		0.00081
1,1,2,2-Tetrachloroethane	ND		0.00081
1,2,3-Trichloropropane	ND		0.00081
2-Chlorotoluene	ND		0.00081
4-Chlorotoluene	ND		0.00081
1,3-Dichlorobenzene	ND		0.00081
1,4-Dichlorobenzene	ND		0.00081
1,2-Dichlorobenzene	ND		0.00081
1,2-Dibromo-3-chloropropane	ND		0.0041
1,2,4-Trichlorobenzene	ND		0.00081
Hexachlorobutadiene	ND		0.0041
1,2,3-Trichlorobenzene	ND		0.00081

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	83	66-128
Toluene-d8	85	68-126
4-Bromofluorobenzene	85	53-134

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Date Extracted: 10-19-10
Date Analyzed: 10-19-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-144-05
Client ID: MWJ1-12.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00087
Chloromethane	ND		0.0043
Vinyl Chloride	ND		0.00087
Bromomethane	ND		0.00087
Chloroethane	ND		0.0043
Trichlorofluoromethane	ND		0.00087
1,1-Dichloroethene	ND		0.00087
Iodomethane	ND		0.0043
Methylene Chloride	ND		0.0043
(trans) 1,2-Dichloroethene	ND		0.00087
1,1-Dichloroethane	ND		0.00087
2,2-Dichloropropane	ND		0.00087
(cis) 1,2-Dichloroethene	ND		0.00087
Bromochloromethane	ND		0.00087
Chloroform	ND		0.00087
1,1,1-Trichloroethane	ND		0.00087
Carbon Tetrachloride	ND		0.00087
1,1-Dichloropropene	ND		0.00087
1,2-Dichloroethane	ND		0.00087
Trichloroethene	ND		0.00087
1,2-Dichloropropane	ND		0.00087
Dibromomethane	ND		0.00087
Bromodichloromethane	ND		0.00087
2-Chloroethyl Vinyl Ether	ND		0.0043
(cis) 1,3-Dichloropropene	ND		0.00087
(trans) 1,3-Dichloropropene	ND		0.00087

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Lab ID: 10-144-05
Client ID: MWJ1-12.5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00087
Tetrachloroethene	ND		0.00087
1,3-Dichloropropane	ND		0.00087
Dibromochloromethane	ND		0.00087
1,2-Dibromoethane	ND		0.00087
Chlorobenzene	ND		0.00087
1,1,1,2-Tetrachloroethane	ND		0.00087
Bromoform	ND		0.00087
Bromobenzene	ND		0.00087
1,1,2,2-Tetrachloroethane	ND		0.00087
1,2,3-Trichloropropane	ND		0.00087
2-Chlorotoluene	ND		0.00087
4-Chlorotoluene	ND		0.00087
1,3-Dichlorobenzene	ND		0.00087
1,4-Dichlorobenzene	ND		0.00087
1,2-Dichlorobenzene	ND		0.00087
1,2-Dibromo-3-chloropropane	ND		0.0043
1,2,4-Trichlorobenzene	ND		0.00087
Hexachlorobutadiene	ND		0.0043
1,2,3-Trichlorobenzene	ND		0.00087

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	89	66-128
Toluene-d8	88	68-126
4-Bromofluorobenzene	88	53-134

Date of Report: October 27, 2010
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Date Extracted:	10-19-10
Date Analyzed:	10-19-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	10-144-08
Client ID:	**MWJ1-25**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00079
Chloromethane	ND		0.0040
Vinyl Chloride	ND		0.00079
Bromomethane	ND		0.00079
Chloroethane	ND		0.0040
Trichlorofluoromethane	ND		0.00079
1,1-Dichloroethene	ND		0.00079
Iodomethane	ND		0.0040
Methylene Chloride	ND		0.0040
(trans) 1,2-Dichloroethene	ND		0.00079
1,1-Dichloroethane	ND		0.00079
2,2-Dichloropropane	ND		0.00079
(cis) 1,2-Dichloroethene	ND		0.00079
Bromochloromethane	ND		0.00079
Chloroform	ND		0.00079
1,1,1-Trichloroethane	ND		0.00079
Carbon Tetrachloride	ND		0.00079
1,1-Dichloropropene	ND		0.00079
1,2-Dichloroethane	ND		0.00079
Trichloroethene	ND		0.00079
1,2-Dichloropropane	ND		0.00079
Dibromomethane	ND		0.00079
Bromodichloromethane	ND		0.00079
2-Chloroethyl Vinyl Ether	ND		0.0040
(cis) 1,3-Dichloropropene	ND		0.00079
(trans) 1,3-Dichloropropene	ND		0.00079

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Lab ID: 10-144-08
Client ID: MWJ1-25

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00079
Tetrachloroethene	ND		0.00079
1,3-Dichloropropane	ND		0.00079
Dibromochloromethane	ND		0.00079
1,2-Dibromoethane	ND		0.00079
Chlorobenzene	ND		0.00079
1,1,1,2-Tetrachloroethane	ND		0.00079
Bromoform	ND		0.00079
Bromobenzene	ND		0.00079
1,1,2,2-Tetrachloroethane	ND		0.00079
1,2,3-Trichloropropane	ND		0.00079
2-Chlorotoluene	ND		0.00079
4-Chlorotoluene	ND		0.00079
1,3-Dichlorobenzene	ND		0.00079
1,4-Dichlorobenzene	ND		0.00079
1,2-Dichlorobenzene	ND		0.00079
1,2-Dibromo-3-chloropropane	ND		0.0040
1,2,4-Trichlorobenzene	ND		0.00079
Hexachlorobutadiene	ND		0.0040
1,2,3-Trichlorobenzene	ND		0.00079

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	83	66-128
Toluene-d8	90	68-126
4-Bromofluorobenzene	89	53-134

Date of Report: October 27, 2010
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Date Extracted: 10-19-10
Date Analyzed: 10-19-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-144-11
Client ID: MWJ2-2.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00078
Chloromethane	ND		0.0039
Vinyl Chloride	ND		0.00078
Bromomethane	ND		0.00078
Chloroethane	ND		0.0039
Trichlorofluoromethane	ND		0.00078
1,1-Dichloroethene	ND		0.00078
Iodomethane	ND		0.0039
Methylene Chloride	ND		0.0039
(trans) 1,2-Dichloroethene	ND		0.00078
1,1-Dichloroethane	ND		0.00078
2,2-Dichloropropane	ND		0.00078
(cis) 1,2-Dichloroethene	ND		0.00078
Bromochloromethane	ND		0.00078
Chloroform	ND		0.00078
1,1,1-Trichloroethane	ND		0.00078
Carbon Tetrachloride	ND		0.00078
1,1-Dichloropropene	ND		0.00078
1,2-Dichloroethane	ND		0.00078
Trichloroethene	ND		0.00078
1,2-Dichloropropane	ND		0.00078
Dibromomethane	ND		0.00078
Bromodichloromethane	ND		0.00078
2-Chloroethyl Vinyl Ether	ND		0.0039
(cis) 1,3-Dichloropropene	ND		0.00078
(trans) 1,3-Dichloropropene	ND		0.00078

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Lab ID: 10-144-11
Client ID: MWJ2-2.5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00078
Tetrachloroethene	0.0074		0.00078
1,3-Dichloropropane	ND		0.00078
Dibromochloromethane	ND		0.00078
1,2-Dibromoethane	ND		0.00078
Chlorobenzene	ND		0.00078
1,1,1,2-Tetrachloroethane	ND		0.00078
Bromoform	ND		0.00078
Bromobenzene	ND		0.00078
1,1,2,2-Tetrachloroethane	ND		0.00078
1,2,3-Trichloropropane	ND		0.00078
2-Chlorotoluene	ND		0.00078
4-Chlorotoluene	ND		0.00078
1,3-Dichlorobenzene	ND		0.00078
1,4-Dichlorobenzene	ND		0.00078
1,2-Dichlorobenzene	ND		0.00078
1,2-Dibromo-3-chloropropane	ND		0.0039
1,2,4-Trichlorobenzene	ND		0.00078
Hexachlorobutadiene	ND		0.0039
1,2,3-Trichlorobenzene	ND		0.00078

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	93	66-128
Toluene-d8	88	68-126
4-Bromofluorobenzene	67	53-134

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Date Extracted: 10-19-10
Date Analyzed: 10-19-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-144-12
Client ID: MWJ2-5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00095
Chloromethane	ND		0.0048
Vinyl Chloride	ND		0.00095
Bromomethane	ND		0.00095
Chloroethane	ND		0.0048
Trichlorofluoromethane	ND		0.00095
1,1-Dichloroethene	ND		0.00095
Iodomethane	ND		0.0048
Methylene Chloride	ND		0.0048
(trans) 1,2-Dichloroethene	ND		0.00095
1,1-Dichloroethane	ND		0.00095
2,2-Dichloropropane	ND		0.00095
(cis) 1,2-Dichloroethene	ND		0.00095
Bromochloromethane	ND		0.00095
Chloroform	ND		0.00095
1,1,1-Trichloroethane	ND		0.00095
Carbon Tetrachloride	ND		0.00095
1,1-Dichloropropene	ND		0.00095
1,2-Dichloroethane	ND		0.00095
Trichloroethene	ND		0.00095
1,2-Dichloropropane	ND		0.00095
Dibromomethane	ND		0.00095
Bromodichloromethane	ND		0.00095
2-Chloroethyl Vinyl Ether	ND		0.0048
(cis) 1,3-Dichloropropene	ND		0.00095
(trans) 1,3-Dichloropropene	ND		0.00095

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Lab ID: 10-144-12
Client ID: MWJ2-5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00095
Tetrachloroethene	0.0018		0.00095
1,3-Dichloropropane	ND		0.00095
Dibromochloromethane	ND		0.00095
1,2-Dibromoethane	ND		0.00095
Chlorobenzene	ND		0.00095
1,1,1,2-Tetrachloroethane	ND		0.00095
Bromoform	ND		0.00095
Bromobenzene	ND		0.00095
1,1,2,2-Tetrachloroethane	ND		0.00095
1,2,3-Trichloropropane	ND		0.00095
2-Chlorotoluene	ND		0.00095
4-Chlorotoluene	ND		0.00095
1,3-Dichlorobenzene	ND		0.00095
1,4-Dichlorobenzene	ND		0.00095
1,2-Dichlorobenzene	ND		0.00095
1,2-Dibromo-3-chloropropane	ND		0.0048
1,2,4-Trichlorobenzene	ND		0.00095
Hexachlorobutadiene	ND		0.0048
1,2,3-Trichlorobenzene	ND		0.00095

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	84	66-128
Toluene-d8	86	68-126
4-Bromofluorobenzene	85	53-134

Date of Report: October 27, 2010
Samples Submitted: October 18, 2010
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Date Extracted:	10-19-10
Date Analyzed:	10-19-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	10-144-13
Client ID:	**MWJ2-7.5**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00078
Chloromethane	ND		0.0039
Vinyl Chloride	ND		0.00078
Bromomethane	ND		0.00078
Chloroethane	ND		0.0039
Trichlorofluoromethane	ND		0.00078
1,1-Dichloroethene	ND		0.00078
Iodomethane	ND		0.0039
Methylene Chloride	ND		0.0039
(trans) 1,2-Dichloroethene	ND		0.00078
1,1-Dichloroethane	ND		0.00078
2,2-Dichloropropane	ND		0.00078
(cis) 1,2-Dichloroethene	ND		0.00078
Bromochloromethane	ND		0.00078
Chloroform	ND		0.00078
1,1,1-Trichloroethane	ND		0.00078
Carbon Tetrachloride	ND		0.00078
1,1-Dichloropropene	ND		0.00078
1,2-Dichloroethane	ND		0.00078
Trichloroethene	ND		0.00078
1,2-Dichloropropane	ND		0.00078
Dibromomethane	ND		0.00078
Bromodichloromethane	ND		0.00078
2-Chloroethyl Vinyl Ether	ND		0.0039
(cis) 1,3-Dichloropropene	ND		0.00078
(trans) 1,3-Dichloropropene	ND		0.00078

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Lab ID: 10-144-13
Client ID: MWJ2-7.5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00078
Tetrachloroethene	ND		0.00078
1,3-Dichloropropane	ND		0.00078
Dibromochloromethane	ND		0.00078
1,2-Dibromoethane	ND		0.00078
Chlorobenzene	ND		0.00078
1,1,1,2-Tetrachloroethane	ND		0.00078
Bromoform	ND		0.00078
Bromobenzene	ND		0.00078
1,1,2,2-Tetrachloroethane	ND		0.00078
1,2,3-Trichloropropane	ND		0.00078
2-Chlorotoluene	ND		0.00078
4-Chlorotoluene	ND		0.00078
1,3-Dichlorobenzene	ND		0.00078
1,4-Dichlorobenzene	ND		0.00078
1,2-Dichlorobenzene	ND		0.00078
1,2-Dibromo-3-chloropropane	ND		0.0039
1,2,4-Trichlorobenzene	ND		0.00078
Hexachlorobutadiene	ND		0.0039
1,2,3-Trichlorobenzene	ND		0.00078

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	89	66-128
Toluene-d8	89	68-126
4-Bromofluorobenzene	87	53-134

Date of Report: October 27, 2010
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Laboratory Reference: 1010-144
Project: 103-93320-10

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METHOD BLANK QUALITY CONTROL
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Date Extracted: 10-19-10
Date Analyzed: 10-19-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB1019S1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0050
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0050
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Iodomethane	ND		0.0050
Methylene Chloride	ND		0.0050
(trans) 1,2-Dichloroethene	ND		0.0010
1,1-Dichloroethane	ND		0.0010
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0050
(cis) 1,3-Dichloropropene	ND		0.0010
(trans) 1,3-Dichloropropene	ND		0.0010

Date of Report: October 27, 2010
Samples Submitted: October 18, 2010
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Project: 103-93320-10

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METHOD BLANK QUALITY CONTROL
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Lab ID: MB1019S1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.0010
1,3-Dichloropropane	ND		0.0010
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Bromoform	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0050
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0050
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	88	66-128
Toluene-d8	85	68-126
4-Bromofluorobenzene	88	53-134

Date of Report: October 27, 2010
Samples Submitted: October 18, 2010
Laboratory Reference: 1010-144
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 10-19-10
Date Analyzed: 10-19-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB1019S1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	0.0500	0.0457	91	0.0461	92	70-130	
Benzene	0.0500	0.0462	92	0.0480	96	70-121	
Trichloroethene	0.0500	0.0468	94	0.0468	94	70-124	
Toluene	0.0500	0.0482	96	0.0483	97	70-123	
Chlorobenzene	0.0500	0.0470	94	0.0470	94	71-119	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	1	14	
Benzene	4	10	
Trichloroethene	0	12	
Toluene	0	12	
Chlorobenzene	0	9	

Date of Report: October 27, 2010
Samples Submitted: October 18, 2010
Laboratory Reference: 1010-144
Project: 103-93320-10

TOTAL LEAD
EPA 6010B

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	10-144-02					
Client ID:	**MWJ1-5**					
Lead	**7.8**	5.6	6010B	10-20-10	10-20-10	
Lab ID:	10-144-05					
Client ID:	**MWJ1-12.5**					
Lead	**ND**	5.7	6010B	10-20-10	10-20-10	
Lab ID:	10-144-08					
Client ID:	**MWJ1-25**					
Lead	**ND**	5.8	6010B	10-20-10	10-20-10	
Lab ID:	10-144-11					
Client ID:	**MWJ2-2.5**					
Lead	**25**	6.0	6010B	10-20-10	10-20-10	
Lab ID:	10-144-12					
Client ID:	**MWJ2-5**					
Lead	**6.5**	6.2	6010B	10-20-10	10-20-10	
Lab ID:	10-144-13					
Client ID:	**MWJ2-7.5**					
Lead	**ND**	5.5	6010B	10-20-10	10-20-10	

Date of Report: October 27, 2010
Samples Submitted: October 18, 2010
Laboratory Reference: 1010-144
Project: 103-93320-10

TOTAL LEAD
EPA 6010B
METHOD BLANK QUALITY CONTROL

Date Extracted:	10-20-10
Date Analyzed:	10-20-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB1020S3

Analyte	Method	Result	PQL
Lead	6010B	**ND**	5.0

Date of Report: October 27, 2010
Samples Submitted: October 18, 2010
Laboratory Reference: 1010-144
Project: 103-93320-10

TOTAL LEAD
EPA 6010B
DUPLICATE QUALITY CONTROL

Date Extracted: 10-20-10
Date Analyzed: 10-20-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-144-13

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	**ND**	**5.65**	NA	5.0	

Date of Report: October 27, 2010
Samples Submitted: October 18, 2010
Laboratory Reference: 1010-144
Project: 103-93320-10

TOTAL LEAD
EPA 6010B
MS/MSD QUALITY CONTROL

Date Extracted: 10-20-10
Date Analyzed: 10-20-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 10-144-13

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	250	**209**	84	**208**	83	1	

Date of Report: October 27, 2010
Samples Submitted: October 18, 2010
Laboratory Reference: 1010-144
Project: 103-93320-10

% MOISTURE

Date Analyzed: 10-20-10

Client ID	Lab ID	% Moisture
MWJ1-5	10-144-02	10
MWJ1-12.5	10-144-05	12
MWJ1-25	10-144-08	14
MWJ2-2.5	10-144-11	16
MWJ2-5	10-144-12	20
MWJ2-7.5	10-144-13	9

OnSite Environmental Inc.

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-napthalene) 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

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

Laboratory Number: 10-144

Company: Golder Associates
Project Number: 103-93320-10
Project Name: HAL - BALLARD
Project Manager: CHAS KING / MEL GILHAM
Sampled by: T. Sager

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	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX / MTBE	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	Total Lead					% Moisture
1	MWJ1-2.5	10/17/10	0945	Soil	5																					
2	MWJ1-5	10/17/10	0955	Soil	5		✓		✓		✓										✓					X
3	MWJ1-7.5	10/17/10	1008	Soil	5																					
4	MWJ1-10	10/17/10	1019	Soil	5																					
5	MWJ1-12.5	10/17/10	1030 CAT TLS 10/18/10	Soil	5		✓		✓		✓										✓					X
6	MWJ1-15	10/17/10	1041	Soil	5																					
7	MWJ1-20	10/17/10	1055	Soil	5																					
8	MWJ1-25	10/17/10	1117	Soil	5		✓		✓		✓										✓					X
9	MWJ1-30	10/17/10	1132	Soil	5																					
10	MWJ1-35	10/17/10	1217	Soil	5																					

	Signature	Company	Date	Time
Relinquished		Golder Assoc.	10/13/10	1900
Received		Golder Assoc	10/17/10	1900
Relinquished		Golder Assoc	10/18/10	10:58
Received		CDE	10/18/10	1058
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Chromatograms with final report ☐

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

Chain of Custody

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

Company: GOLDER ASSOCIATES
Project Number: 103-93320-10
Project Name: HAL-BALLARD
Project Manager: CHRIS KING / NEIL GILHAM
Sampled by: T. Sager

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: 10-144

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX/MTBE	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	Total Lead						% Moisture
11	MWJ2-2.5	10/17/10	1410	Soil	5		✓		✓		✓										✓						X
12	MWJ2-5	10/17/10	1423	Soil	5		✓		✓		✓										✓						↓
13	MWJ2-7.5	10/17/10	1428	Soil	5		✓		✓		✓										✓						↓

	Signature	Company	Date	Time
Relinquished		Golder Assoc.	10/17/10	1900
Received		Golder	10/17/10	1900
Relinquished		Golder	10/18/10	10:58am
Received		OSE	10/18/10	1058
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Chromatograms with final report ☐

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

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 28, 2010

Chris King
Golder Associates Inc.
18300 NE Union Hill Road
Suite 200
Redmond, WA 98052-3333

Re: Analytical Data for Project 103-93320-10
Laboratory Reference No. 1010-183

Dear Chris:

Enclosed are the analytical results and associated quality control data for samples submitted on October 21, 2010.

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,

David Baumeister
Project Manager

Enclosures

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

Case Narrative

Samples were collected on October 21, 2010 and received by the laboratory on October 21, 2010. 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: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

NWTPH-Gx/BTEX + MTBE

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWJ1-102110**					
Laboratory ID:	10-183-01					
MTBE	**ND**	10	EPA 8021	10-26-10	10-26-10	
Benzene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
Toluene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
m,p-Xylene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
o-Xylene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
Gasoline	**ND**	100	NWTPH-Gx	10-26-10	10-26-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*91*	*74-121*				

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

NWTPH-Gx/BTEX + MTBE
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1026W2					
MTBE	**ND**	10	EPA 8021	10-26-10	10-26-10	
Benzene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
Toluene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
m,p-Xylene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
o-Xylene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
Gasoline	**ND**	100	NWTPH-Gx	10-26-10	10-26-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*91*	*74-121*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-179-04										
	ORIG	DUP									
Benzene	**1.91**	**1.78**	NA	NA		NA		NA	7	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*91*	*91*	*74-121*			
MATRIX SPIKES											
Laboratory ID:	10-199-02										
	MS	MSD	MS	MSD		MS	MSD				
Benzene	**48.8**	**48.3**	50.0	50.0	ND	**98**	**97**	78-118	1	8	
Toluene	**49.5**	**49.0**	50.0	50.0	ND	**99**	**98**	81-119	1	8	
Ethyl Benzene	**50.2**	**49.9**	50.0	50.0	ND	**100**	**100**	81-121	1	8	
m,p-Xylene	**49.9**	**49.3**	50.0	50.0	ND	**100**	**99**	79-123	1	8	
o-Xylene	**49.3**	**48.8**	50.0	50.0	ND	**99**	**98**	79-121	1	8	
Surrogate:											
Fluorobenzene						*101*	*95*	*74-121*			

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

NWTPH-Dx
(with acid/silica gel clean-up)

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWJ1-102110**					
Laboratory ID:	10-183-01					
Diesel Range Organics	**ND**	0.26	NWTPH-Dx	10-21-10	10-21-10	
Lube Oil Range Organics	**ND**	0.42	NWTPH-Dx	10-21-10	10-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*90*	*50-150*				

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

NWTPH-Dx
QUALITY CONTROL
(with acid/silica gel clean-up)

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1021W1					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	10-21-10	10-21-10	
Lube Oil Range Organics	**ND**	0.40	NWTPH-Dx	10-21-10	10-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*91*	*50-150*				

Analyte	Result		Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE							
Laboratory ID:	10-173-07						
	ORIG	DUP					
Diesel Range Organics	**ND**	**ND**			NA	NA	
Lube Oil Range Organics	**ND**	**ND**			NA	NA	
Surrogate:							
o-Terphenyl			*88* *94*	*50-150*			

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted: 10-21-10
Date Analyzed: 10-21-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 10-183-01
Client ID: MWJ1-102110

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 10-183-01
Client ID: MWJ1-102110

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	90	71-126
Toluene-d8	92	76-116
4-Bromofluorobenzene	84	70-123

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 1 of 2

Date Extracted: 10-21-10
Date Analyzed: 10-21-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB1021W1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Lab ID: MB1021W1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	93	71-126
Toluene-d8	90	76-116
4-Bromofluorobenzene	86	70-123

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
MS/MSD QUALITY CONTROL

Date Extracted: 10-21-10
Date Analyzed: 10-21-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 10-183-01

Compound	Sample Amount	Spike Amount	MS	Percent Recovery	MSD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	ND	10.0	9.66	97	9.30	93	70-130	
Benzene	ND	10.0	10.1	101	10.2	102	74-125	
Trichloroethene	ND	10.0	10.1	101	10.1	101	77-117	
Toluene	ND	10.0	10.4	104	10.4	104	79-119	
Chlorobenzene	ND	10.0	10.3	103	10.2	102	85-112	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	4	13	
Benzene	1	11	
Trichloroethene	1	11	
Toluene	0	11	
Chlorobenzene	1	10	

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

DISSOLVED LEAD
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	10-183-01					
Client ID:	**MWJ1-102110**					
Lead	**ND**	1.0	200.8		10-25-10	

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

DISSOLVED LEAD
EPA 200.8
METHOD BLANK QUALITY CONTROL

Date Analyzed:	10-25-10
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	MB1025D1

Analyte	Method	Result	PQL
Lead	200.8	**ND**	1.0

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

DISSOLVED LEAD
EPA 200.8
DUPLICATE QUALITY CONTROL

Date Analyzed: 10-25-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 10-183-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	**ND**	**ND**	NA	1.0	

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

DISSOLVED LEAD
EPA 200.8
MS/MSD QUALITY CONTROL

Date Analyzed: 10-25-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 10-183-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD
Lead	200	**198**	99	**198**	99	0

OnSite Environmental Inc.

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-napthalene) 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

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

Company: Golder Associates
Project Number: 103-93320-10
Project Name: AAL Ballard
Project Manager: Chris King
Sampled by: Kirsi Longley

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: 10-183

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX & MTBE	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/Dissolved (circle one) RCRA Metals + Lead	TCLP Metals	HEM (oil and grease) 1664	% Moisture
1	MWJ1-102110	10/21/10	1115	W	9		X		X		X							X			

	Signature	Company	Date	Time
Relinquished		Golder	10/21/10	1320
Received			10/21/10	1320
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions

* Field Filtered

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☒ Ecology EIM Format

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

September 21, 2010

Neil Gilham
Golder Associates Inc.
18300 NE Union Hill Road
Suite 200
Redmond, WA 98052-3333

Re: Analytical Data for Project 103-93320
Laboratory Reference No. 1009-101

Dear Neil:

Enclosed are the analytical results and associated quality control data for samples submitted on September 11, 2010.

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,

David Baumeister
Project Manager

Enclosures

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

Case Narrative

Samples were collected on September 10, 2010 and received by the laboratory on September 11, 2010. 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.

NWTPH Gx/BTEX 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.

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.

Internal Standard 1,4-Dichlorobenzene-d4 does not meet acceptance criteria for samples GP3-2 and GP5-5 due to sample matrix effects. The samples were reanalyzed with similar results. All results, including Practical Quantitation Limits, from Bromobenzene onward should be considered estimates.

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 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP1-3**					
Laboratory ID:	09-101-01					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-17-10	
Toluene	**ND**	0.048	EPA 8021	9-17-10	9-17-10	
Ethyl Benzene	**ND**	0.048	EPA 8021	9-17-10	9-17-10	
m,p-Xylene	**ND**	0.048	EPA 8021	9-17-10	9-17-10	
o-Xylene	**ND**	0.048	EPA 8021	9-17-10	9-17-10	
Gasoline	**ND**	4.8	NWTPH-Gx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*105*	*55-127*				
Client ID:	**GP1-7**					
Laboratory ID:	09-101-02					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.054	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.054	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.054	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.054	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	5.4	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*96*	*55-127*				
Client ID:	**GP2-2**					
Laboratory ID:	09-101-03					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.069	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.069	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.069	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.069	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	6.9	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*97*	*55-127*				

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP2-10**					
Laboratory ID:	09-101-04					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.050	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.050	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.050	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.050	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	5.0	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*95*	*55-127*				
Client ID:	**GP3-2**					
Laboratory ID:	09-101-05					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.078	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.078	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.078	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.078	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	7.8	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*79*	*55-127*				
Client ID:	**GP3-10**					
Laboratory ID:	09-101-06					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	4.9	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*55-127*				

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP4-3**					
Laboratory ID:	09-101-07					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.063	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.063	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.063	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.063	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	6.3	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*102*	*55-127*				
Client ID:	**GP4-10**					
Laboratory ID:	09-101-08					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	4.9	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*55-127*				
Client ID:	**GP5-5**					
Laboratory ID:	09-101-09					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.074	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.074	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.074	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.074	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	7.4	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*78*	*55-127*				

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP5-10**					
Laboratory ID:	09-101-10					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.056	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.056	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.056	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.056	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	5.6	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*91*	*55-127*				
Client ID:	**GP6-2**					
Laboratory ID:	09-101-11					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	4.9	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*55-127*				
Client ID:	**GP6-6**					
Laboratory ID:	09-101-12					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.052	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.052	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.052	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.052	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	5.2	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*96*	*55-127*				

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP7-3**					
Laboratory ID:	09-101-13					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.046	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.046	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.046	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.046	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	4.6	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*55-127*				
Client ID:	**GP7-10**					
Laboratory ID:	09-101-14					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.049	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	4.9	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*93*	*55-127*				
Client ID:	**GP8-3**					
Laboratory ID:	09-101-15					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.072	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.072	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.072	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.072	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	7.2	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*95*	*55-127*				

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

NWTPH-Gx/BTEX

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP8-10**					
Laboratory ID:	09-101-16					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.051	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.051	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.051	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.051	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	5.1	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*95*	*55-127*				
Client ID:	**GP9-2**					
Laboratory ID:	09-101-17					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.067	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.067	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.067	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.067	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	6.7	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*95*	*55-127*				
Client ID:	**GP9-7**					
Laboratory ID:	09-101-18					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-19-10	
Toluene	**ND**	0.062	EPA 8021	9-17-10	9-19-10	
Ethyl Benzene	**ND**	0.062	EPA 8021	9-17-10	9-19-10	
m,p-Xylene	**ND**	0.062	EPA 8021	9-17-10	9-19-10	
o-Xylene	**ND**	0.062	EPA 8021	9-17-10	9-19-10	
Gasoline	**ND**	6.2	NWTPH-Gx	9-17-10	9-19-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*55-127*				

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

NWTPH-Gx/BTEX
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0917S2					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-17-10	
Toluene	**ND**	0.050	EPA 8021	9-17-10	9-17-10	
Ethyl Benzene	**ND**	0.050	EPA 8021	9-17-10	9-17-10	
m,p-Xylene	**ND**	0.050	EPA 8021	9-17-10	9-17-10	
o-Xylene	**ND**	0.050	EPA 8021	9-17-10	9-17-10	
Gasoline	**ND**	5.0	NWTPH-Gx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*91*	*55-127*				
Laboratory ID:	MB0917S3					
Benzene	**ND**	0.020	EPA 8021	9-17-10	9-17-10	
Toluene	**ND**	0.050	EPA 8021	9-17-10	9-17-10	
Ethyl Benzene	**ND**	0.050	EPA 8021	9-17-10	9-17-10	
m,p-Xylene	**ND**	0.050	EPA 8021	9-17-10	9-17-10	
o-Xylene	**ND**	0.050	EPA 8021	9-17-10	9-17-10	
Gasoline	**ND**	5.0	NWTPH-Gx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*91*	*55-127*				

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

NWTPH-Gx/BTEX
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-101-01										
	ORIG	DUP									
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*104*	*107*	*55-127*			
Laboratory ID:	09-101-02										
	ORIG	DUP									
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*96*	*95*	*55-127*			
SPIKE BLANKS											
Laboratory ID:	SB0917S2										
	SB	SBD	SB	SBD		SB	SBD				
Benzene	**0.946**	**0.990**	1.00	1.00		**95**	**99**	75-113	5	9	
Toluene	**0.931**	**0.956**	1.00	1.00		**93**	**96**	75-116	3	10	
Ethyl Benzene	**0.929**	**0.968**	1.00	1.00		**93**	**97**	82-117	4	10	
m,p-Xylene	**0.949**	**0.978**	1.00	1.00		**95**	**98**	81-122	3	10	
o-Xylene	**0.939**	**0.964**	1.00	1.00		**94**	**96**	83-118	3	10	
Surrogate:											
Fluorobenzene						*92*	*94*	*55-127*			

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

NWTPH-Dx
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP1-3**					
Laboratory ID:	09-101-01					
Diesel Range Organics	**ND**	29	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil Range Organics	**ND**	57	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				
Client ID:	**GP1-7**					
Laboratory ID:	09-101-02					
Diesel Range Organics	**ND**	29	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil Range Organics	**ND**	59	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*92*	*50-150*				
Client ID:	**GP2-2**					
Laboratory ID:	09-101-03					
Diesel Range Organics	**ND**	31	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil Range Organics	**ND**	62	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*101*	*50-150*				
Client ID:	**GP2-10**					
Laboratory ID:	09-101-04					
Diesel Range Organics	**ND**	27	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil Range Organics	**ND**	54	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				
Client ID:	**GP3-2**					
Laboratory ID:	09-101-05					
Diesel Range Organics	**ND**	39	NWTPH-Dx	9-17-10	9-17-10	U1
Lube Oil	**140**	65	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*94*	*50-150*				
Client ID:	**GP3-10**					
Laboratory ID:	09-101-06					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

NWTPH-Dx
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP4-3**					
Laboratory ID:	09-101-07					
Diesel Range Organics	**71**	30	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil	**230**	61	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*89*	*50-150*				
Client ID:	**GP4-10**					
Laboratory ID:	09-101-08					
Diesel Range Organics	**ND**	27	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil Range Organics	**ND**	55	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*100*	*50-150*				
Client ID:	**GP5-5**					
Laboratory ID:	09-101-09					
Diesel Range Organics	**ND**	32	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil	**110**	63	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*96*	*50-150*				
Client ID:	**GP5-10**					
Laboratory ID:	09-101-10					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*110*	*50-150*				
Client ID:	**GP6-2**					
Laboratory ID:	09-101-11					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*94*	*50-150*				
Client ID:	**GP6-6**					
Laboratory ID:	09-101-12					
Diesel Range Organics	**ND**	37	NWTPH-Dx	9-17-10	9-17-10	U1
Lube Oil	**310**	58	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*106*	*50-150*				

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

NWTPH-Dx
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP7-3**					
Laboratory ID:	09-101-13					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*102*	*50-150*				
Client ID:	**GP7-10**					
Laboratory ID:	09-101-14					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil	**160**	55	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*111*	*50-150*				
Client ID:	**GP8-3**					
Laboratory ID:	09-101-15					
Diesel Range Organics	**ND**	30	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil Range Organics	**ND**	61	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*97*	*50-150*				
Client ID:	**GP8-10**					
Laboratory ID:	09-101-16					
Diesel Range Organics	**ND**	27	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil Range Organics	**ND**	54	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*103*	*50-150*				
Client ID:	**GP9-2**					
Laboratory ID:	09-101-17					
Diesel Range Organics	**ND**	43	NWTPH-Dx	9-17-10	9-17-10	U1
Lube Oil	**200**	59	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*95*	*50-150*				
Client ID:	**GP9-7**					
Laboratory ID:	09-101-18					
Diesel Range Organics	**ND**	30	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil Range Organics	**ND**	60	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*93*	*50-150*				

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

NWTPH-Dx
QUALITY CONTROL
(with acid/silica gel clean-up)

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0917S2					
Diesel Range Organics	**ND**	25	NWTPH-Dx	9-17-10	9-17-10	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	9-17-10	9-17-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*109*	*50-150*				

Analyte	Result		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	09-101-01							
	ORIG	DUP						
Diesel Range Organics	**ND**	**ND**				NA	NA	
Lube Oil Range Organics	**ND**	**ND**				NA	NA	
Surrogate:								
o-Terphenyl			*97*	*100*	*50-150*			
Laboratory ID:	09-101-08							
	ORIG	DUP						
Diesel Range Organics	**ND**	**ND**				NA	NA	
Lube Oil Range Organics	**ND**	**ND**				NA	NA	
Surrogate:								
o-Terphenyl			*100*	*103*	*50-150*			

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
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Project: 103-93320

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Date Extracted: 9-14-10
Date Analyzed: 9-14-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-101-01
Client ID: GP1-3

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0012
Chloromethane	ND		0.0060
Vinyl Chloride	ND		0.0012
Bromomethane	ND		0.0012
Chloroethane	ND		0.0060
Trichlorofluoromethane	ND		0.0012
1,1-Dichloroethene	ND		0.0012
Iodomethane	ND		0.0060
Methylene Chloride	ND		0.0060
(trans) 1,2-Dichloroethene	ND		0.0012
1,1-Dichloroethane	ND		0.0012
2,2-Dichloropropane	ND		0.0012
(cis) 1,2-Dichloroethene	ND		0.0012
Bromochloromethane	ND		0.0012
Chloroform	ND		0.0012
1,1,1-Trichloroethane	ND		0.0012
Carbon Tetrachloride	ND		0.0012
1,1-Dichloropropene	ND		0.0012
1,2-Dichloroethane	ND		0.0012
Trichloroethene	ND		0.0012
1,2-Dichloropropane	ND		0.0012
Dibromomethane	ND		0.0012
Bromodichloromethane	ND		0.0012
2-Chloroethyl Vinyl Ether	ND		0.0060
(cis) 1,3-Dichloropropene	ND		0.0012
(trans) 1,3-Dichloropropene	ND		0.0012

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
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HALOGENATED VOLATILES by EPA 8260B
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Lab ID: 09-101-01
Client ID: GP1-3

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0012
Tetrachloroethene	ND		0.0012
1,3-Dichloropropane	ND		0.0012
Dibromochloromethane	ND		0.0012
1,2-Dibromoethane	ND		0.0012
Chlorobenzene	ND		0.0012
1,1,1,2-Tetrachloroethane	ND		0.0012
Bromoform	ND		0.0012
Bromobenzene	ND		0.0012
1,1,2,2-Tetrachloroethane	ND		0.0012
1,2,3-Trichloropropane	ND		0.0012
2-Chlorotoluene	ND		0.0012
4-Chlorotoluene	ND		0.0012
1,3-Dichlorobenzene	ND		0.0012
1,4-Dichlorobenzene	ND		0.0012
1,2-Dichlorobenzene	ND		0.0012
1,2-Dibromo-3-chloropropane	ND		0.0060
1,2,4-Trichlorobenzene	ND		0.0012
Hexachlorobutadiene	ND		0.0060
1,2,3-Trichlorobenzene	ND		0.0012

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	91	66-128
Toluene-d8	104	68-126
4-Bromofluorobenzene	87	53-134

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

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Date Extracted:	9-14-10
Date Analyzed:	9-14-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-101-02
Client ID:	**GP1-7**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.0012
Chloromethane	ND		0.0058
Vinyl Chloride	ND		0.0012
Bromomethane	ND		0.0012
Chloroethane	ND		0.0058
Trichlorofluoromethane	ND		0.0012
1,1-Dichloroethene	ND		0.0012
Iodomethane	ND		0.0058
Methylene Chloride	ND		0.0058
(trans) 1,2-Dichloroethene	ND		0.0012
1,1-Dichloroethane	ND		0.0012
2,2-Dichloropropane	ND		0.0012
(cis) 1,2-Dichloroethene	ND		0.0012
Bromochloromethane	ND		0.0012
Chloroform	ND		0.0012
1,1,1-Trichloroethane	ND		0.0012
Carbon Tetrachloride	ND		0.0012
1,1-Dichloropropene	ND		0.0012
1,2-Dichloroethane	ND		0.0012
Trichloroethene	ND		0.0012
1,2-Dichloropropane	ND		0.0012
Dibromomethane	ND		0.0012
Bromodichloromethane	ND		0.0012
2-Chloroethyl Vinyl Ether	ND		0.0058
(cis) 1,3-Dichloropropene	ND		0.0012
(trans) 1,3-Dichloropropene	ND		0.0012

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Lab ID: 09-101-02
Client ID: GP1-7

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0012
Tetrachloroethene	ND		0.0012
1,3-Dichloropropane	ND		0.0012
Dibromochloromethane	ND		0.0012
1,2-Dibromoethane	ND		0.0012
Chlorobenzene	ND		0.0012
1,1,1,2-Tetrachloroethane	ND		0.0012
Bromoform	ND		0.0012
Bromobenzene	ND		0.0012
1,1,2,2-Tetrachloroethane	ND		0.0012
1,2,3-Trichloropropane	ND		0.0012
2-Chlorotoluene	ND		0.0012
4-Chlorotoluene	ND		0.0012
1,3-Dichlorobenzene	ND		0.0012
1,4-Dichlorobenzene	ND		0.0012
1,2-Dichlorobenzene	ND		0.0012
1,2-Dibromo-3-chloropropane	ND		0.0058
1,2,4-Trichlorobenzene	ND		0.0012
Hexachlorobutadiene	ND		0.0058
1,2,3-Trichlorobenzene	ND		0.0012

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	89	66-128
Toluene-d8	106	68-126
4-Bromofluorobenzene	87	53-134

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Date Extracted:	9-14-10
Date Analyzed:	9-14-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-101-03
Client ID:	**GP2-2**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.0011
Chloromethane	ND		0.0053
Vinyl Chloride	ND		0.0011
Bromomethane	ND		0.0011
Chloroethane	ND		0.0053
Trichlorofluoromethane	ND		0.0011
1,1-Dichloroethene	ND		0.0011
Iodomethane	ND		0.0053
Methylene Chloride	ND		0.0053
(trans) 1,2-Dichloroethene	ND		0.0011
1,1-Dichloroethane	ND		0.0011
2,2-Dichloropropane	ND		0.0011
(cis) 1,2-Dichloroethene	ND		0.0011
Bromochloromethane	ND		0.0011
Chloroform	ND		0.0011
1,1,1-Trichloroethane	ND		0.0011
Carbon Tetrachloride	ND		0.0011
1,1-Dichloropropene	ND		0.0011
1,2-Dichloroethane	ND		0.0011
Trichloroethene	ND		0.0011
1,2-Dichloropropane	ND		0.0011
Dibromomethane	ND		0.0011
Bromodichloromethane	ND		0.0011
2-Chloroethyl Vinyl Ether	ND		0.0053
(cis) 1,3-Dichloropropene	ND		0.0011
(trans) 1,3-Dichloropropene	ND		0.0011

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Lab ID: 09-101-03
Client ID: GP2-2

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0011
Tetrachloroethene	ND		0.0011
1,3-Dichloropropane	ND		0.0011
Dibromochloromethane	ND		0.0011
1,2-Dibromoethane	ND		0.0011
Chlorobenzene	ND		0.0011
1,1,1,2-Tetrachloroethane	ND		0.0011
Bromoform	ND		0.0011
Bromobenzene	ND		0.0011
1,1,2,2-Tetrachloroethane	ND		0.0011
1,2,3-Trichloropropane	ND		0.0011
2-Chlorotoluene	ND		0.0011
4-Chlorotoluene	ND		0.0011
1,3-Dichlorobenzene	ND		0.0011
1,4-Dichlorobenzene	ND		0.0011
1,2-Dichlorobenzene	ND		0.0011
1,2-Dibromo-3-chloropropane	ND		0.0053
1,2,4-Trichlorobenzene	ND		0.0011
Hexachlorobutadiene	ND		0.0053
1,2,3-Trichlorobenzene	ND		0.0011

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	86	66-128
Toluene-d8	103	68-126
4-Bromofluorobenzene	83	53-134

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
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HALOGENATED VOLATILES by EPA 8260B
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Date Extracted: 9-14-10
Date Analyzed: 9-14-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-101-04
Client ID: GP2-10

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00083
Chloromethane	ND		0.0042
Vinyl Chloride	ND		0.00083
Bromomethane	ND		0.00083
Chloroethane	ND		0.0042
Trichlorofluoromethane	ND		0.00083
1,1-Dichloroethene	ND		0.00083
Iodomethane	ND		0.0042
Methylene Chloride	ND		0.0042
(trans) 1,2-Dichloroethene	ND		0.00083
1,1-Dichloroethane	ND		0.00083
2,2-Dichloropropane	ND		0.00083
(cis) 1,2-Dichloroethene	ND		0.00083
Bromochloromethane	ND		0.00083
Chloroform	ND		0.00083
1,1,1-Trichloroethane	ND		0.00083
Carbon Tetrachloride	ND		0.00083
1,1-Dichloropropene	ND		0.00083
1,2-Dichloroethane	ND		0.00083
Trichloroethene	ND		0.00083
1,2-Dichloropropane	ND		0.00083
Dibromomethane	ND		0.00083
Bromodichloromethane	ND		0.00083
2-Chloroethyl Vinyl Ether	ND		0.0042
(cis) 1,3-Dichloropropene	ND		0.00083
(trans) 1,3-Dichloropropene	ND		0.00083

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
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Lab ID: 09-101-04
Client ID: GP2-10

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00083
Tetrachloroethene	ND		0.00083
1,3-Dichloropropane	ND		0.00083
Dibromochloromethane	ND		0.00083
1,2-Dibromoethane	ND		0.00083
Chlorobenzene	ND		0.00083
1,1,1,2-Tetrachloroethane	ND		0.00083
Bromoform	ND		0.00083
Bromobenzene	ND		0.00083
1,1,2,2-Tetrachloroethane	ND		0.00083
1,2,3-Trichloropropane	ND		0.00083
2-Chlorotoluene	ND		0.00083
4-Chlorotoluene	ND		0.00083
1,3-Dichlorobenzene	ND		0.00083
1,4-Dichlorobenzene	ND		0.00083
1,2-Dichlorobenzene	ND		0.00083
1,2-Dibromo-3-chloropropane	ND		0.0042
1,2,4-Trichlorobenzene	ND		0.00083
Hexachlorobutadiene	ND		0.0042
1,2,3-Trichlorobenzene	ND		0.00083

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	90	66-128
Toluene-d8	111	68-126
4-Bromofluorobenzene	87	53-134

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Date Extracted:	9-14-10
Date Analyzed:	9-14-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-101-05
Client ID:	**GP3-2**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00081
Chloromethane	ND		0.0041
Vinyl Chloride	ND		0.00081
Bromomethane	ND		0.00081
Chloroethane	ND		0.0041
Trichlorofluoromethane	ND		0.00081
1,1-Dichloroethene	ND		0.00081
Iodomethane	ND		0.0041
Methylene Chloride	ND		0.0041
(trans) 1,2-Dichloroethene	ND		0.00081
1,1-Dichloroethane	ND		0.00081
2,2-Dichloropropane	ND		0.00081
(cis) 1,2-Dichloroethene	ND		0.00081
Bromochloromethane	ND		0.00081
Chloroform	ND		0.00081
1,1,1-Trichloroethane	ND		0.00081
Carbon Tetrachloride	ND		0.00081
1,1-Dichloropropene	ND		0.00081
1,2-Dichloroethane	ND		0.00081
Trichloroethene	ND		0.00081
1,2-Dichloropropane	ND		0.00081
Dibromomethane	ND		0.00081
Bromodichloromethane	ND		0.00081
2-Chloroethyl Vinyl Ether	ND		0.0041
(cis) 1,3-Dichloropropene	ND		0.00081
(trans) 1,3-Dichloropropene	ND		0.00081

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Lab ID: 09-101-05
Client ID: GP3-2

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00081
Tetrachloroethene	ND		0.00081
1,3-Dichloropropane	ND		0.00081
Dibromochloromethane	ND		0.00081
1,2-Dibromoethane	ND		0.00081
Chlorobenzene	ND		0.00081
1,1,1,2-Tetrachloroethane	ND		0.00081
Bromoform	ND		0.00081
Bromobenzene	ND		0.00081
1,1,2,2-Tetrachloroethane	ND		0.00081
1,2,3-Trichloropropane	ND		0.00081
2-Chlorotoluene	ND		0.00081
4-Chlorotoluene	ND		0.00081
1,3-Dichlorobenzene	ND		0.00081
1,4-Dichlorobenzene	ND		0.00081
1,2-Dichlorobenzene	ND		0.00081
1,2-Dibromo-3-chloropropane	ND		0.0041
1,2,4-Trichlorobenzene	ND		0.00081
Hexachlorobutadiene	ND		0.0041
1,2,3-Trichlorobenzene	ND		0.00081

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	81	66-128
Toluene-d8	95	68-126
4-Bromofluorobenzene	65	53-134

Date of Report: September 21, 2010
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Date Extracted:	9-15-10
Date Analyzed:	9-15-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-101-06
Client ID:	**GP3-10**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0051
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0051
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Iodomethane	ND		0.0051
Methylene Chloride	ND		0.0051
(trans) 1,2-Dichloroethene	ND		0.0010
1,1-Dichloroethane	ND		0.0010
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0051
(cis) 1,3-Dichloropropene	ND		0.0010
(trans) 1,3-Dichloropropene	ND		0.0010

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Lab ID: 09-101-06
Client ID: GP3-10

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.0010
1,3-Dichloropropane	ND		0.0010
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Bromoform	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0051
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0051
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	93	66-128
Toluene-d8	109	68-126
4-Bromofluorobenzene	88	53-134

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Date Extracted:	9-15-10
Date Analyzed:	9-15-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-101-07
Client ID:	**GP4-3**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00097
Chloromethane	ND		0.0048
Vinyl Chloride	ND		0.00097
Bromomethane	ND		0.00097
Chloroethane	ND		0.0048
Trichlorofluoromethane	ND		0.00097
1,1-Dichloroethene	ND		0.00097
Iodomethane	ND		0.0048
Methylene Chloride	ND		0.0048
(trans) 1,2-Dichloroethene	ND		0.00097
1,1-Dichloroethane	ND		0.00097
2,2-Dichloropropane	ND		0.00097
(cis) 1,2-Dichloroethene	ND		0.00097
Bromochloromethane	ND		0.00097
Chloroform	ND		0.00097
1,1,1-Trichloroethane	ND		0.00097
Carbon Tetrachloride	ND		0.00097
1,1-Dichloropropene	ND		0.00097
1,2-Dichloroethane	ND		0.00097
Trichloroethene	ND		0.00097
1,2-Dichloropropane	ND		0.00097
Dibromomethane	ND		0.00097
Bromodichloromethane	ND		0.00097
2-Chloroethyl Vinyl Ether	ND		0.0048
(cis) 1,3-Dichloropropene	ND		0.00097
(trans) 1,3-Dichloropropene	ND		0.00097

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Lab ID: 09-101-07
Client ID: GP4-3

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00097
Tetrachloroethene	ND		0.00097
1,3-Dichloropropane	ND		0.00097
Dibromochloromethane	ND		0.00097
1,2-Dibromoethane	ND		0.00097
Chlorobenzene	ND		0.00097
1,1,1,2-Tetrachloroethane	ND		0.00097
Bromoform	ND		0.00097
Bromobenzene	ND		0.00097
1,1,2,2-Tetrachloroethane	ND		0.00097
1,2,3-Trichloropropane	ND		0.00097
2-Chlorotoluene	ND		0.00097
4-Chlorotoluene	ND		0.00097
1,3-Dichlorobenzene	ND		0.00097
1,4-Dichlorobenzene	ND		0.00097
1,2-Dichlorobenzene	ND		0.00097
1,2-Dibromo-3-chloropropane	ND		0.0048
1,2,4-Trichlorobenzene	ND		0.00097
Hexachlorobutadiene	ND		0.0048
1,2,3-Trichlorobenzene	ND		0.00097

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	90	66-128
Toluene-d8	102	68-126
4-Bromofluorobenzene	76	53-134

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Date Extracted: 9-14-10
Date Analyzed: 9-14-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-101-08
Client ID: GP4-10

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00090
Chloromethane	ND		0.0045
Vinyl Chloride	ND		0.00090
Bromomethane	ND		0.00090
Chloroethane	ND		0.0045
Trichlorofluoromethane	ND		0.00090
1,1-Dichloroethene	ND		0.00090
Iodomethane	ND		0.0045
Methylene Chloride	ND		0.0045
(trans) 1,2-Dichloroethene	ND		0.00090
1,1-Dichloroethane	ND		0.00090
2,2-Dichloropropane	ND		0.00090
(cis) 1,2-Dichloroethene	ND		0.00090
Bromochloromethane	ND		0.00090
Chloroform	ND		0.00090
1,1,1-Trichloroethane	ND		0.00090
Carbon Tetrachloride	ND		0.00090
1,1-Dichloropropene	ND		0.00090
1,2-Dichloroethane	ND		0.00090
Trichloroethene	ND		0.00090
1,2-Dichloropropane	ND		0.00090
Dibromomethane	ND		0.00090
Bromodichloromethane	ND		0.00090
2-Chloroethyl Vinyl Ether	ND		0.0045
(cis) 1,3-Dichloropropene	ND		0.00090
(trans) 1,3-Dichloropropene	ND		0.00090

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Lab ID: 09-101-08
Client ID: GP4-10

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00090
Tetrachloroethene	ND		0.00090
1,3-Dichloropropane	ND		0.00090
Dibromochloromethane	ND		0.00090
1,2-Dibromoethane	ND		0.00090
Chlorobenzene	ND		0.00090
1,1,1,2-Tetrachloroethane	ND		0.00090
Bromoform	ND		0.00090
Bromobenzene	ND		0.00090
1,1,2,2-Tetrachloroethane	ND		0.00090
1,2,3-Trichloropropane	ND		0.00090
2-Chlorotoluene	ND		0.00090
4-Chlorotoluene	ND		0.00090
1,3-Dichlorobenzene	ND		0.00090
1,4-Dichlorobenzene	ND		0.00090
1,2-Dichlorobenzene	ND		0.00090
1,2-Dibromo-3-chloropropane	ND		0.0045
1,2,4-Trichlorobenzene	ND		0.00090
Hexachlorobutadiene	ND		0.0045
1,2,3-Trichlorobenzene	ND		0.00090

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	87	66-128
Toluene-d8	104	68-126
4-Bromofluorobenzene	88	53-134

Date of Report: September 21, 2010
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Date Extracted:	9-14-10
Date Analyzed:	9-14-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-101-09
Client ID:	**GP5-5**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.0011
Chloromethane	ND		0.0055
Vinyl Chloride	ND		0.0011
Bromomethane	ND		0.0011
Chloroethane	ND		0.0055
Trichlorofluoromethane	ND		0.0011
1,1-Dichloroethene	ND		0.0011
Iodomethane	ND		0.0055
Methylene Chloride	ND		0.0055
(trans) 1,2-Dichloroethene	ND		0.0011
1,1-Dichloroethane	ND		0.0011
2,2-Dichloropropane	ND		0.0011
(cis) 1,2-Dichloroethene	ND		0.0011
Bromochloromethane	ND		0.0011
Chloroform	ND		0.0011
1,1,1-Trichloroethane	ND		0.0011
Carbon Tetrachloride	ND		0.0011
1,1-Dichloropropene	ND		0.0011
1,2-Dichloroethane	ND		0.0011
Trichloroethene	ND		0.0011
1,2-Dichloropropane	ND		0.0011
Dibromomethane	ND		0.0011
Bromodichloromethane	ND		0.0011
2-Chloroethyl Vinyl Ether	ND		0.0055
(cis) 1,3-Dichloropropene	ND		0.0011
(trans) 1,3-Dichloropropene	ND		0.0011

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Lab ID: 09-101-09
Client ID: GP5-5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0011
Tetrachloroethene	ND		0.0011
1,3-Dichloropropane	ND		0.0011
Dibromochloromethane	ND		0.0011
1,2-Dibromoethane	ND		0.0011
Chlorobenzene	ND		0.0011
1,1,1,2-Tetrachloroethane	ND		0.0011
Bromoform	ND		0.0011
Bromobenzene	ND		0.0011
1,1,2,2-Tetrachloroethane	ND		0.0011
1,2,3-Trichloropropane	ND		0.0011
2-Chlorotoluene	ND		0.0011
4-Chlorotoluene	ND		0.0011
1,3-Dichlorobenzene	ND		0.0011
1,4-Dichlorobenzene	ND		0.0011
1,2-Dichlorobenzene	ND		0.0011
1,2-Dibromo-3-chloropropane	ND		0.0055
1,2,4-Trichlorobenzene	ND		0.0011
Hexachlorobutadiene	ND		0.0055
1,2,3-Trichlorobenzene	ND		0.0011

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	91	66-128
Toluene-d8	101	68-126
4-Bromofluorobenzene	68	53-134

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Date Extracted:	9-14-10
Date Analyzed:	9-14-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-101-10
Client ID:	**GP5-10**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00084
Chloromethane	ND		0.0042
Vinyl Chloride	ND		0.00084
Bromomethane	ND		0.00084
Chloroethane	ND		0.0042
Trichlorofluoromethane	ND		0.00084
1,1-Dichloroethene	ND		0.00084
Iodomethane	ND		0.0042
Methylene Chloride	ND		0.0042
(trans) 1,2-Dichloroethene	ND		0.00084
1,1-Dichloroethane	ND		0.00084
2,2-Dichloropropane	ND		0.00084
(cis) 1,2-Dichloroethene	ND		0.00084
Bromochloromethane	ND		0.00084
Chloroform	ND		0.00084
1,1,1-Trichloroethane	ND		0.00084
Carbon Tetrachloride	ND		0.00084
1,1-Dichloropropene	ND		0.00084
1,2-Dichloroethane	ND		0.00084
Trichloroethene	ND		0.00084
1,2-Dichloropropane	ND		0.00084
Dibromomethane	ND		0.00084
Bromodichloromethane	ND		0.00084
2-Chloroethyl Vinyl Ether	ND		0.0042
(cis) 1,3-Dichloropropene	ND		0.00084
(trans) 1,3-Dichloropropene	ND		0.00084

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Lab ID: 09-101-10
Client ID: GP5-10

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00084
Tetrachloroethene	ND		0.00084
1,3-Dichloropropane	ND		0.00084
Dibromochloromethane	ND		0.00084
1,2-Dibromoethane	ND		0.00084
Chlorobenzene	ND		0.00084
1,1,1,2-Tetrachloroethane	ND		0.00084
Bromoform	ND		0.00084
Bromobenzene	ND		0.00084
1,1,2,2-Tetrachloroethane	ND		0.00084
1,2,3-Trichloropropane	ND		0.00084
2-Chlorotoluene	ND		0.00084
4-Chlorotoluene	ND		0.00084
1,3-Dichlorobenzene	ND		0.00084
1,4-Dichlorobenzene	ND		0.00084
1,2-Dichlorobenzene	ND		0.00084
1,2-Dibromo-3-chloropropane	ND		0.0042
1,2,4-Trichlorobenzene	ND		0.00084
Hexachlorobutadiene	ND		0.0042
1,2,3-Trichlorobenzene	ND		0.00084

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	97	66-128
Toluene-d8	114	68-126
4-Bromofluorobenzene	91	53-134

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Date Extracted:	9-14-10
Date Analyzed:	9-14-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-101-11
Client ID:	**GP6-2**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00081
Chloromethane	ND		0.0040
Vinyl Chloride	ND		0.00081
Bromomethane	ND		0.00081
Chloroethane	ND		0.0040
Trichlorofluoromethane	ND		0.00081
1,1-Dichloroethene	ND		0.00081
Iodomethane	ND		0.0040
Methylene Chloride	ND		0.0040
(trans) 1,2-Dichloroethene	ND		0.00081
1,1-Dichloroethane	ND		0.00081
2,2-Dichloropropane	ND		0.00081
(cis) 1,2-Dichloroethene	ND		0.00081
Bromochloromethane	ND		0.00081
Chloroform	ND		0.00081
1,1,1-Trichloroethane	ND		0.00081
Carbon Tetrachloride	ND		0.00081
1,1-Dichloropropene	ND		0.00081
1,2-Dichloroethane	ND		0.00081
Trichloroethene	ND		0.00081
1,2-Dichloropropane	ND		0.00081
Dibromomethane	ND		0.00081
Bromodichloromethane	ND		0.00081
2-Chloroethyl Vinyl Ether	ND		0.0040
(cis) 1,3-Dichloropropene	ND		0.00081
(trans) 1,3-Dichloropropene	ND		0.00081

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Lab ID: 09-101-11
Client ID: GP6-2

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00081
Tetrachloroethene	ND		0.00081
1,3-Dichloropropane	ND		0.00081
Dibromochloromethane	ND		0.00081
1,2-Dibromoethane	ND		0.00081
Chlorobenzene	ND		0.00081
1,1,1,2-Tetrachloroethane	ND		0.00081
Bromoform	ND		0.00081
Bromobenzene	ND		0.00081
1,1,2,2-Tetrachloroethane	ND		0.00081
1,2,3-Trichloropropane	ND		0.00081
2-Chlorotoluene	ND		0.00081
4-Chlorotoluene	ND		0.00081
1,3-Dichlorobenzene	ND		0.00081
1,4-Dichlorobenzene	ND		0.00081
1,2-Dichlorobenzene	ND		0.00081
1,2-Dibromo-3-chloropropane	ND		0.0040
1,2,4-Trichlorobenzene	ND		0.00081
Hexachlorobutadiene	ND		0.0040
1,2,3-Trichlorobenzene	ND		0.00081

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	90	66-128
Toluene-d8	105	68-126
4-Bromofluorobenzene	84	53-134

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Date Extracted:	9-14-10
Date Analyzed:	9-14-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-101-12
Client ID:	**GP6-6**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.0013
Chloromethane	ND		0.0063
Vinyl Chloride	ND		0.0013
Bromomethane	ND		0.0013
Chloroethane	ND		0.0063
Trichlorofluoromethane	ND		0.0013
1,1-Dichloroethene	ND		0.0013
Iodomethane	ND		0.0063
Methylene Chloride	ND		0.0063
(trans) 1,2-Dichloroethene	ND		0.0013
1,1-Dichloroethane	ND		0.0013
2,2-Dichloropropane	ND		0.0013
(cis) 1,2-Dichloroethene	ND		0.0013
Bromochloromethane	ND		0.0013
Chloroform	ND		0.0013
1,1,1-Trichloroethane	ND		0.0013
Carbon Tetrachloride	ND		0.0013
1,1-Dichloropropene	ND		0.0013
1,2-Dichloroethane	ND		0.0013
Trichloroethene	ND		0.0013
1,2-Dichloropropane	ND		0.0013
Dibromomethane	ND		0.0013
Bromodichloromethane	ND		0.0013
2-Chloroethyl Vinyl Ether	ND		0.0063
(cis) 1,3-Dichloropropene	ND		0.0013
(trans) 1,3-Dichloropropene	ND		0.0013

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Lab ID: 09-101-12
Client ID: GP6-6

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0013
Tetrachloroethene	ND		0.0013
1,3-Dichloropropane	ND		0.0013
Dibromochloromethane	ND		0.0013
1,2-Dibromoethane	ND		0.0013
Chlorobenzene	ND		0.0013
1,1,1,2-Tetrachloroethane	ND		0.0013
Bromoform	ND		0.0013
Bromobenzene	ND		0.0013
1,1,2,2-Tetrachloroethane	ND		0.0013
1,2,3-Trichloropropane	ND		0.0013
2-Chlorotoluene	ND		0.0013
4-Chlorotoluene	ND		0.0013
1,3-Dichlorobenzene	ND		0.0013
1,4-Dichlorobenzene	ND		0.0013
1,2-Dichlorobenzene	ND		0.0013
1,2-Dibromo-3-chloropropane	ND		0.0063
1,2,4-Trichlorobenzene	ND		0.0013
Hexachlorobutadiene	ND		0.0063
1,2,3-Trichlorobenzene	ND		0.0013

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	82	66-128
Toluene-d8	90	68-126
4-Bromofluorobenzene	66	53-134

Date of Report: September 21, 2010
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Date Extracted:	9-14-10
Date Analyzed:	9-14-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-101-13
Client ID:	**GP7-3**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00086
Chloromethane	ND		0.0043
Vinyl Chloride	ND		0.00086
Bromomethane	ND		0.00086
Chloroethane	ND		0.0043
Trichlorofluoromethane	ND		0.00086
1,1-Dichloroethene	ND		0.00086
Iodomethane	ND		0.0043
Methylene Chloride	ND		0.0043
(trans) 1,2-Dichloroethene	ND		0.00086
1,1-Dichloroethane	ND		0.00086
2,2-Dichloropropane	ND		0.00086
(cis) 1,2-Dichloroethene	ND		0.00086
Bromochloromethane	ND		0.00086
Chloroform	ND		0.00086
1,1,1-Trichloroethane	ND		0.00086
Carbon Tetrachloride	ND		0.00086
1,1-Dichloropropene	ND		0.00086
1,2-Dichloroethane	ND		0.00086
Trichloroethene	ND		0.00086
1,2-Dichloropropane	ND		0.00086
Dibromomethane	ND		0.00086
Bromodichloromethane	ND		0.00086
2-Chloroethyl Vinyl Ether	ND		0.0043
(cis) 1,3-Dichloropropene	ND		0.00086
(trans) 1,3-Dichloropropene	ND		0.00086

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Lab ID: 09-101-13
Client ID: GP7-3

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00086
Tetrachloroethene	ND		0.00086
1,3-Dichloropropane	ND		0.00086
Dibromochloromethane	ND		0.00086
1,2-Dibromoethane	ND		0.00086
Chlorobenzene	ND		0.00086
1,1,1,2-Tetrachloroethane	ND		0.00086
Bromoform	ND		0.00086
Bromobenzene	ND		0.00086
1,1,2,2-Tetrachloroethane	ND		0.00086
1,2,3-Trichloropropane	ND		0.00086
2-Chlorotoluene	ND		0.00086
4-Chlorotoluene	ND		0.00086
1,3-Dichlorobenzene	ND		0.00086
1,4-Dichlorobenzene	ND		0.00086
1,2-Dichlorobenzene	ND		0.00086
1,2-Dibromo-3-chloropropane	ND		0.0043
1,2,4-Trichlorobenzene	ND		0.00086
Hexachlorobutadiene	ND		0.0043
1,2,3-Trichlorobenzene	ND		0.00086

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	85	66-128
Toluene-d8	105	68-126
4-Bromofluorobenzene	82	53-134

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Date Extracted: 9-14-10
Date Analyzed: 9-14-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-101-14
Client ID: GP7-10

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.00094
Chloromethane	ND		0.0047
Vinyl Chloride	ND		0.00094
Bromomethane	ND		0.00094
Chloroethane	ND		0.0047
Trichlorofluoromethane	ND		0.00094
1,1-Dichloroethene	ND		0.00094
Iodomethane	ND		0.0047
Methylene Chloride	ND		0.0047
(trans) 1,2-Dichloroethene	ND		0.00094
1,1-Dichloroethane	ND		0.00094
2,2-Dichloropropane	ND		0.00094
(cis) 1,2-Dichloroethene	ND		0.00094
Bromochloromethane	ND		0.00094
Chloroform	ND		0.00094
1,1,1-Trichloroethane	ND		0.00094
Carbon Tetrachloride	ND		0.00094
1,1-Dichloropropene	ND		0.00094
1,2-Dichloroethane	ND		0.00094
Trichloroethene	ND		0.00094
1,2-Dichloropropane	ND		0.00094
Dibromomethane	ND		0.00094
Bromodichloromethane	ND		0.00094
2-Chloroethyl Vinyl Ether	ND		0.0047
(cis) 1,3-Dichloropropene	ND		0.00094
(trans) 1,3-Dichloropropene	ND		0.00094

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Lab ID: 09-101-14
Client ID: GP7-10

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00094
Tetrachloroethene	ND		0.00094
1,3-Dichloropropane	ND		0.00094
Dibromochloromethane	ND		0.00094
1,2-Dibromoethane	ND		0.00094
Chlorobenzene	ND		0.00094
1,1,1,2-Tetrachloroethane	ND		0.00094
Bromoform	ND		0.00094
Bromobenzene	ND		0.00094
1,1,2,2-Tetrachloroethane	ND		0.00094
1,2,3-Trichloropropane	ND		0.00094
2-Chlorotoluene	ND		0.00094
4-Chlorotoluene	ND		0.00094
1,3-Dichlorobenzene	ND		0.00094
1,4-Dichlorobenzene	ND		0.00094
1,2-Dichlorobenzene	ND		0.00094
1,2-Dibromo-3-chloropropane	ND		0.0047
1,2,4-Trichlorobenzene	ND		0.00094
Hexachlorobutadiene	ND		0.0047
1,2,3-Trichlorobenzene	ND		0.00094

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	87	66-128
Toluene-d8	101	68-126
4-Bromofluorobenzene	85	53-134

Date of Report: September 21, 2010
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Date Extracted:	9-14-10
Date Analyzed:	9-14-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-101-15
Client ID:	**GP8-3**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.0011
Chloromethane	ND		0.0053
Vinyl Chloride	ND		0.0011
Bromomethane	ND		0.0011
Chloroethane	ND		0.0053
Trichlorofluoromethane	ND		0.0011
1,1-Dichloroethene	ND		0.0011
Iodomethane	ND		0.0053
Methylene Chloride	ND		0.0053
(trans) 1,2-Dichloroethene	ND		0.0011
1,1-Dichloroethane	ND		0.0011
2,2-Dichloropropane	ND		0.0011
(cis) 1,2-Dichloroethene	ND		0.0011
Bromochloromethane	ND		0.0011
Chloroform	ND		0.0011
1,1,1-Trichloroethane	ND		0.0011
Carbon Tetrachloride	ND		0.0011
1,1-Dichloropropene	ND		0.0011
1,2-Dichloroethane	ND		0.0011
Trichloroethene	ND		0.0011
1,2-Dichloropropane	ND		0.0011
Dibromomethane	ND		0.0011
Bromodichloromethane	ND		0.0011
2-Chloroethyl Vinyl Ether	ND		0.0053
(cis) 1,3-Dichloropropene	ND		0.0011
(trans) 1,3-Dichloropropene	ND		0.0011

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
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Project: 103-93320

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Lab ID: 09-101-15
Client ID: GP8-3

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0011
Tetrachloroethene	0.0025		0.0011
1,3-Dichloropropane	ND		0.0011
Dibromochloromethane	ND		0.0011
1,2-Dibromoethane	ND		0.0011
Chlorobenzene	ND		0.0011
1,1,1,2-Tetrachloroethane	ND		0.0011
Bromoform	ND		0.0011
Bromobenzene	ND		0.0011
1,1,2,2-Tetrachloroethane	ND		0.0011
1,2,3-Trichloropropane	ND		0.0011
2-Chlorotoluene	ND		0.0011
4-Chlorotoluene	ND		0.0011
1,3-Dichlorobenzene	ND		0.0011
1,4-Dichlorobenzene	ND		0.0011
1,2-Dichlorobenzene	ND		0.0011
1,2-Dibromo-3-chloropropane	ND		0.0053
1,2,4-Trichlorobenzene	ND		0.0011
Hexachlorobutadiene	ND		0.0053
1,2,3-Trichlorobenzene	ND		0.0011

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	93	66-128
Toluene-d8	109	68-126
4-Bromofluorobenzene	85	53-134

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
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Date Extracted:	9-14-10
Date Analyzed:	9-14-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-101-16
Client ID:	**GP8-10**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.0011
Chloromethane	ND		0.0054
Vinyl Chloride	ND		0.0011
Bromomethane	ND		0.0011
Chloroethane	ND		0.0054
Trichlorofluoromethane	ND		0.0011
1,1-Dichloroethene	ND		0.0011
Iodomethane	ND		0.0054
Methylene Chloride	ND		0.0054
(trans) 1,2-Dichloroethene	ND		0.0011
1,1-Dichloroethane	ND		0.0011
2,2-Dichloropropane	ND		0.0011
(cis) 1,2-Dichloroethene	ND		0.0011
Bromochloromethane	ND		0.0011
Chloroform	ND		0.0011
1,1,1-Trichloroethane	ND		0.0011
Carbon Tetrachloride	ND		0.0011
1,1-Dichloropropene	ND		0.0011
1,2-Dichloroethane	ND		0.0011
Trichloroethene	ND		0.0011
1,2-Dichloropropane	ND		0.0011
Dibromomethane	ND		0.0011
Bromodichloromethane	ND		0.0011
2-Chloroethyl Vinyl Ether	ND		0.0054
(cis) 1,3-Dichloropropene	ND		0.0011
(trans) 1,3-Dichloropropene	ND		0.0011

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

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Lab ID: 09-101-16
Client ID: GP8-10

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0011
Tetrachloroethene	ND		0.0011
1,3-Dichloropropane	ND		0.0011
Dibromochloromethane	ND		0.0011
1,2-Dibromoethane	ND		0.0011
Chlorobenzene	ND		0.0011
1,1,1,2-Tetrachloroethane	ND		0.0011
Bromoform	ND		0.0011
Bromobenzene	ND		0.0011
1,1,2,2-Tetrachloroethane	ND		0.0011
1,2,3-Trichloropropane	ND		0.0011
2-Chlorotoluene	ND		0.0011
4-Chlorotoluene	ND		0.0011
1,3-Dichlorobenzene	ND		0.0011
1,4-Dichlorobenzene	ND		0.0011
1,2-Dichlorobenzene	ND		0.0011
1,2-Dibromo-3-chloropropane	ND		0.0054
1,2,4-Trichlorobenzene	ND		0.0011
Hexachlorobutadiene	ND		0.0054
1,2,3-Trichlorobenzene	ND		0.0011

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	91	66-128
Toluene-d8	110	68-126
4-Bromofluorobenzene	88	53-134

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Date Extracted:	9-14-10
Date Analyzed:	9-14-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-101-17
Client ID:	**GP9-2**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.00096
Chloromethane	ND		0.0048
Vinyl Chloride	ND		0.00096
Bromomethane	ND		0.00096
Chloroethane	ND		0.0048
Trichlorofluoromethane	ND		0.00096
1,1-Dichloroethene	ND		0.00096
Iodomethane	ND		0.0048
Methylene Chloride	ND		0.0048
(trans) 1,2-Dichloroethene	ND		0.00096
1,1-Dichloroethane	ND		0.00096
2,2-Dichloropropane	ND		0.00096
(cis) 1,2-Dichloroethene	ND		0.00096
Bromochloromethane	ND		0.00096
Chloroform	ND		0.00096
1,1,1-Trichloroethane	ND		0.00096
Carbon Tetrachloride	ND		0.00096
1,1-Dichloropropene	ND		0.00096
1,2-Dichloroethane	ND		0.00096
Trichloroethene	ND		0.00096
1,2-Dichloropropane	ND		0.00096
Dibromomethane	ND		0.00096
Bromodichloromethane	ND		0.00096
2-Chloroethyl Vinyl Ether	ND		0.0048
(cis) 1,3-Dichloropropene	ND		0.00096
(trans) 1,3-Dichloropropene	ND		0.00096

Date of Report: September 21, 2010
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Lab ID: 09-101-17
Client ID: GP9-2

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.00096
Tetrachloroethene	ND		0.00096
1,3-Dichloropropane	ND		0.00096
Dibromochloromethane	ND		0.00096
1,2-Dibromoethane	ND		0.00096
Chlorobenzene	ND		0.00096
1,1,1,2-Tetrachloroethane	ND		0.00096
Bromoform	ND		0.00096
Bromobenzene	ND		0.00096
1,1,2,2-Tetrachloroethane	ND		0.00096
1,2,3-Trichloropropane	ND		0.00096
2-Chlorotoluene	ND		0.00096
4-Chlorotoluene	ND		0.00096
1,3-Dichlorobenzene	ND		0.00096
1,4-Dichlorobenzene	ND		0.00096
1,2-Dichlorobenzene	ND		0.00096
1,2-Dibromo-3-chloropropane	ND		0.0048
1,2,4-Trichlorobenzene	ND		0.00096
Hexachlorobutadiene	ND		0.0048
1,2,3-Trichlorobenzene	ND		0.00096

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	84	66-128
Toluene-d8	102	68-126
4-Bromofluorobenzene	80	53-134

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
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Date Extracted:	9-14-10
Date Analyzed:	9-14-10
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-101-18
Client ID:	**GP9-7**

Compound	**Results**	**Flags**	**PQL**
Dichlorodifluoromethane	ND		0.0011
Chloromethane	ND		0.0053
Vinyl Chloride	ND		0.0011
Bromomethane	ND		0.0011
Chloroethane	ND		0.0053
Trichlorofluoromethane	ND		0.0011
1,1-Dichloroethene	ND		0.0011
Iodomethane	ND		0.0053
Methylene Chloride	ND		0.0053
(trans) 1,2-Dichloroethene	ND		0.0011
1,1-Dichloroethane	ND		0.0011
2,2-Dichloropropane	ND		0.0011
(cis) 1,2-Dichloroethene	ND		0.0011
Bromochloromethane	ND		0.0011
Chloroform	ND		0.0011
1,1,1-Trichloroethane	ND		0.0011
Carbon Tetrachloride	ND		0.0011
1,1-Dichloropropene	ND		0.0011
1,2-Dichloroethane	ND		0.0011
Trichloroethene	ND		0.0011
1,2-Dichloropropane	ND		0.0011
Dibromomethane	ND		0.0011
Bromodichloromethane	ND		0.0011
2-Chloroethyl Vinyl Ether	ND		0.0053
(cis) 1,3-Dichloropropene	ND		0.0011
(trans) 1,3-Dichloropropene	ND		0.0011

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

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Lab ID: 09-101-18
Client ID: GP9-7

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0011
Tetrachloroethene	ND		0.0011
1,3-Dichloropropane	ND		0.0011
Dibromochloromethane	ND		0.0011
1,2-Dibromoethane	ND		0.0011
Chlorobenzene	ND		0.0011
1,1,1,2-Tetrachloroethane	ND		0.0011
Bromoform	ND		0.0011
Bromobenzene	ND		0.0011
1,1,2,2-Tetrachloroethane	ND		0.0011
1,2,3-Trichloropropane	ND		0.0011
2-Chlorotoluene	ND		0.0011
4-Chlorotoluene	ND		0.0011
1,3-Dichlorobenzene	ND		0.0011
1,4-Dichlorobenzene	ND		0.0011
1,2-Dichlorobenzene	ND		0.0011
1,2-Dibromo-3-chloropropane	ND		0.0053
1,2,4-Trichlorobenzene	ND		0.0011
Hexachlorobutadiene	ND		0.0053
1,2,3-Trichlorobenzene	ND		0.0011

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	87	66-128
Toluene-d8	100	68-126
4-Bromofluorobenzene	83	53-134

Date of Report: September 21, 2010
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Project: 103-93320

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METHOD BLANK QUALITY CONTROL
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Date Extracted: 9-14-10
Date Analyzed: 9-14-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0914S1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0050
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0050
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Iodomethane	ND		0.0050
Methylene Chloride	ND		0.0050
(trans) 1,2-Dichloroethene	ND		0.0010
1,1-Dichloroethane	ND		0.0010
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0050
(cis) 1,3-Dichloropropene	ND		0.0010
(trans) 1,3-Dichloropropene	ND		0.0010

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

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METHOD BLANK QUALITY CONTROL
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Lab ID: MB0914S1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.0010
1,3-Dichloropropane	ND		0.0010
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Bromoform	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0050
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0050
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	74	66-128
Toluene-d8	97	68-126
4-Bromofluorobenzene	88	53-134

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
page 1 of 2

Date Extracted: 9-15-10
Date Analyzed: 9-15-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0915S1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0050
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0050
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Iodomethane	ND		0.0050
Methylene Chloride	ND		0.0050
(trans) 1,2-Dichloroethene	ND		0.0010
1,1-Dichloroethane	ND		0.0010
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0050
(cis) 1,3-Dichloropropene	ND		0.0010
(trans) 1,3-Dichloropropene	ND		0.0010

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
page 2 of 2

Lab ID: MB0915S1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.0010
1,3-Dichloropropane	ND		0.0010
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Bromoform	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0050
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0050
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	85	66-128
Toluene-d8	101	68-126
4-Bromofluorobenzene	83	53-134

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 9-14-10
Date Analyzed: 9-14-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB0914S1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	0.0500	0.0540	108	0.0529	106	70-130	
Benzene	0.0500	0.0426	85	0.0435	87	70-121	
Trichloroethene	0.0500	0.0473	95	0.0491	98	70-124	
Toluene	0.0500	0.0438	88	0.0465	93	70-123	
Chlorobenzene	0.0500	0.0442	88	0.0462	92	71-119	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	2	14	
Benzene	2	10	
Trichloroethene	4	12	
Toluene	6	12	
Chlorobenzene	4	9	

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 9-15-10
Date Analyzed: 9-15-10

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB0915S1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	0.0500	0.0523	105	0.0530	106	70-130	
Benzene	0.0500	0.0421	84	0.0421	84	70-121	
Trichloroethene	0.0500	0.0487	97	0.0480	96	70-124	
Toluene	0.0500	0.0459	92	0.0461	92	70-123	
Chlorobenzene	0.0500	0.0458	92	0.0458	92	71-119	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	1	14	
Benzene	0	10	
Trichloroethene	1	12	
Toluene	0	12	
Chlorobenzene	0	9	

Date of Report: September 21, 2010
Samples Submitted: September 11, 2010
Laboratory Reference: 1009-101
Project: 103-93320

% MOISTURE

Date Analyzed: 9-14-10

Client ID	Lab ID	% Moisture
GP1-3	09-101-01	12
GP1-7	09-101-02	15
GP2-2	09-101-03	19
GP2-10	09-101-04	8
GP3-2	09-101-05	23
GP3-10	09-101-06	11
GP4-3	09-101-07	17
GP4-10	09-101-08	9
GP5-5	09-101-09	21
GP5-10	09-101-10	11
GP6-2	09-101-11	10
GP6-6	09-101-12	13
GP7-3	09-101-13	11
GP7-10	09-101-14	10
GP8-3	09-101-15	17
GP8-10	09-101-16	8
GP9-2	09-101-17	15
GP9-7	09-101-18	16

OnSite Environmental Inc.

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-napthalene) 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

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

Company: GAI
Project Number: 103-93320
Project Name: Ballard
Project Manager: Neal Gilham / Chris King
Sampled by: Amanda Cote

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Day
- ☐ 3 Day
- ☒ Standard (7 working days) (TPH analysis 5 working days)
- ☐ _____ (other)

Laboratory Number: 09-101

Requested Analysis

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 / SIM	PAHs by 8270D / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	% Moisture
11	GP6-2	091010	12:40	soil	5		X	X		X									
12	GP6-6		12:40				X	X		X									
13	GP7-3		1:00				X	X		X									
14	GP7-10		1:25				X	X		X									
15	GP8-3		2:30				X	X		X									
16	GP8-10		2:40				X	X		X									
17	GP9-2		3:20				X	X		X									
18	GP9-7		3:30				X	X		X									
								X		X									
								X		X									

	Signature	Company	Date	Time
Relinquished by		GAI	9-11-10	855
Received by		OnSite Env	9/11/10	855
Relinquished by				
Received by				
Relinquished by				
Received by				

Comments/Special Instructions:

Reviewed by/Date

Reviewed by/Date

Chromatograms with final report ☐

DISTRIBUTION LEGEND: White - OnSite Copy Yellow - Client Copy

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 28, 2010

Chris King
Golder Associates Inc.
18300 NE Union Hill Road
Suite 200
Redmond, WA 98052-3333

Re: Analytical Data for Project 103-93320-10
Laboratory Reference No. 1010-183

Dear Chris:

Enclosed are the analytical results and associated quality control data for samples submitted on October 21, 2010.

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,

David Baumeister
Project Manager

Enclosures

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

Case Narrative

Samples were collected on October 21, 2010 and received by the laboratory on October 21, 2010. 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: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

NWTPH-Gx/BTEX + MTBE

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWJ1-102110**					
Laboratory ID:	10-183-01					
MTBE	**ND**	10	EPA 8021	10-26-10	10-26-10	
Benzene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
Toluene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
m,p-Xylene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
o-Xylene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
Gasoline	**ND**	100	NWTPH-Gx	10-26-10	10-26-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*91*	*74-121*				

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

NWTPH-Gx/BTEX + MTBE
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1026W2					
MTBE	**ND**	10	EPA 8021	10-26-10	10-26-10	
Benzene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
Toluene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
Ethyl Benzene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
m,p-Xylene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
o-Xylene	**ND**	1.0	EPA 8021	10-26-10	10-26-10	
Gasoline	**ND**	100	NWTPH-Gx	10-26-10	10-26-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*91*	*74-121*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-179-04										
	ORIG	DUP									
Benzene	**1.91**	**1.78**	NA	NA		NA		NA	7	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*91*	*91*	*74-121*			
MATRIX SPIKES											
Laboratory ID:	10-199-02										
	MS	MSD	MS	MSD		MS	MSD				
Benzene	**48.8**	**48.3**	50.0	50.0	ND	**98**	**97**	78-118	1	8	
Toluene	**49.5**	**49.0**	50.0	50.0	ND	**99**	**98**	81-119	1	8	
Ethyl Benzene	**50.2**	**49.9**	50.0	50.0	ND	**100**	**100**	81-121	1	8	
m,p-Xylene	**49.9**	**49.3**	50.0	50.0	ND	**100**	**99**	79-123	1	8	
o-Xylene	**49.3**	**48.8**	50.0	50.0	ND	**99**	**98**	79-121	1	8	
Surrogate:											
Fluorobenzene						*101*	*95*	*74-121*			

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

NWTPH-Dx
(with acid/silica gel clean-up)

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWJ1-102110**					
Laboratory ID:	10-183-01					
Diesel Range Organics	**ND**	0.26	NWTPH-Dx	10-21-10	10-21-10	
Lube Oil Range Organics	**ND**	0.42	NWTPH-Dx	10-21-10	10-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*90*	*50-150*				

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

NWTPH-Dx
QUALITY CONTROL
(with acid/silica gel clean-up)

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1021W1					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	10-21-10	10-21-10	
Lube Oil Range Organics	**ND**	0.40	NWTPH-Dx	10-21-10	10-21-10	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*91*	*50-150*				

Analyte	Result		Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE							
Laboratory ID:	10-173-07						
	ORIG	DUP					
Diesel Range Organics	**ND**	**ND**			NA	NA	
Lube Oil Range Organics	**ND**	**ND**			NA	NA	
Surrogate:							
o-Terphenyl			*88* *94*	*50-150*			

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted: 10-21-10
Date Analyzed: 10-21-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 10-183-01
Client ID: MWJ1-102110

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 10-183-01
Client ID: MWJ1-102110

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	90	71-126
Toluene-d8	92	76-116
4-Bromofluorobenzene	84	70-123

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 1 of 2

Date Extracted: 10-21-10
Date Analyzed: 10-21-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB1021W1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Lab ID: MB1021W1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	93	71-126
Toluene-d8	90	76-116
4-Bromofluorobenzene	86	70-123

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

HALOGENATED VOLATILES by EPA 8260B
MS/MSD QUALITY CONTROL

Date Extracted: 10-21-10
Date Analyzed: 10-21-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 10-183-01

Compound	Sample Amount	Spike Amount	MS	Percent Recovery	MSD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	ND	10.0	9.66	97	9.30	93	70-130	
Benzene	ND	10.0	10.1	101	10.2	102	74-125	
Trichloroethene	ND	10.0	10.1	101	10.1	101	77-117	
Toluene	ND	10.0	10.4	104	10.4	104	79-119	
Chlorobenzene	ND	10.0	10.3	103	10.2	102	85-112	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	4	13	
Benzene	1	11	
Trichloroethene	1	11	
Toluene	0	11	
Chlorobenzene	1	10	

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

DISSOLVED LEAD
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	10-183-01					
Client ID:	**MWJ1-102110**					
Lead	**ND**	1.0	200.8		10-25-10	

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

DISSOLVED LEAD
EPA 200.8
METHOD BLANK QUALITY CONTROL

Date Analyzed:	10-25-10
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	MB1025D1

Analyte	Method	Result	PQL
Lead	200.8	**ND**	1.0

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

DISSOLVED LEAD
EPA 200.8
DUPLICATE QUALITY CONTROL

Date Analyzed: 10-25-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 10-183-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	**ND**	**ND**	NA	1.0	

Date of Report: October 28, 2010
Samples Submitted: October 21, 2010
Laboratory Reference: 1010-183
Project: 103-93320-10

DISSOLVED LEAD
EPA 200.8
MS/MSD QUALITY CONTROL

Date Analyzed: 10-25-10

Matrix: Water
Units: ug/L (ppb)

Lab ID: 10-183-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD
Lead	200	**198**	99	**198**	99	0

OnSite Environmental Inc.

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-napthalene) 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

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

Company: Golder Associates
Project Number: 103-93320-10
Project Name: AAL Ballard
Project Manager: Chris King
Sampled by: Kirsi Longley

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: 10-183

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX & MTBE	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/Dissolved (circle one) RCRA Metals + Lead	TCLP Metals	HEM (oil and grease) 1664	% Moisture
1	MWJ1-102110	10/21/10	1115	W	9		X		X		X							X			

	Signature	Company	Date	Time
Relinquished		Golder	10/21/10	1320
Received			10/21/10	1320
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions

* Field Filtered

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Electronic Data Deliverables (EDDs) ☒ Ecology EIM Format