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December 13, 2016
Cardno 03137902.R01

LUST Coordinator
Washington State Department of Ecology
Northwest Regional Office
3190 160th Avenue Southeast
Bellevue, Washington 98008

SUBJECT **Limited Subsurface Investigation**
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

LUST Coordinator:

At the request of ExxonMobil Environmental Services Company (EMES), on behalf of ExxonMobil Oil Corporation, Cardno has prepared the enclosed *Limited Subsurface Investigation*. The purpose of the report is to summarize the results of the soil, soil vapor, and groundwater investigation conducted at the subject site.

Please contact Mr. Ryan Pozzuto, Cardno Project Manager for this site at 206 575 1527, or Ms. Marla Madden, EMES Project Manager for this site at 714 964 4935 with questions.

Sincerely,

LAINACRE
ON BEHALF OF

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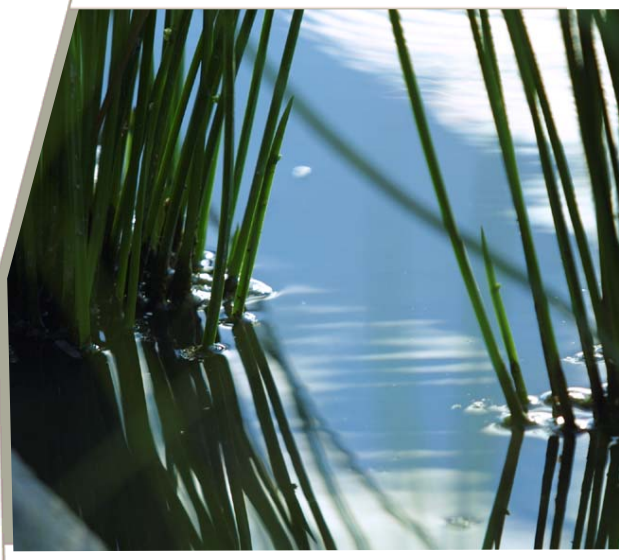
ENCLOSURE
Cardno's *Limited Subsurface Investigation*, dated December 13, 2016

cc: w/ enclosure
Mr. Chris Dalton, Property Owner *(Electronic copy via email)*
Ms. Marla Madden, ExxonMobil Environmental Services Company *(Filed in project file)*

Limited Subsurface Investigation

Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Cardno 03137902.R01



Prepared for
ExxonMobil Environmental Services Company

December 13, 2016

Cardno
Shaping the Future

Limited Subsurface Investigation

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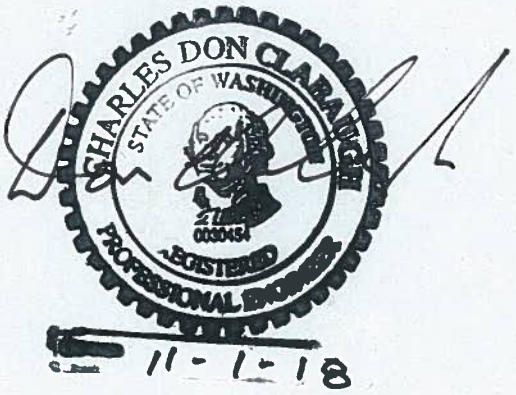

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1 Introduction

At the request of ExxonMobil Environmental Services Company (EMES), on behalf of ExxonMobil Oil Corporation (ExxonMobil), Cardno prepared this report presenting results of the soil, soil vapor, and groundwater investigation as outlined in Cardno's *Supplemental Subsurface Investigation Work Plan* (*Work Plan*), dated June 11, 2015 (Cardno, 2015). The purpose of the work was to further characterize the subject site following the Sound Earth Strategies (SES) initial subsurface investigation in February 2015. Additional locations downgradient of the subject site to the south were also delineated. The scope of work conducted by Cardno included the installation of six groundwater monitoring wells and three soil vapor sampling (SVS) wells, and the collection of soil, soil vapor, and groundwater samples.

2 Background

2.1 Site Description

Former Mobil Station 99CHT is located at 7323 Aurora Avenue North, on the southwestern intersection of Winona Avenue North and Aurora Avenue North, Seattle, King County, Washington (Plate 1). The surrounding area consists of residential and commercial properties.

A review of chain of title documents indicates that the subject site operated as a gasoline service station from at least 1927 when General Petroleum Corporation of California (General Petroleum) leased the property. In 1960, Socony Mobil Oil Company (Mobil), successor to General Petroleum, terminated the lease (First American, 2015).

An approved building plan from 1961, from the City of Seattle Department of Buildings, shows the planned redevelopment of the service station including an auto hoist, floor sump, dispenser island, four USTs located northwest and southwest of the dispenser island, and a 4,000-gallon and 6,000-gallon UST located in the northern portion of the subject site. In 1962, a permit was granted to Mobil Oil Company for the installation of an electric sign. A review of city directories by SES indicated the Mobil-branded gasoline service station operated through the 1960s. The property is currently occupied by a lawn mower repair business, which has operated at the site since the 1970s. No information included regarding station decommissioning or removal of the USTs, dispenser island, or associated piping was available (SES, 2015).

Approximate locations of the former dispenser island, historical UST locations, station building, and other select site features are shown on Plate 2.

2.2 Regional Geology and Hydrogeology

The subject site is situated in the lowlands of the Puget Sound basin in western Washington. The Puget Sound is a north to south trending trough between the Olympic Mountains to the west and the Cascade Mountains to the east. Elevation in the lowlands ranges from sea level up to several hundred feet. The topography is dominated by north to south trending valleys and low, nearly flat topped highlands cut by streams. The Puget Sound occupies a large part of the western portion of the basin, and lakes and streams occur frequently throughout the area.

Surficial geology is dominated by Pleistocene glacial alluvium with recent alluvium in river floodplains. Pleistocene sediments are typically well-compacted beds of very dense till inter-bedded with sands, silts and gravels, with occasional lacustrine deposits. Beds of till are often several meters thick and contain frequent discontinuous lenses of more permeable material. Perched groundwater frequently occurs in the lenses with larger aquifers occupying sandy strata overlying less permeable till or silt deposits. The first occurrence of groundwater is typically within 50 feet of the surface (Livingston, 1971).

2.3 Site Geology and Hydrogeology

The subject site is at an approximate elevation of 200 feet above msl (SES, 2015). During the February 2015 investigation (SES, 2015), silty sand with some gravel was observed to 15.5 feet bgs, the maximum depth explored. Groundwater encountered during drilling ranged from 9 to 13 feet bgs.

3 Previous Work

Soil, soil vapor, and groundwater investigations have been conducted at the site beginning in 2015. Cumulative soil analytical results are summarized in Tables 1 through 5. Cumulative soil vapor analytical results are summarized in Tables 6 and 7. Well construction details are summarized in Table 8. Cumulative groundwater analytical results are summarized in Tables 9 through 13.

In February 2015, SES conducted a subsurface investigation to evaluate soil and groundwater at the subject site (SES, 2015). The investigation included a ground penetrating radar survey, advancement of 11 soil borings, and the collection of soil and groundwater samples. The GPR survey indicated that one of the smaller USTs located outside of the building was oriented as shown on the building plan; the report did not indicate which UST. A survey of the potential locations of the 4,000-gallon and 6,000-gallon USTs could not be conducted due to obstructions. Soil borings PB01 through PB11 were advanced in the vicinity of the floor sump, hydraulic hoist, USTs, and former dispenser island to depths ranging from 10.5 to 15.5 feet bgs. Concentrations were detected above the MTCA Method A Cleanup Levels in soil collected from boring locations PB02, PB03, PB04, PB06, and PB07 at depths of 10 and 13.5 feet bgs (Table 1). Maximum concentrations of 9,600 mg/kg TPHg and 6.5 mg/kg benzene were observed in boring PB04 at 10 feet bgs. Temporary wells were constructed in borings PB01, PB02, PB04, and PB07 and groundwater samples were collected. All groundwater samples collected exceeded the MTCA Method A Cleanup Levels (Table 9).

4 Subsurface Investigation

The purpose of the work was to characterize hydrocarbon concentrations on the subject site and downgradient to the south on the adjacent property and in the sidewalk along Aurora Avenue North. Cardno installed four groundwater monitoring wells and three SVS wells on the subject site. One groundwater monitoring well was installed off-site to the south in the Duck Island Ale House (Duck Island) adjacent parking lot and a second off-site groundwater monitoring well was installed in the sidewalk bordering Aurora Avenue North. Cardno performed the field work in accordance with the *Work Plan*, Cardno's standard field protocols (Appendix A), and under the supervision of a licensed geologist.

4.1 Soil Boring Advancement Location Considerations

Based on a review of historical soil data, proposed boring locations were selected using the following considerations:

- Boring B12 was advanced to evaluate soil conditions along the northern property boundary.
- Borings B13 and B17 were advanced to delineate concentrations of hydrocarbons that were encountered in the central portion of the site in the vicinity of former UST basins.
- Boring B14 was advanced to evaluate the eastern property line.
- Boring B15 was advanced off-site in the adjacent property parking lot, south of the former station to evaluate soil conditions on the southern border of the property.
- Boring B16 was advanced off-site in the sidewalk, along Aurora Avenue North, to evaluate soil conditions to the south of the property.

> Borings B18, B19, and B20 were advanced along the east side of the current lawnmower repair shop to delineate soil and soil vapor conditions encountered near the concrete slab of the building.

4.2 Pre-Field Activities

Prior to field activities, Cardno notified the Utility Notification Center (UNC) to mark public subsurface utilities. Holocene Drilling, Inc. of Puyallup, Washington (Holocene) obtained Washington start cards from the Washington State Department of Ecology (Ecology). Cardno personnel visited the proposed locations to check for obstructions and to mark the proposed locations. The property owner, tenant, and UNC were all notified at least 48 hours prior to the onset of field activities.

4.3 Private Utility Locate

On December 14, 2015, Cardno observed Mt. View Locating Services, LLC (Mt. View) locate subsurface utilities in the area of the proposed borings. Mt. View identified a gas line running east to west through the alley, south of Duck Island, which prevented the advancement of the boring location in the alley. Additionally, water and electrical lines were identified between the lawnmower repair shop and the enclosed storage building which prevented the advancement of two of the borings.

4.4 Soil Boring Advancement

On December 14 through December 15, 2015, Cardno observed Holocene clear soil borings B12 through B15, B17, and B20 to a depth of 8 feet bgs using hand tools and air-knife clearance drilling equipment. Following clearance activities, Holocene advanced the borings using either 6-inch or 8-inch outside diameter sonic drilling equipment to depths of 15 feet bgs in borings. Soil boring B16 was advanced to a depth of 8 feet bgs and soil borings B18 and B19 were advanced to a depth of 5 feet bgs using a hand auger. Soil samples were collected every 5 feet for geologic logging purposes. Select soil samples were preserved in accordance with EPA Method 5035 for submittal for laboratory analysis.

The boring locations and sample depths are shown on Plate 3. Cumulative soil results are shown on Plate 4. Descriptions of materials encountered during drilling, PID readings, and sampled intervals are provided in Appendix B.

4.5 Groundwater Monitoring Well Installation

Borings B12 through B17 were subsequently completed as groundwater monitoring wells MW1 through MW6. Monitoring wells MW1 through MW4 were installed on the subject site. Monitoring wells MW5 and MW6 were installed off-site to the south. Blank PVC casing was placed from the top of the screens to surface and finished with concrete to grade and a flush mounted well monument. Screens were installed with the midpoint of the screen at the approximate static water level encountered during drilling. Groundwater monitoring well construction details are summarized in Figure 1 and Table 8.

Figure 1 Well Construction Details – Groundwater Monitoring Wells

Boring/ Well ID	Date of Installation	Wellhead Elevation (feet bgs)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Borehole/Casing Diameter (inches)	Slot Size
B17/MW1	December 15, 2015	102.13	5-13	13	8/4	0.010
B14/MW2	December 15, 2015	101.63	5-13	13	8/4	0.010
B13/MW3	December 16, 2015	103.38	5-15	15	8/4	0.010
B12/MW4	December 17, 2015	104.10	5-15	15	6/2	0.010
B15/MW5	December 15, 2015	100.93	5-15	15	6/2	0.010
B16/MW6	December 14, 2015	100.00	3-8	8	3/1	0.010

4.6 Soil Vapor Sampling Well Installation

Borings B18, B19, and B20 were subsequently completed as SVS wells SVS1 through SVS3. The SVS wells were constructed with 0.25-inch diameter poly tubing with 12 inches of stainless steel mesh screen. Colorado silica sand was backfilled in the annular space surrounding the screened interval. Hydrated grout was installed in the annular space from the top of the sand interval to approximately 1.5 feet bgs. The SVS wells were completed to grade with concrete and a flush mounted well monument.

The screened interval was selected based on DTW encountered during drilling in each of the soil borings. The screen was placed at least 2 feet above to static water level encountered during drilling to ensure that vapor samples would be collected in the vadose zone, not in the smear or saturated zones.

Boring B20 (SVS1) was advanced to 15 feet bgs using sonic drilling equipment to characterize soil near the southeast corner of the lawnmower repair shop. Prior to construction of SVS1 the boring was backfilled with bentonite from 15 feet to 5 feet bgs. Well construction details for SVS wells are summarized in Figure 2.

Figure 2 Well Construction Details – SVS Wells

Boring/Well ID	Date of Installation	Wellhead Elevation (feet bgs)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Borehole/Casing Diameter (inches)
B20/SVS1	December 16, 2015	NE	3.5-4.5	4.5	3/0.25
B19/SVS2	December 16, 2015	NE	3-4	4	3/0.25
B18/SVS3	December 17, 2015	NE	3-4	4	3/0.25

4.7 Laboratory Analyses

Soil samples were shipped to TestAmerica Laboratories, Inc. (TestAmerica), a state certified laboratory in Nashville, Tennessee and analyzed for:

- TPHg in accordance with NWTPH-Gx.
- TPHd and TPHmo in accordance with NWTPH-Dx
- BTEX in accordance with EPA Method 8260B.
- Total lead in accordance with EPA Method 6010C.

In addition, samples collected from borings B13 and B17 were analyzed for:

- EDB, 1,2-DCA, naphthalenes, and HVOCs in accordance with EPA Method 8260B.
- PCBs in accordance with EPA Method 8082A.
- PAHs in accordance with EPA Method 8270C.

Soil analytical results are summarized in Tables 1 through 5 and are shown on Plate 3. Laboratory analytical reports are included in Appendix C.

4.8 Waste Management

The soil and decontamination water generated during drilling activities was stored on the subject site in DOT–approved, 55-gallon drums pending transport and disposal. Following drilling, the drums were transported by Emerald Services, Inc. (Emerald) for disposal at the Emerald Airport Way Facility located in Seattle, Washington. A copy of the certificate of disposal is enclosed in Appendix D.

4.9 Geology and Hydrogeology

Soil encountered beneath the site consisted of silty sand and sand mixtures to 15 feet bgs, the maximum depth of exploration at the site. Groundwater was encountered during drilling at depths ranging from 5 to 10 feet bgs. (Appendix B).

4.10 Soil Investigation Results

Laboratory results indicate 15 of 20 soil samples collected during boring advancement contained residual hydrocarbon concentrations below the MTCA Method A Cleanup Levels (Plate 3; Table 1; Appendix C).

- Samples collected from B13 at 10 feet bgs, in the vicinity of the former UST basin, exceeded the MTCA Method A Cleanup Levels for TPHg and total xylenes. Soil samples collected from B13 at depths of 5 and 15 feet bgs were below the MTCA Method A Cleanup Levels.
- Samples collected from B14 at 10 feet bgs, south of the former pump island, exceeded the MTCA Method A Cleanup Level for TPHg. Soil samples collected from B14 at depths of 6 and 15 feet bgs were below the MTCA Method A Cleanup Levels.
- Soil samples collected from B17 at 5 and 10 feet bgs, in the vicinity of the former UST basin, contained concentrations of TPHg, ethylbenzene, and/or total xylenes which exceeded the MTCA Method A Cleanup Levels. Samples collected from B17 at 15 feet bgs were below the MTCA Method A Cleanup Levels.
- Soil samples collected from B20 at 20 feet bgs, near the southeast corner of the current lawnmower repair shop, exceeded the MTCA Method A Cleanup Level for TPHg. Samples collected from B20 at depths of 5 and 15 feet bgs were below the MTCA Method A Cleanup Levels.

Hydrocarbon concentrations exceeding the MTCA Method A Cleanup Levels were observed at 5 and 10 feet bgs along the smear zone. The samples collected at 15 feet bgs at these locations were below the MTCA Method A Cleanup Levels. Results indicate that off-site boring locations B15 and B16, located to the south in the Duck Island parking lot and the sidewalk along Auroa Avenue North, contained concentrations of residual hydrocarbons below the MTCA Method A Cleanup Levels.

5 Soil Vapor Investigation

Cardno proposed to collect soil vapor samples in the vicinity where historical laboratory results indicated the highest hydrocarbon concentrations to evaluate current soil vapor conditions. Cardno performed the field work in accordance with Cardno's standard field protocol (Appendix A).

5.1 Soil Vapor Sampling Methodology

As outlined in Appendix C, Section C.1(h) of Ecology's *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation Remedial Action* (Ecology, 2016):

> *… efforts are typically taken as part of project QA/QC to determine how much indoor air may have entered the sample during a sub-slab collection. Often this is accomplished by shrouding the sample collector, apparatus, probe, and hole, and then delivering a tracer compound to the shrouded air volume. When the sample is analyzed the tracer compound can also be quantified, providing an estimate of how much indoor air may have entered the sample.*

Appendix C, Section C.2(h) of the guidance document, which discusses soil vapor sampling from locations other than sub-slab, indicates that a similar method for leak detection should be used as described in the sub-slab section (Ecology, 2016). Cardno applied this QA/QC methodology with the use of helium as a tracer compound and the use of a shroud when collecting soil vapor samples during this investigation.

5.2 Soil Vapor Sampling Activities

On February 9, 2016, Cardno collected samples of soil vapor from SVS wells SVS1 through SVS3 using Summa™ canisters inside of a custom-made helium shroud. The vapor sampling assembly consisted of a helium shroud, a flow regulator, a vacuum gauge, airtight valves, tubing, an electric air pump, a helium detector, and sample collection vessels (Summa™ canisters).

Prior to sampling, Cardno assembled the sampling system over the SVS well and performed a leak test by evacuating all air from the sample tubing using an electric air pump. Ball valves were used to isolate the tubing and a vacuum gauge was used to monitor for any leaks. If the sampling system was not able to hold a vacuum, all connections were checked and the leak test was repeated.

Upon successful completion of the leak test, Cardno calculated purge volumes for each SVS well, accounting for the casing, sample tubing, and sand pack porosity. Following the determination of the sampling system purge volume, the ball valve leading to the well was opened, an atmosphere of 20% helium by volume was introduced inside the shroud, and the sampling system was purged using an electric pump. The purged vapor was pumped into a Tedlar bag that was tested with a helium detector to monitor for any leaks. No significant leaks were detected, and the valve from the SVS wells to the pump was closed. The valve to the Summa™ canister was then opened, and a sample was collected from the SVS well for laboratory analysis. The Summa™ canisters were filled until the pressure inside was the vessel was approximately negative 5 inches of Hg and the flow regulator and ball valve was closed. An additional Tedlar bag was then filled from each SVS well for laboratory analysis.

5.3 Laboratory Analyses

Soil vapor samples were submitted for analysis to Fremont Analytical, Inc., a state-certified laboratory, located in Seattle, Washington. The samples were analyzed for:

- Full-scan VOCs (including but not limited to TPHg, BTEX, oxygenated compounds, lead scavengers, and naphthalene) in accordance with EPA Method TO-15
- C5-C8 aliphatic hydrocarbons, C9-C12 aliphatic hydrocarbons, and C9-C10 aromatic hydrocarbons in accordance with EPA Method TO-3
- Oxygen, carbon dioxide, methane, and helium (leak detection compound) in accordance with American Society of Testing and Materials (ASTM) Method 1946.

Soil vapor analytical results are summarized in Tables 6 and 7. Laboratory analytical results and COC records are provided in Appendix C.

5.4 Soil Vapor Sampling Results

Due to the shallow depths of the SVS wells, measurements were compared to sub-slab gas screening levels as defined in Ecology's (Ecology, 2016). Laboratory results indicate concentrations of chloroform exceeded the MTCA Method B Soil Gas Screening Level for cancer risk of 3.62 µg/m^3 (Plate 5; Table 7). Chloroform was detected in soil vapor collected from well SVS3 at a concentration of 20.2 µg/m^3. No other constiuents of concern exceeded the MTCA Method B Soil Gas Screening Levels (Tables 6 and 7). The leak detection gas, helium, was not detected in any of the SVS samples, indicating that soil vapor samples are representative of in-situ soil conditions. Soil vapor analytical results are shown on Plate 5 and in Tables 6 and 7.

The detections of chloroform are not believed to be related to Former Mobil Station 99CHT operations. The following information was referenced from the U.S. Department of Health and Human Servces Agency for Toxic Substances and Disease Registry and the U.S. EPA (ATSDR, 1997; EPA, 2000). Chloroform is an organic compound that can be synthesized and is natually occuring. The predominant current use of chloroform is in chemical manufacturing, including refrigerants and propellants, and as a laboratory extractant. Additional sources of chloroform include paper and pulp mills, hazardous waste sites and landfills, chlorination of drinking water, swimming pools, and wastewater. Sources of chloroform that are no longer in use include use as an extraction solvent for fats, oils, and grease; dry cleaning operations; fire extinguishers; in the manufacturing of dyes and pesticides; and as a fumigant. Mobil service station operation did not include any of current or historical sources of chloroform indicating that concentrations of chloroform detected in SVS3 are not related to historical release of hydrocarbons to soil and groundwater.

6 Groundwater Monitoring and Sampling

6.1 Wellhead Elevation Survey

On February 10, 2016, Cardno performed a wellhead elevation survey of newly installed groundwater monitoring wells MW1 through MW6. The wellhead survey was conducted by using an optical level and graduated survey rod. Wellhead elevations were measured to the nearest 0.005 foot relative to the top of casing of the MW6, which was set as a local datum of 100.00 feet. Wellhead elevation survey results are presented in Appendix E.

6.2 Well Development

On February 8, 2016, Cardno developed monitoring wells MW1 through MW5 using a downwell pump and surge block. The DTW and total depth of each well was measured prior to development. Each well was purged dry, allowed to recharge to at least 80% of its original volume, surged for 15 minutes slowly, purged again, allowed to recharge once more to at least 80% of its original volume, surged slowly for another 15 minutes, and purged once more. The purge water was pumped into a DOT-approved 55-gallon drums to be stored on site until transport and disposal. Well MW6 could not be developed due to its 1-inch casing diameter. Well construction details, casing volumes, and approximations of the purge volume for each well and purge event are shown in Figure 3.

Figure 3 Well Development Purge Log

Well ID	Initial DTW (feet bgs)	Depth of Well (feet)	Casing Diameter (inches)	Casing Volume (gallons)	Purge Value 1 (gallons)	Purge Value 2 (gallons)	Purge Value 3 (gallons)
MW1	4.30	12.6	4	5.42	7.5	6.0	7.5
MW2	4.04	12.3	4	5.39	10.5	7.5	9.0
MW3	6.06	15.1	4	5.89	9.8	8.6	8.6
MW4	7.99	14.6	2	1.07	3.0	4.1	3.4
MW5	6.11	13.7	2	1.22	8.6	3.4	3.8

6.3 Groundwater Monitoring and Sampling

On February 10, 2016 Cardno measured DTW from on-site groundwater monitoring wells MW1 through MW4 and off-site well MW5 and MW6. Monitoring wells MW1 through MW5 were sampled using low-flow methods. Monitoring well MW6 did not have sufficient recharge to use low-flow methodology; it was purged dry on February 10, allowed to recharge overnight, and a grab groundwater sample was collected on February 11, 2016. There was insufficient sample volume from MW6 to run a full round of analyses. The DTW and groundwater monitoring and sampling field notes are enclosed as Appendix F.

6.4 Laboratory Analyses

The samples were shipped to TestAmerica in Nashville, Tennessee. Laboratory analytical methods for all wells sampled are summarized in Figure 4. Groundwater monitoring and sampling data is summarized in Tables 9 through 13. Laboratory analytical results and COC records are provided in Appendix C.

Figure 4 Groundwater Laboratory Analytical Methods

Well ID	TPHg[a]	TPHd/ TPHmo[b]	BTEX[c]	Additional VOCs[d]	PAHs[e]	PCBs[f]	Total/ Dissolved Pb[g]
MW1	X	X	X	X	X	X	X
MW2	X	X	X	--	--	--	X
MW3	X	X	X	X	X	X	X
MW4	X	X	X	--	--	--	X
MW5	X	X	X	--	--	--	X
MW6	X	--	--	--	--	--	--

X = analyzed
-- = not analyzed
a = TPHg in accordance with NWTPH-Gx
b = TPHd and TPHmo in accordance with NWTPH-Dx
c = BTEX in accordance with EPA Method 8260C
d = additional VOCs in accordance with EPA Method 8260C
e = PAHs in accordance with EPA Method 8270D SIM
f = PCBs in accordance with EPA Method 8082A
g = Total and dissolved lead in accordance with EPA Method 6010C

6.5 Waste Management

Water generated during well development and purge water generated during groundwater sampling was stored on site in DOT-approved, 55-gallon drums pending profiling and disposal. The drums were transported by Emerald for disposal at the Emerald Airport Way Facility located in Seattle, Washington. A copy of the certificate of disposal is enclosed in Appendix D.

6.6 Groundwater Monitoring and Sampling Results

Laboratory results indicate 4 of 6 groundwater samples collected during groundwater monitoring contained dissolved-phase hydrocarbon concentrations below the MTCA Method A Cleanup Levels (Plate 6; Tables 10 through 13; Appendix C). The DTW was measured from depths ranging from 4.37 to 7.52 feet bgs (Appendix F). The average groundwater gradient flow direction is south with an average magnitude of 0.08 (Plate 7).

Samples collected from MW2 (east of the former UST basins) and MW3 (in the vicinity of the former UST basin) contained concentrations exceeding the MTCA Method A Cleanup Levels for TPHg, TPHd, and naphthalenes (Figure 5).

Figure 5 Hydrocarbons in Groundwater Above the MTCA Method A Cleanup Level

Well ID	TPHg (µg/L)	TPHd (µg/L)	Naphthalenes (µg/L)
MW1	**2,900**	**589**	ND
MW3	**8,540**	**1,780**	**198.8**
MTCA Method A Cleanup Levels	800/1,000[a]	500	160

ND = not detected
TPHg analyzed in accordance with Ecology Method NWTPH-Gx
TPHd analyzed in accordance with Ecology Method NWTPH-Dx
Naphthalenes = the sum of naphthalene, 1-Methyl Naphthalene, and 2-Methyl Naphthalene
Naphthalene analyzed in accordance with EPA Method 8260C
1-Methyl Naphthalene and 2-Methyl Naphthalene analyzed in accordance with EPA Method 8270D
Bolded and values equal or exceed the MTCA Method A Cleanup Levels
a = TPHg cleanup level for groundwater is 800 ug/L if benzene is present, or 1,000 ug/L if benzene is not present

7 Deviations from Work Plan

The *Work Plan* proposed the installation of six 2-inch groundwater monitoring wells, of which two 2-inch monitoring wells were installed.

- A soil boring could not be advance at proposed location in the alley south of Duck Island due to a gas line running west to east through the alley.

- The sonic drill rig could not access the proposed boring location in the sidewalk adjacent to Aurora Avenue North due to right-of-way constraints. Instead, a hand auger was used to advance a 3-inch diameter borehole to install 1-inch diameter groundwater monitoring well MW 6in front of Duck Island Ale House at point B16/MW6.
- Based on field observations monitoring well MW2 was installed as a 4-inch diameter monitoring well instead of a 2-inch monitoring well in the event that NAPL recovery is necessary in the future.
- During the underground utility search it was identified that water and electrical lines run between the lawnmower repair shop and the enclosed storage building preventing the installation of two proposed wells. A single 4-inch groundwater monitoring well (MW3) was near the northwest corner of the enclosed storage building.

The *Work Plan*, based on historical data, proposed that SVS wells would be installed at depths of 6 to 8 feet bgs. Water was encountered at approximately 5 feet bgs. To ensure that the soil vapor sampling well screens above the saturated zone, the final screened intervals was set at depths between 3.5 to 4.5 feet bgs. The SVS wells were constructed with a 12-inch wire mesh screen instead of a 6-inch screen flexible poly tubing, not stainless steel casing, was installed. Hydrated grout was used as the well seal instead of bentonite chips.

8 Conclusions

Residual concentrations of hydrocarbons in soil exceeding the MTCA Method A Cleanup Levels are encountered at depths ranging from 5 to 10 feet bgs along the vadose/saturated zone interface. Beneath this interface, residual concentrations of hydrocarbons in soil are not encountered in the saturated zone. Residual concentrations of hydrocarbons above the MTCA Method A Cleanup Levels remain in the vicinity of the former UST basin and to the south of the former pump island. The deepest samples collected from historical borings PB03 and PB06 exceeded the MTCA Method A Cleanup Levels and additional assessment is necessary at these locations to vertically delineate soil containing hydrocarbons. Borings PB06, B14, and PB07 were advanced along the eastern property line and exceeded the MTCA Method A Cleanup Levels. Additional assessment is needed to define the eastern extent of soil containing hydrocarbons.

Soil vapor concentrations, related to the former Mobil station operations, were below the MTCA Method B Soil Gas Screening Levels in accordance with Washington Administrative Code Chapter 173-340-750 (WAC, 2007). Chloroform was detected above the MTCA Method B Soil Gas Screening Level for cancer risk. However; there is no evidence that former Mobil station operations provided a source for chloroform and that chloroform detected in soil vapor is not related to the release of hydrocarbons to soil and groundwater at the subject site. Chloroform was not detected in any soil samples and was detected at a concentration below the MTCA Method A Cleanup Level in groundwater collected from well MW3. Chloroform in soil is highly volatile and will preferentially leach from soil to groundwater due to low soil adsorption (ATSDR, 1997). Additionally, chloroform is water soluble and is expected to be persistent in groundwater (i.e. detections of chloroform in groundwater, and non-detected concentrations in soil).

Dissolved-phase concentrations of hydrocarbons exceeding MTCA Method A Cleanup Levels are encountered in the vicinity of the former UST basins in monitoring wells MW2 and MW3. However, monitoring well MW1, also located in the southern former UST basin, did not contain concentrations exceeding MTCA Method A Cleanup Levels. Additional characterization of groundwater conditions along the eastern property boundary should be conducted to define the extent of dissolved-phase hydrocarbons.

Grab groundwater sample PB02, collected during the SES investigation, exceeded the MTCA Method A Cleanup Level for naphthalene. Wells MW1 and MW2 were installed in the vicinity of PB02. Groundwater samples collected from MW1 did not contain detectable concentrations of naphthalene. Samples collected from MW2, were not analyzed for naphthalene.

9 Recommendations

Cardno recommends additional characterization of soil to determine the vertical extent of hydrocarbons at boring locations PB03 and PB06 and on the eastern portion of the site to horizontally delineate the eastern extent of soil containing hydrocarbons. Additionally, chloroform concentrations in soil vapor should be monitored periodically and a groundwater monitoring and sampling plan should be developed and implemented to evaluate current groundwater conditions.

10 Contact Information

> The responsible party contact is Ms. Jerri Hanks, ExxonMobil Environmental Services Company, 22777 Springwoods Village Parkway, Spring, Texas, 77389.

> The consultant contact is Mr. Ryan Pozzuto, Cardno, 801 Second Avenue, Suite 700, Seattle, Washington 98104.

> The agency contact is Washington State Department of Ecology, Northwest Regional Office, 3190 160th Avenue Southeast, Bellevue, Washington 98008-5452.

11 Limitations

For documents cited that were not generated by Cardno, the data taken from those documents is used “as is” and is assumed to be accurate. Cardno does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents.

This report and the work performed have been undertaken in good faith, with due diligence and with the expertise, experience, capability and specialized knowledge necessary to perform the work in a good and workmanlike manner and within all accepted standards pertaining to providers of environmental services in Washington at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

12 References

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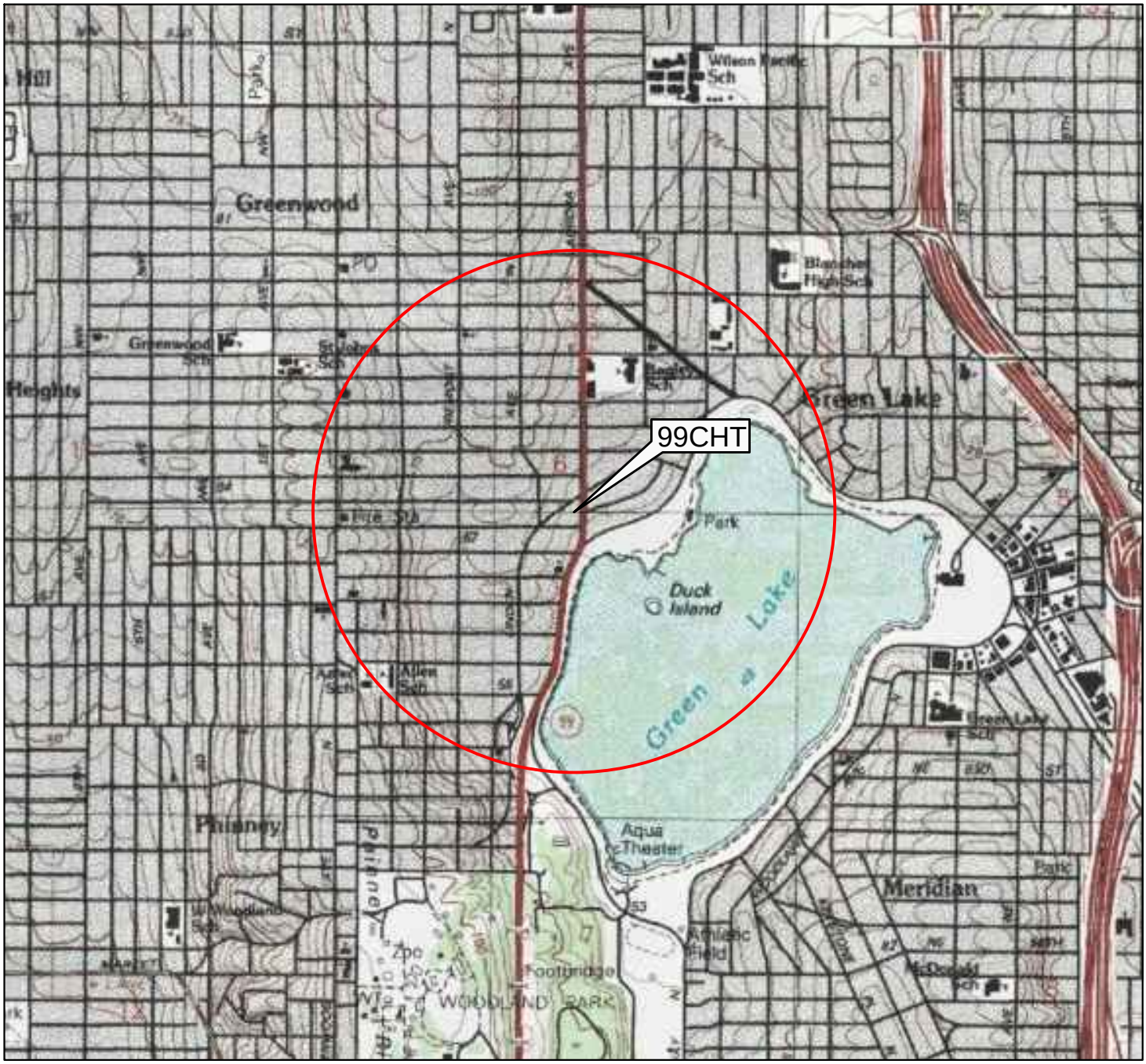
13 Acronym List

µg/L	Micrograms per liter
µs	Microsiemens
1,2-DCA	1,2-dichloroethane
acfm	Actual cubic feet per minute
AS	Air sparge
bgs	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, and total xylenes
CEQA	California Environmental Quality Act
cfm	Cubic feet per minute
COC	Chain of Custody
CPT	Cone Penetration (Penetrometer) Test
DIPE	Di-isopropyl ether
DO	Dissolved oxygen
DOT	Department of Transportation
DPE	Dual-phase extraction
DTW	Depth to water
EDB	1,2-dibromoethane
EDC	1,2-dichloroethane
EPA	Environmental Protection Agency
ESL	Environmental screening level
ETBE	Ethyl tertiary butyl ether
FID	Flame-ionization detector
fpm	Feet per minute
GAC	Granular activated carbon
gpd	Gallons per day
gpm	Gallons per minute
GWPTS	Groundwater pump and treat system
HVOC	Halogenated volatile organic compound
J	Estimated value between MDL and PQL (RL)
LEL	Lower explosive limit
LPC	Liquid-phase carbon
LRP	Liquid-ring pump
LUFT	Leaking underground fuel tank
LUST	Leaking underground storage tank
MCL	Maximum contaminant level
MDL	Method detection limit
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
mg/m^3	Milligrams per cubic meter
MPE	Multi-phase extraction
MRL	Method reporting limit
msl	Mean sea level
MTBE	Methyl tertiary butyl ether
MTCA	Model Toxics Control Act
NAI	Natural attenuation indicators
NAPL	Non-aqueous phase liquid
NEPA	National Environmental Policy Act
NGVD	National Geodetic Vertical Datum
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
ORP	Oxidation-reduction potential
OSHA	Occupational Safety and Health Administration
OVA	Organic vapor analyzer
P&ID	Process & Instrumentation Diagram
PAH	Polycyclic aromatic hydrocarbon
PCB	Polychlorinated biphenyl
PCE	Tetrachloroethene or perchloroethylene
PID	Photo-ionization detector
PLC	Programmable logic control
POTW	Publicly owned treatment works
ppmv	Parts per million by volume
PQL	Practical quantitation limit
psi	Pounds per square inch
PVC	Polyvinyl chloride
QA/QC	Quality assurance/quality control
RBSL	Risk-based screening levels
RCRA	Resource Conservation and Recovery Act
RL	Reporting limit
scfm	Standard cubic feet per minute
SSTL	Site-specific target level
STLC	Soluble threshold limit concentration
SVE	Soil vapor extraction
SVOC	Semivolatile organic compound
TAME	Tertiary amyl methyl ether
TBA	Tertiary butyl alcohol
TCE	Trichloroethene
TOC	Top of well casing elevation; datum is msl
TOG	Total oil and grease
TPHd	Total hydrocarbons as diesel
TPHg	Total hydrocarbons as gasoline
TPHmo	Total hydrocarbons as motor oil
TPHs	Total hydrocarbons as stoddard solvent
TRPH	Total recoverable hydrocarbons
UCL	Upper confidence level
USCS	Unified Soil Classification System
USGS	United States Geologic Survey
UST	Underground storage tank
VCP	Voluntary Cleanup Program
VOC	Volatile organic compound
VPC	Vapor-phase carbon



FN 0313790001

EXPLANATION

1/2-mile radius circle

APPROXIMATE SCALE

0 0.25 0.5 mile

N

SOURCE: Modified from a map provided by USGS

Cardno
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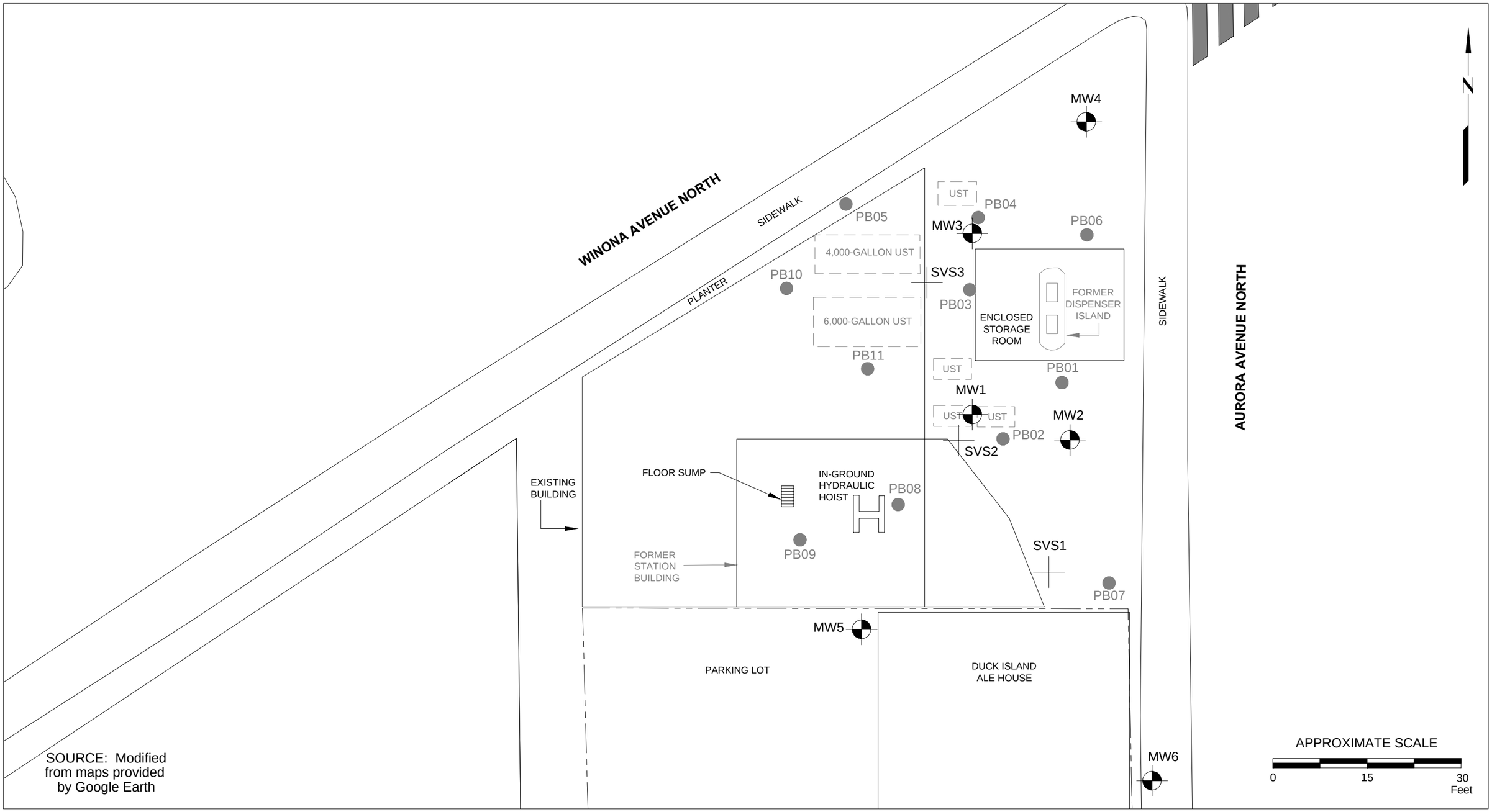
SITE LOCATION MAP

FORMER MOBIL STATION 99CHT
7323 Aurora Avenue North
Seattle, Washington

PROJECT NO. 031379

PLATE 1

LEC: 06/09/15



FN 0313790002

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GENERALIZED SITE PLAN

FORMER MOBIL STATION 99CHT
7323 Aurora Avenue North
Seattle, Washington

EXPLANATION

- MW6 — Groundwater Monitoring Well
- PB11 — Historical Soil Boring
- SVS3 — Soil Vapor Sampling Well
- Approximate Property Line

PROJECT NO.
031379

PLATE
2
LEC: 04/06/16

Laboratory Results in mg/kg

B13/MW3	Boring ID / Well ID
12/16/15	Sample Date
S-10-B12	Sample Name
10	Sample Depth
1,430	TPHg
1.81	Ethylbenzene
15.1	Total Xylenes

mg/kg = Milligrams per kilogram

<1.00 = Less than stated laboratory reporting limit

b = Sample prepped or analyzed beyond hold time

- Numbers or Well Symbols in Red Indicate Residual Hydrocarbon Concentrations Which Exceed MTCA Method A Cleanup Levels
- Numbers or Well Symbols in Green Indicate Residual Hydrocarbon Concentrations Less Than MTCA Method A Cleanup Levels
- No Data Available for Numbers and Well Symbols in Black

B18/SVS3
12/14/15
S-5-B18
5
<4.44
<0.00145
<0.00436

B12/MW4		
12/14/15	12/16/15	12/16/15
S-5.5-B12	S-10-B12	S-15-B12
5.5	10	15
<4.66	<4.44	<4.15
<0.00149	<0.00143	<0.00137
<0.00446	<0.00430	<0.00411

B13/MW3		
12/14/15	12/16/15	12/16/15
S-5-B13	S-10-B12	S-15-B12
5	10	15
<4.77	1,430	<4.32
<0.00198	1.81	<0.00133
<0.00595	15.1	<0.00398

B14/MW2		
12/14/15	12/15/15	12/15/15
S-6-B14	S-10-B14	S-15-B14
6	10	15
<6.55	30.8	<4.95
<0.00265	0.104	<0.00154
<0.00796	1.34	<0.00462

B17/MW1		
12/14/15	12/15/15	12/15/15
S-5-B17	S-10-B17	S-15-B17
5	10	15
807	758	<5.68
0.0251	7.65	<0.00157
0.0861	46.6	<0.00481

B20/SVS1		
12/14/15	12/16/15	12/16/15
S-5-B20	S-10-B20	S-15-B20
5	10	15
<4.94	1,510	<5.35
<0.00156	1.72b	<0.00181
<0.00469	2.25b	<0.00544

B15/MW5		
12/15/15	12/17/15	12/17/15
S-5-B15	S-10-B15	S-15-B15
5	10	15
<5.79	<4.49	<4.49
<0.00189	<0.00158	<0.00149
<0.00566	<0.00473	<0.00448

B16/MW6
12/14/15
S-5-B16
5
<5.35
<0.00194
<0.00582

WINONA AVENUE NORTH
SIDEWALK
PLANTER
AURORA AVENUE NORTH
SIDEWALK
EXISTING BUILDING
4,000-GALLON UST
6,000-GALLON UST
ENCLOSED STORAGE ROOM
FORMER DISPENSER ISLAND
FLOOR SUMP
IN-GROUND HYDRAULIC HOIST
FORMER STATION BUILDING
PARKING LOT
DUCK ISLAND ALE HOUSE
ALLEY
PARKING LOT
BETH'S CAFE
PB01 PB02 PB03 PB04 PB05 PB06 PB07 PB08 PB09 PB10 PB11
B12/MW4 B13/MW3 B18/SVS3 B17/MW1 B14/MW2 B19/SVS2 B20/SVS1 B15/MW5 B16/MW6
UST

N

APPROXIMATE SCALE
0 20 40 Feet

SOURCE: Modified from maps provided by Google Earth

FN 0313790002

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SOIL SAMPLE ANALYSES MAP - 12/14 - 12/16/15

FORMER MOBIL STATION 99CHT
7323 Aurora Avenue North
Seattle, Washington

EXPLANATION

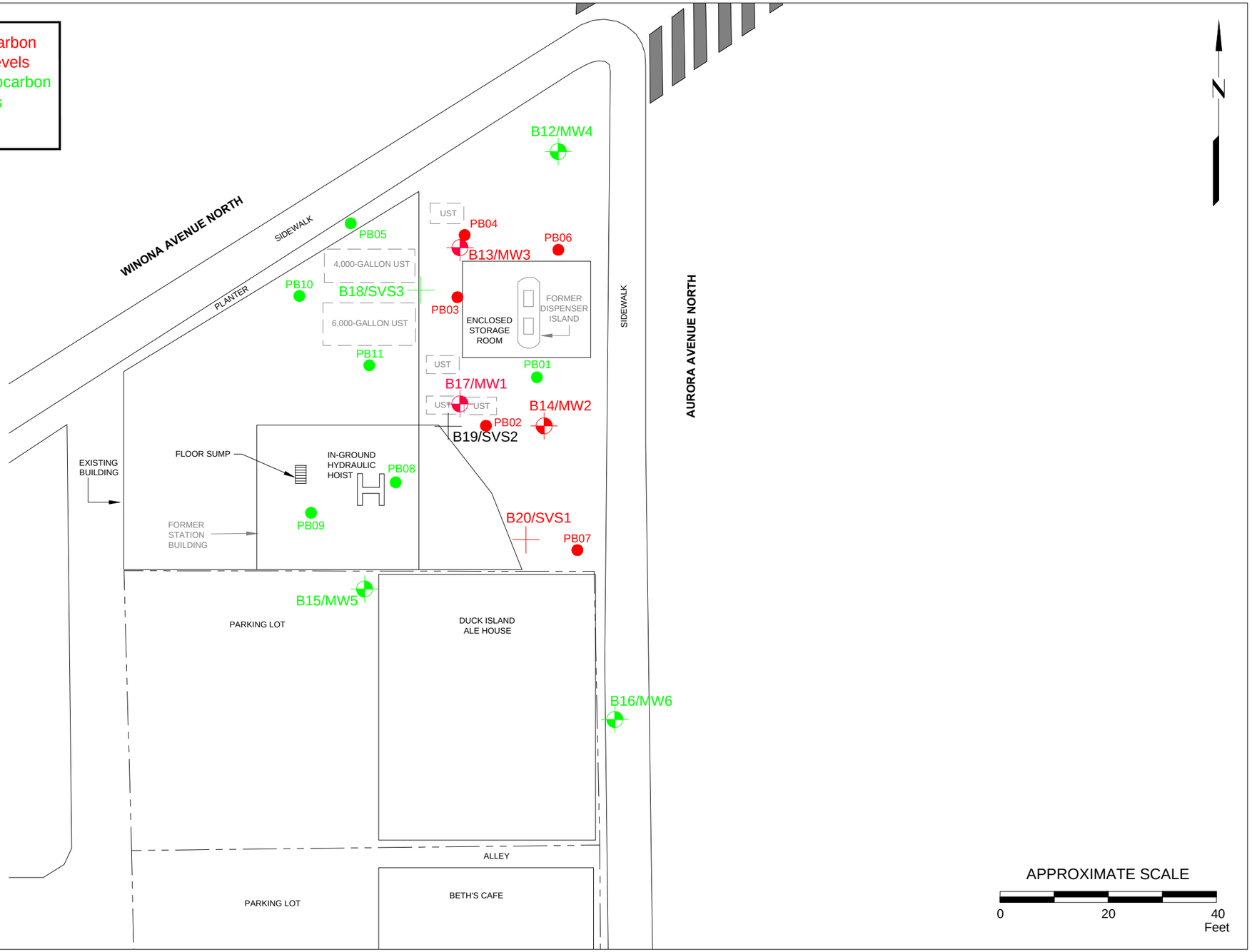
- MW6 — Groundwater Monitoring Well
- SVS3 — Soil Vapor Sampling Well
- Approximate Property Line
- PB11 — Historical Soil Boring

PROJECT NO. 031379

PLATE 3

LEC: 04/06/16

- Numbers or Well Symbols in Red Indicate Residual Hydrocarbon Concentrations Which Exceed MTCA Method A Cleanup Levels
- Numbers or Well Symbols in Green Indicate Residual Hydrocarbon Concentrations Less Than MTCA Method A Cleanup Levels
- No Data Available for Numbers and Well Symbols in Black



APPROXIMATE SCALE

0 20 40 Feet

SOURCE: Modified from maps provided by Google Earth

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CUMULATIVE SOIL SAMPLE ANALYSES MAP

FORMER MOBIL STATION 99CHT
7323 Aurora Avenue North
Seattle, Washington

EXPLANATION

- PB11 — Historical Soil Boring
- B18/SVS3 — Soil Vapor Sampling Well
- B16/MW6 — Groundwater Monitoring Well
- Approximate Property Line

PROJECT NO. 031379

PLATE 4

RRT: 10/26/16

Laboratory Results in µg/m3

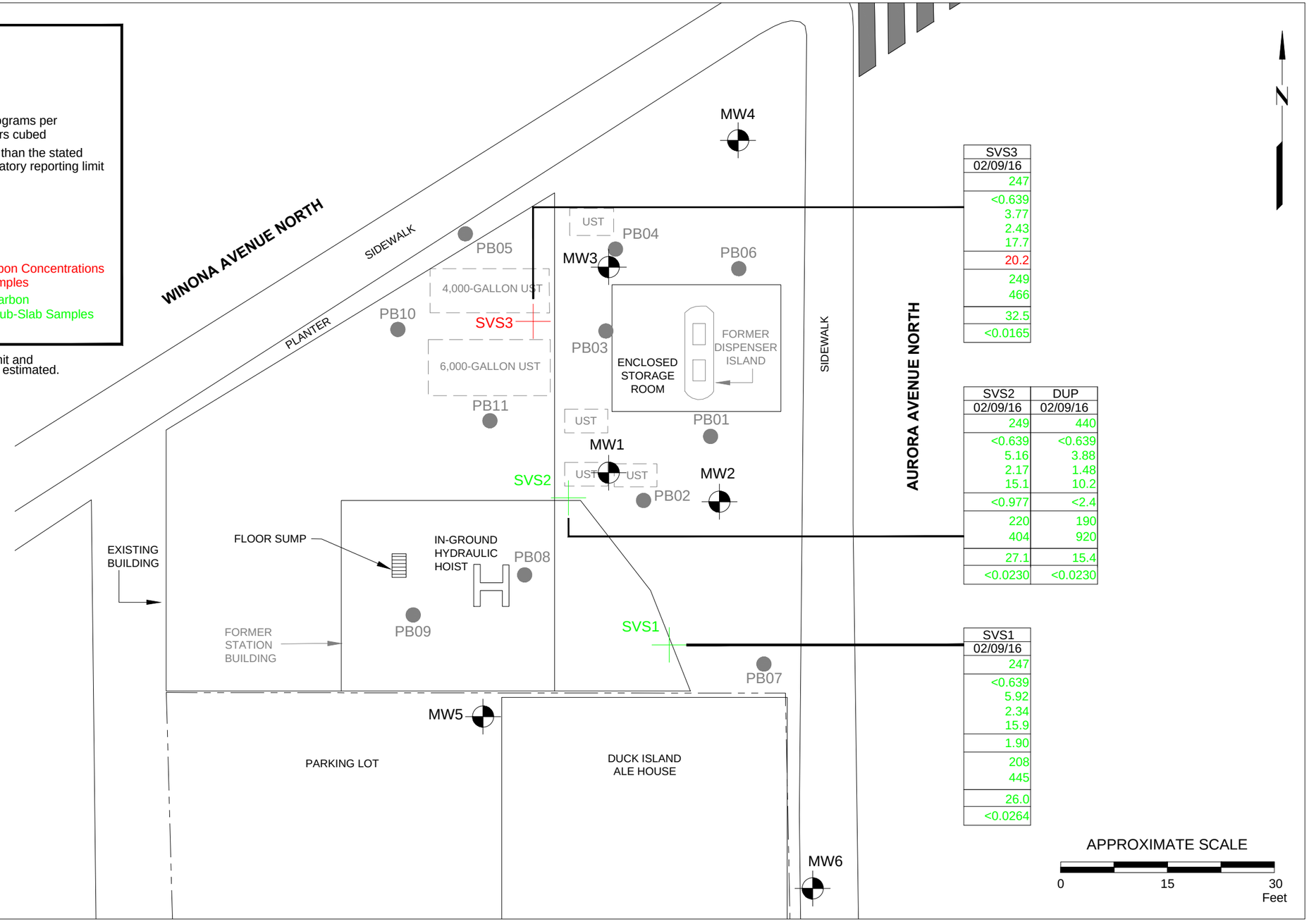
SVS3	Sample Name
02/09/16	Sample Date
247	Total Petroleum Hydrocarbons as Gasoline
<0.639	Benzene
3.77	Toluene
2.43	Ethylbenzene
17.7	Total Xylenes
20.2	Chloroform
249	C5-C8 Aliphatic Hydrocarbons
466	C9-C12 Aliphatic Hydrocarbons
32.5	C9-C10 Aromatic Hydrocarbons
<0.0165	Helium (%v)

µg/m3 = Micrograms per meters cubed

<0.639 = Less than the stated laboratory reporting limit

- Numbers or Symbols in Red Indicate Vapor Phase Hydrocarbon Concentrations Which Exceed Soil Vapor Screening Levels for Sub-Slab Samples
- Numbers or Symbols in Green Indicate Vapor Phase Hydrocarbon Concentrations Less Than Soil Vapor Screening Levels for Sub-Slab Samples
- No Data Available for Numbers and Well Symbols in Black

J = Analyte was detected at a concentration below the reporting limit and and above the laboratory method detection limit. Reported value is estimated.



SOURCE: Modified from maps provided by Google Earth

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SOIL VAPOR SAMPLE ANALYSES MAP - 02/09/16

FORMER MOBIL STATION 99CHT

7323 Aurora Avenue North

Seattle, Washington

EXPLANATION

MW6 Groundwater Monitoring Well

PB11 Historical Soil Boring

SVS3 Soil Vapor Sampling Well

PROJECT NO. 031379

PLATE 5

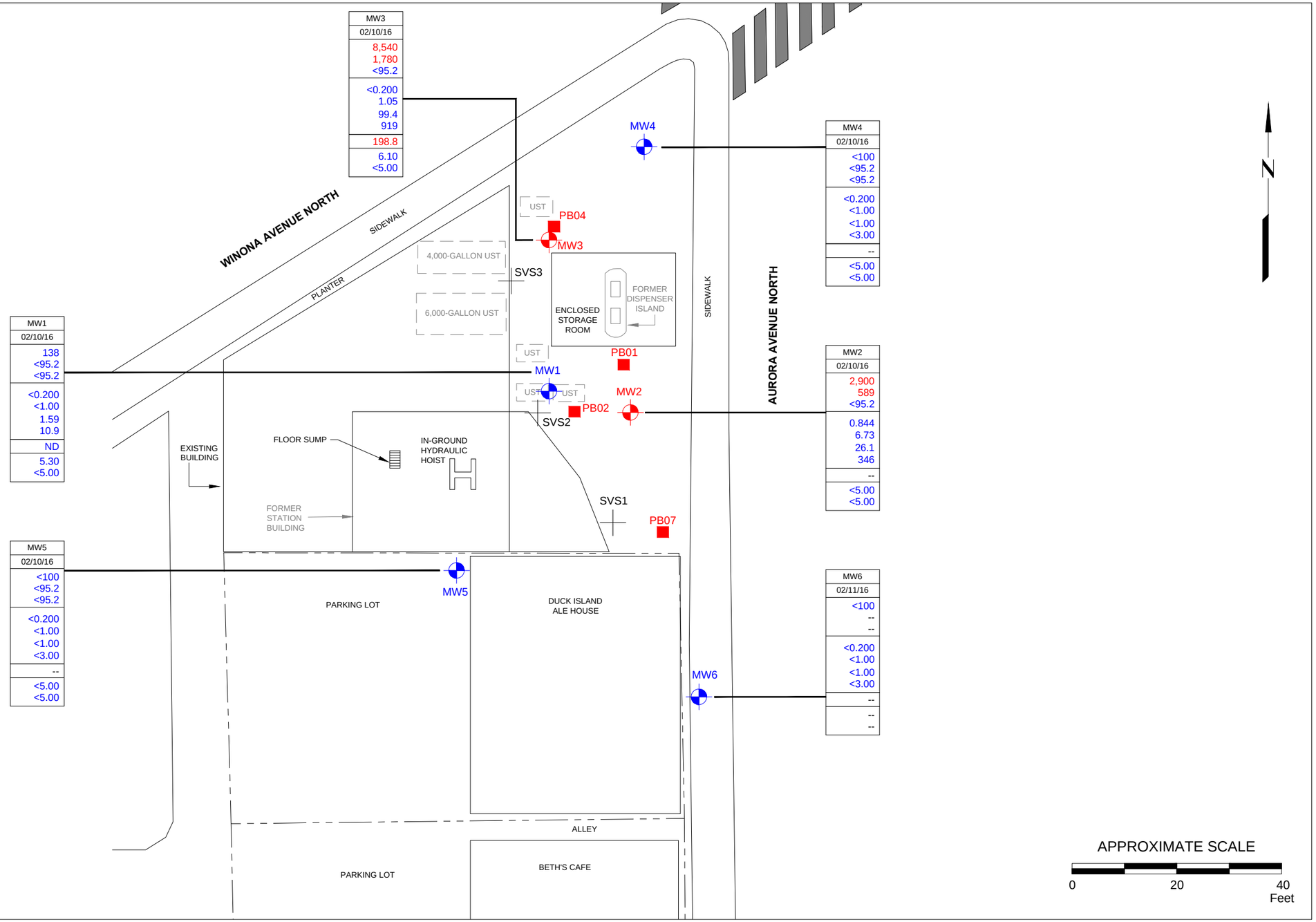
RRT: 12/20/16

Laboratory Results in µg/L

MW3	Well ID
02/10/16	Sample Date
8,540	Total Petroleum Hydrocarbons as Gasoline
1,780	Total Petroleum Hydrocarbons as Diesel
<95.2	Total Petroleum Hydrocarbons as Motor Oil
<0.200	Benzene
1.05	Toluene
99.4	Ethylbenzene
919	Total Xylenes
198.8	Naphthalenes
6.10	Total Lead
<5.00	Dissolved Lead

<1.00 = Less than the Stated Laboratory Reporting Limit
µg/L = Micrograms per liter
-- = Not Analyzed
ND = Not Detected

- Numbers or Well Symbols in Red Indicate Dissolved Hydrocarbon Concentrations Which Exceed MTCA Method A Cleanup Levels
- Numbers or Well Symbols in Blue Indicate Dissolved Hydrocarbon Concentrations Less Than MTCA Method A Cleanup Levels
- No Data Available for Numbers and Well Symbols in Black



SOURCE: Modified from maps provided by Google Earth

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GROUNDWATER SAMPLE ANALYSES MAP - 02/10 - 02/11/16

FORMER MOBIL STATION 99CHT
7323 Aurora Avenue North
Seattle, Washington

EXPLANATION

- MW6 — Groundwater Monitoring Well
- SVS3 — Soil Vapor Sampling Well
- PB07 — Grab Groundwater Sample
- Approximate Property Line

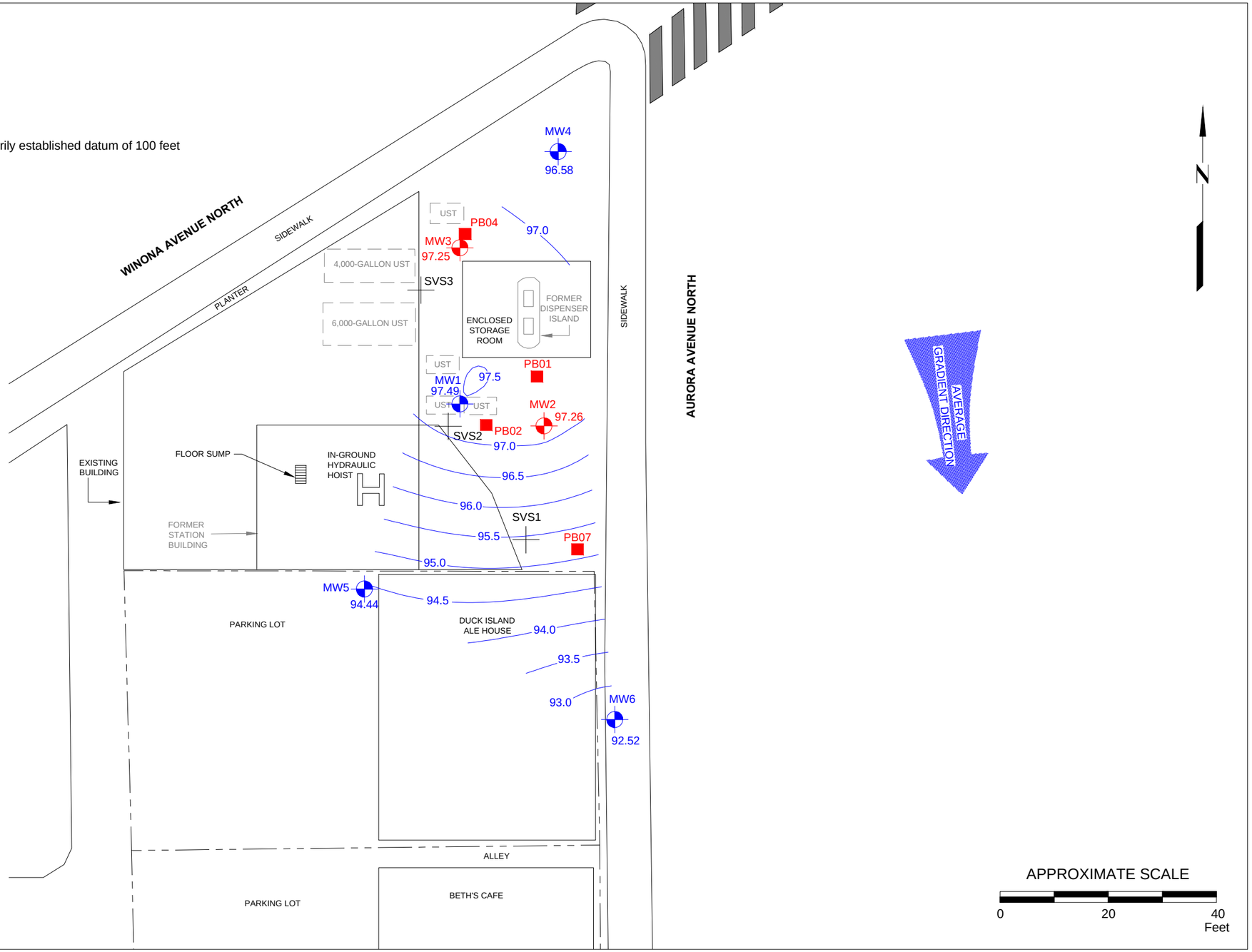
PROJECT NO. 031379

PLATE 6

LEC: 04/13/16

- Numbers or Well Symbols in Red Indicate Dissolved Hydrocarbon Concentrations Which Exceed MTCA Method A Cleanup Levels
- Numbers or Well Symbols in Blue Indicate Dissolved Hydrocarbon Concentrations Less Than MTCA Method A Cleanup Levels
- No Data Available for Numbers and Well Symbols in Black

Wellhead elevations were measured relative to MW6 which was assigned an arbitrarily established datum of 100 feet



SOURCE: Modified from maps provided by Google Earth

APPROXIMATE SCALE

0 20 40 Feet

FN 0313790002

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GROUNDWATER ELEVATION CONTOUR MAP - 02/10/16

FORMER MOBIL STATION 99CHT
7323 Aurora Avenue North
Seattle, Washington

EXPLANATION

- MW6 — Groundwater Monitoring Well
- 92.52 — Groundwater Elevation
- PB07 — Grab Groundwater Sample
- Groundwater Elevation Contour Line
- B18/SVS3 — Soil Vapor Sampling Well
- Approximate Property Line

PROJECT NO. 031379

PLATE 7

LEC: 04/06/16

TABLE 1
CUMULATIVE SOIL ANALYTICAL RESULTS
TPH / BTEX / LEAD
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Sample Name	Well ID	Sample Date	Sample Depth (feet bgs)	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	Total Pb (mg/kg)
SoundEarth Strategies, Inc. (SES) - Subsurface Investigation - March 5, 2015:											
PB01-10.0	N/A	02/10/15	10	<2	--	--	<0.02	<0.02	<0.02	<0.06	1.40
PB01-15.0	N/A	02/10/15	15	<2	--	--	<0.02	<0.02	<0.02	<0.06	--
PB02-10.0	N/A	02/10/15	10	**3,100**	640	<250	**3.9**	**19**	**21**	**100**	2.20
PB02-14.5	N/A	02/10/15	14.5	26	--	--	0.024	0.12	0.16	0.97	--
PB03-10.0	N/A	02/10/15	10	**680**	--	--	**0.26**	1.4	0.98	3.2	1.53
PB03-13.5	N/A	02/10/15	13.5	**850**	--	--	<0.1	1.5	2.7	**16**	--
PB04-10.0	N/A	02/10/15	10	**9,600**	--	--	**6.5**	**16**	**28**	**180**	2.88
PB04-14.0	N/A	02/10/15	14	17	--	--	<0.02	<0.02	0.046	0.34	--
PB05-10.0	N/A	02/10/15	10	<2	--	--	<0.02	<0.02	<0.02	<0.06	--
PB06-10.0	N/A	02/10/15	10	**4,000**	--	--	<0.2	**10**	**24**	**59**	2.19
PB07-10.0	N/A	02/10/15	10	**84**	--	--	<0.02	<0.02	0.30	0.66	--
PB07-13.0	N/A	02/10/15	13	<2	--	--	<0.02	<0.02	<0.02	<0.06	--
PB08-10.0	N/A	02/11/15	10	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	--
PB09-10.0	N/A	02/11/15	10	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	5.66
PB10-9.0	N/A	02/11/15	9	<2	--	--	<0.02	<0.02	<0.02	<0.06	--
PB11-9.5	N/A	02/11/15	9.5	<2	--	--	<0.02	<0.02	<0.02	<0.06	--
Cardno - Limited Subsurface Investigation - December 13, 2016:											
S-5.5-B12	MW4	12/14/15	5.5	<4.66	<4.51	<4.51	<0.00149	<0.00149	<0.00149	<0.00446	5.17
S-10-B12	MW4	12/16/15	10	<4.44	6.34	11.5	<0.00143	<0.00143	<0.00143	<0.00430	5.28
S-15-B12	MW4	12/16/15	15	<4.15	8	5.79	<0.00137	<0.00137	<0.00137	<0.00411	3.88
S-5-B13	MW3	12/14/15	5	<4.77	<4.76	<4.76	<0.00198	<0.00198	<0.00198	<0.00595	4.91
S-10-B13	MW3	12/16/15	10	**1,430**	15.7	<3.96	<0.00141	<0.00141	1.81	**15.1**	4.74
MTCA Method A Cleanup Levels				30/100[a]	2,000	2,000	0.03	7	6	9	250

Continued on page 2

TABLE 1
CUMULATIVE SOIL ANALYTICAL RESULTS
TPH / BTEX / LEAD
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Sample Name	Well ID	Sample Date	Sample Depth (feet bgs)	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	Total Pb (mg/kg)
Cardno - Limited Subsurface Investigation - December 13, 2016 (continued):											
S-15-B13	MW3	12/16/15	15	<4.32	<3.77	<3.77	<0.00133	<0.00133	<0.00133	<0.00398	3.93
S-6-B14	MW2	12/14/15	6	<6.55	<4.99	<4.99	<0.00265	<0.00265	<0.00265	<0.00796	9.03
S-10-B14	MW2	12/15/15	10	**30.8**	<3.80	<3.80	0.0150	0.0198	0.104	1.34	5.31
S-15-B14	MW2	12/15/15	15	<4.95	<3.95	<3.95	<0.00154	<0.00154	<0.00154	<0.00462	4.34
S-5-B15	MW5	12/15/15	5	<5.79	5.25	<3.99	<0.00189	<0.00189	<0.00189	<0.00566	4.55
S-10-B15	MW5	12/17/15	10	<4.78	4.76	<3.84	<0.00158	<0.00158	<0.00158	<0.00473	4.47
S-15-B15	MW5	12/17/15	15	<4.49	5.88	4.23	<0.00149	<0.00149	<0.00149	<0.00448	4.02
S-5-B16	MW6	12/14/15	5	<5.35	<4.70	<4.70	<0.00194	<0.00194	<0.00194	<0.00582	6.39
S-5-B17	MW1	12/14/15	5	**807**	67.7	7.29	<0.00142	0.00247	0.0251	0.0861	5.26
S-10-B17	MW1	12/15/15	10	**758**	19.8	37.4	0.0128	<0.00133	**7.65**	**46.6**	6.35
S-15-B17	MW1	12/15/15	15	<5.68	7.92	6.67	<0.00157	<0.00157	<0.00157	<0.00481	4.65
S-5-B18	SVS3	12/17/15	5	<4.44	4.55	6.88	<0.00145	<0.00145	<0.00145	<0.00436	11.8
S-5-B20	SVS1	12/14/15	5	<4.94	<4.54	<4.54	<0.00156	<0.00156	<0.00156	<0.00469	7.23
S-10-B20	SVS1	12/16/15	10	**1,510**	65.00	49.8	<0.00136	<0.00136	1.72b	2.25b	4.74
S-15-B20	SVS1	12/16/15	15	<5.35	<3.91	<3.91	<0.00181	<0.00181	<0.00181	<0.00544	4.03
MTCA Method A Cleanup Levels				30/100[a]	2,000	2,000	0.03	7	6	9	250

Continued on page 3

TABLE 1
CUMULATIVE SOIL ANALYTICAL RESULTS
TPH / BTEX / LEAD
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Sample Name	Well ID	Sample Date	Sample Depth (feet bgs)	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	Total Pb (mg/kg)

EXPLANATION:

feet bgs = Feet below ground surface

mg/kg = Milligrams per kilogram

TPHg = Total Petroleum Hydrocarbons as Gasoline analyzed in accordance with Ecology Method NWTPH-Gx

TPHd, TPHmo = Total Petroleum Hydrocarbons as Diesel and Motor Oil, respectively, analyzed in accordance with Ecology Method NWTPH-Dx

B = Benzene; T = Toluene; E = Ethylbenzene; X = Total Xylenes

BTEX = Aromatic compounds analyzed in accordance with EPA Method 8021B or 8260B - refer to laboratory reports

Total Pb = Total Lead analyzed in accordance with EPA Method 6010B or 6010C - refer to laboratory reports

< = Less than the stated laboratory reporting limit

-- = Not analyzed; N/A = Not applicable

Shaded values equal or exceed MTCA Method A Cleanup Levels

a = TPHg soil cleanup level is 100 mg/kg unless benzene is detected in the sample, or if the toluene, ethylbenzene, and total xylenes constitute greater than 1% of the TPHg present in the sample. If these conditions are not met then cleanup level for TPHg is lowered to 30 mg/kg.

b = Sample prepped or analyzed beyond hold time

TABLE 2
CUMULATIVE SOIL ANALYTICAL RESULTS
ADDITIONAL VOCs
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Sample Name	Sample Date	EDB (mg/kg)	EDC (mg/kg)	Chloroform (mg/kg)	Hexane (mg/kg)	Naphthalene (mg/kg)	MC (mg/kg)	MTBE (mg/kg)	TCA (mg/kg)	VC (mg/kg)
SoundEarth Strategies, Inc. (SES) - Subsurface Investigation - March 5, 2015:										
PB02-10.0	02/10/15	--	<0.05	--	--	**11**	<0.5	<0.05	<0.05	<0.05
PB09-10.0	02/11/15	--	<0.05	--	--	<0.05	<0.5	<0.05	<0.05	<0.05
Cardno - Limited Subsurface Investigation - December 13, 2016[a]:										
S-5.5-B12	12/14/15	<0.00149	--	--	--	--	--	--	--	--
S-10-B12	12/16/15	<0.00143	--	--	--	--	--	--	--	--
S-15-B12	12/16/15	<0.00137	--	--	--	--	--	--	--	--
S-5-B13	12/14/15	<0.00198	<0.00198	<0.00198	<0.00992	<0.00496	<0.00992	<0.00198	<0.00198	<0.00198
S-10-B13	12/16/15	<0.00141	<0.00141	<0.00141	10.6	4.31	<0.00704	<0.00141	<0.00141	<0.00141
S-15-B13	12/16/15	<0.00133	<0.00133	<0.00133	<0.00663	0.0916	<0.00663	<0.00133	<0.00133	<0.00133
S-6-B14	12/14/15	<0.00265	--	--	--	--	--	--	--	--
S-10-B14	12/15/15	<0.00155	--	--	--	--	--	--	--	--
S-15-B14	12/15/15	<0.00154	--	--	--	--	--	--	--	--
S-5-B15	12/15/15	<0.00189	--	--	--	--	--	--	--	--
S-10-B15	12/17/15	<0.00158	--	--	--	--	--	--	--	--
S-15-B15	12/17/15	<0.00149	--	--	--	--	--	--	--	--
S-5-B16	12/14/15	<0.00194	--	--	--	--	--	--	--	--
S-5-B17	12/14/15	<0.00142	<0.00142	<0.00142	0.193	0.115	<0.00711	<0.00142	<0.00142	<0.00142
S-10-B17	12/15/15	<0.00133	<0.00133	<0.0805	15.7	3.93	<0.00667	<0.00133	<0.00133	<0.00133
S-15-B17	12/15/15	<0.00157	<0.00157	<0.00157	<0.00787	<0.00401	<0.00787	<0.00157	<0.00157	<0.00157
S-5-B18	12/17/15	<0.00145	--	--	--	--	--	--	--	--
S-5-B20	12/14/15	<0.00156	--	--	--	--	--	--	--	--
S-10-B20	12/16/15	<0.00136	--	--	--	--	--	--	--	--
S-15-B20	12/16/15	<0.00181	--	--	--	--	--	--	--	--
								--		
MTCA Method A Cleanup Levels		0.005	N/A	N/A	N/A	5	0.2	0.1	2	N/A

Continued on page 2

TABLE 2
CUMULATIVE SOIL ANALYTICAL RESULTS
ADDITIONAL VOCs
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

EXPLANATION:
mg/kg = Milligram per kilogram
EDB = 1,2-Dibromoethane
EDC = 1,2-Dichloroethane
MC = Methylene Chloride
MTBE = Methyl tertiary butyl ether
TCA = 1,1,1-Trichloroethane
VC = Vinyl Chloride
VOCs = Volatile organic compounds analyzed in accordance with 8260B or 8260C - refer to laboratory reports
< = Less than the stated laboratory reporting limit
-- = Not analyzed; N/A = Not applicable
Shaded values equal or exceed MTCA Method A Cleanup Levels
a = Additional VOCs were analyzed. All detections are included in this table; refer to the laboratory report for non-detected VOCs.

TABLE 3
CUMULATIVE SOIL ANALYTICAL RESULTS
POLYCYCLIC AROMATIC HYDROCARBONS
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Sample Name	Sample Date	cPAHs							Naphthalenes			
		B(a)A (mg/kg)	B(b)F (mg/kg)	B(k)F (mg/kg)	B(a)P (mg/kg)	Chrysene (mg/kg)	DB(a,h)A (mg/kg)	IP (mg/kg)	Naphthalene (mg/kg)	1-Methyl (mg/kg)	2-Methyl (mg/kg)	Total[b] (mg/kg)
Cardno - Limited Subsurface Investigation - December 13, 2016:												
S-5-B13	12/14/15	<0.00319	<0.00319	<0.00319	<0.00319	<0.00319	<0.00319	<0.00319	<0.00319	<0.00319	<0.00319	ND
S-10-B13	12/16/15	<0.00332	<0.00332	<0.00332	<0.00332	<0.00332	<0.00332	<0.00332	0.117	0.168	0.325	0.610
S-15-B13	12/16/15	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	<0.00324	ND
S-5-B17	12/14/15	<0.00328	<0.00328	<0.00328	<0.00328	<0.00328	<0.00328	<0.00328	0.0209	0.0298	0.0645	0.1152
S-10-B17	12/15/15	<0.0159	<0.0159	<0.0159	<0.0159	<0.0159	<0.0159	<0.0159	0.184	0.0473	0.107	0.338
S-15-B17	12/15/15	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	<0.00331	ND
MTCA Method A Cleanup Levels		N/A	N/A	N/A	0.1[a]	N/A	N/A	N/A	N/A	N/A	N/A	5

EXPLANATION:
mg/kg = Milligram per kilogram
BA = Benzo(a)anthracene
B(b)F = Benzo(b)fluoranthene
B(k)F = Benzo(k)fluoranthene
B(a)P = Benzo(a)pyrene
DB(a,h)A = Dibenzo(a,h)anthracene
IP = Indeno(1,2,3-cd)pyrene
cPAHs = Carcinogenic Polycyclic Aromatic Hydrocarbons
1-Methyl = 1-Methyl Naphthalene
2-Methyl = 2-Methyl Naphthalene
PAHs analyzed in accordance with EPA Method 8270C
< = Less than the stated laboratory reporting limit
N/A = Not applicable; ND = Not detected
Shaded values equal or exceed MTCA Method A Cleanup Levels
a = The MTCA Method A Cleanup Level for B(a)P is 0.1 mg/kg. If other carcinogenic PAHs are detected, the cleanup level for the sum of all carcinogenic PAHs is 0.1 mg/kg.
b = Total naphthalenes is a sum of naphthalene, 1-methyl naphthalene, and 2-methyl naphthalene

TABLE 4
CUMULATIVE SOIL ANALYTICAL RESULTS
POLYCHLORINATED BIPHENYLS
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Sample Name	Sample Date	PCB-1016 (mg/kg)	PCB-1221 (mg/kg)	PCB-1232 (mg/kg)	PCB-1242 (mg/kg)	PCB-1248 (mg/kg)	PCB-1254 (mg/kg)	PCB-1260 (mg/kg)
Cardno - Limited Subsurface Investigation - December 13, 2016:								
S-5-B13	12/14/15	<0.0326	<0.0326	<0.0326	<0.0326	<0.0326	<0.0326	<0.0326
S-10-B13	12/16/15	<0.0322	<0.0322	<0.0322	<0.0322	<0.0322	<0.0322	<0.0322
S-15-B13	12/16/15	<0.0328	<0.0328	<0.0328	<0.0328	<0.0328	<0.0328	<0.0328
S-5-B17	12/14/15	<0.0329	<0.0329	<0.0329	<0.0329	<0.0329	<0.0329	<0.0329
S-10-B17	12/15/15	<0.0331	<0.0331	<0.0331	<0.0331	<0.0331	<0.0331	<0.0331
S-15-B17	12/15/15	<0.0332	<0.0332	<0.0332	<0.0332	<0.0332	<0.0332	<0.0332
MTCA Method A Cleanup Level					1[a]			

EXPLANATION:
mg/kg = Milligram per kilogram
Polychlorinated Biphenyls = PCB-1016, -1221, -1232, -1242, -1248, -1254, and -1260 analyzed in accordance with EPA Method 8082A
< = Less than the stated laboratory reporting limit
Shaded values equal or exceed MTCA Method A Cleanup Levels
a = MTCA Method A Cleanup Level is the cumulative value for all PCBs

TABLE 5
CUMULATIVE SOIL ANALYTICAL RESULTS
TOTAL METALS
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Sample Name	Sample Date	Arsenic (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Mercury (mg/kg)
SoundEarth Strategies, Inc. (SES) - Subsurface Investigation - March 5, 2015:					
PB02-10.0	02/10/15	1.36	<1	7.22	<1
PB09-10.0	02/11/15	4.37	<1	11.4	<1
MTCA Method A Cleanup Levels		20	2	2,000	2

EXPLANATION:
mg/kg = Milligrams per kilogram
Total Metals analyzed in accordance with EPA Method 200.8
< = Less than the stated laboratory reporting limit
Shaded values equal or exceed the MTCA Method A Cleanup Levels

TABLE 6
CUMULATIVE SOIL VAPOR ANALYTICAL RESULTS
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Sample Name	Well ID	Sample Date	TPHg ($\mu g/m^3$)	B ($\mu g/m^3$)	T ($\mu g/m^3$)	E ($\mu g/m^3$)	m,p-Xylenes ($\mu g/m^3$)	o-Xylenes ($\mu g/m^3$)	Total Xylenes ($\mu g/m^3$)	C5-C8 Aliphatics ($\mu g/m^3$)	C9-C12 Aliphatics ($\mu g/m^3$)	C9-C10 Aromatics ($\mu g/m^3$)	Helium (%v)
Cardno - Limited Subsurface Investigation - December 13, 2016:													
SVS1	SVS1	02/09/16	247	<0.639	5.92	2.34	10.4	5.47	15.9	208	445	26.0	<0.0264a
SVS2	SVS2	02/09/16	249	<0.639	5.16	2.17	9.94	5.17	15.1	220	404	27.1	<0.0230a
DUP	SVS2	02/09/16	440	<0.639	3.88	1.48	6.99	3.17	10.2	190	920	15.4	<0.0230a
SVS3	SVS3	02/09/16	264	<0.639	3.77	2.43	11.1	6.60	17.7	249	466	32.5	<0.0165a
Sub-Slab Soil Gas Screening Levels			N/A	457	76,200	15,200	1,520	1,520	N/A	90,000	4,700	6,000	N/A

EXPLANATION:

$\mu g/m^3$ = Micrograms per cubic meter
%v = Percent volume
TPHg = Total Petroleum Hydrocarbons as Gasoline analyzed as gasoline range organics with EPA Method TO-15
B = Benzene; T = Toluene; E = Ethylbenzene
Total Xylenes value is a sum of m,p-Xylenes and o-Xylenes
Benzene, Toulene, Ethylbenzene, m,p-Xylenes, and o-Xylenes = Aromatic compounds analyzed in accordance with EPA Method TO-15
Helium analyzed in accordance with ASTM D-1946
C5-C8 Aliphatics, C9-C12 Aliphatics, C9-C10 Aromatics analyzed in accordance with EPA Method TO-15
N/A = Not applicable
< = Less than the stated laboratory reporting limit
Shaded values equal or exceed the MTCA Method B Sub-Slab Soil Gas Screening Levels in accordance with Ecology's draft *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action*, revised February 2016
a = Helium percent volume calculation: parts per million by volume multipled by 10,000

TABLE 7
CUMULATIVE SOIL VAPOR ANALYTICAL RESULTS
ADDITIONAL VOCs
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Sample Name	Well ID	Sample Date	1,2,4-TMB ($\mu g/m^3$)	1,3,5-TMB ($\mu g/m^3$)	Acetone ($\mu g/m^3$)	CS_2 ($\mu g/m^3$)	Chloroform ($\mu g/m^3$)	4-Ethyltoluene ($\mu g/m^3$)	MEK ($\mu g/m^3$)	Naphthalene ($\mu g/m^3$)	PCE ($\mu g/m^3$)
Cardno - Limited Subsurface Investigation - December 13, 2016:											
SVS1	SVS1	02/09/16	7.42	2.16	2.80	13.8	1.90	1.72	<1.47	<1.57	37.1
SVS2	SVS2	02/09/16	6.83	1.92	2.95	<4.67	<0.977	1.57	1.50	<1.57	63.6
DUP (SVS2)	SVS2	02/09/16	4.33	<1.47	2.78	<4.67	<0.977	<1.47	<1.47	1.68	64.9
SVS3	SVS3	02/09/16	9.34	2.61	3.02	13.3	**20.2**	1.97	1.71	<1.57	33.0
Sub-Slab Soil Gas Screening Levels			107	N/A	N/A	10,700	4	N/A	76,200	45.7	321

EXPLANATION:
feet bgs = Feet below ground surface
$\mu g/m^3$ = Micrograms per cubic meter
N/A = Not applicable
1,2,4-TMB = 1,2,4-trimethylbenzene
1,3,5-TMB = 1,3,5-trimethylbenzene
CS_2 = Carbon disfulfide
MEK = Methyl Ethyl Ketone
PCE = Tetrachloroethylene
VOCs = Volatile Organic Compounds in accordance with EPA Method TO-15
Additional VOCs were analyzed. All detections are included in this table; refer to the laboratory report for non-detected VOCs.
< = Less than the stated laboratory reporting limit
Shaded values equal or exceed the MTCA Method B Sub-Slab Soil Gas Screening Levels in accordance with Ecology's draft *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action*, revised February 2016

TABLE 8
WELL CONSTRUCTION DETAILS
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Well ID	Date of Installation	Borehole/Casing Diameter (Inches)	Wellhead Elevation (feet)	Screened Interval (feet bgs)	Total Well Depth (feet bgs)	Slot Size (Inches)
MW1	12/15/15	8/4	102.13	5-13	13	0.010
MW2	12/15/15	8/4	101.63	5-13	13	0.010
MW3	12/16/15	8/4	103.38	5-15	15	0.010
MW4	12/17/15	6/2	104.10	5-15	15	0.010
MW5	12/15/15	6/2	100.93	5-15	15	0.010
MW6	12/14/15	3/1	100.00	3-8	8	0.010

EXPLANATION:
feet bgs = Feet below ground surface
Wellhead elevations were measured relative to MW6 which was assigned an arbitrarily established datum of 100 feet

TABLE 9
CUMULATIVE GRAB GROUNDWATER ANALYTICAL RESULTS
TPH / VOCS
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Sample Name	Sample Location	Sample Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	EDC (µg/L)	MC (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	PCE (µg/L)	TCA (µg/L)	TCE (µg/L)	VC (µg/L)
PB01-20150215	PB01	02/10/15	**4,500**	--	--	1.4	1.2	42	295	--	--	<1	--	--	--	--	--
PB02-20150215	PB02	02/10/15	**76,000**	**83,000**	**16,000**	**18**	**1,100**	**920**	**4,900**	<1	<5	<1	**490**	<1	<1	<1	<0.2
PB04-20150215	PB04	02/10/15	**53,000**	--	--	0.54	2.3	**800**	**7,330**	--	--	<1	--	--	--	--	--
PB07-20150215	PB07	02/10/15	**1,800**	470	<250	3.2	1.7	3.7	35.2	<1	<5	<1	15	<1	<1	<1	<0.2
MTCA Method A Cleanup Levels			800/1,000[a]	500	500	5	1,000	700	1,000	5	5	20	160	5	200	5	0.2

EXPLANATION:
Data taken from prior consultant reports
µg/L = Micrograms per liter
TPHg = Total Petroleum Hydrocarbons as Gasoline in accordance with Ecology Method NWTPH-Gx
TPHd and TPHmo = Total Petroleum Hydrocarbons as Diesel and Oil, respectively, in accordance with Ecology Method NWTPH-Dx
B = Benzene; T = Toluene; E = Ethylbenzene; X = Total Xylenes
BTEX = Aromatic compounds in accordance with EPA Method 8260C
EDC = 1,2-Dichloroethane
MC = Methylene Chloride
MTBE = Methyl tertiary butyl ether
PCE = Tetrachloroethene
TCA = 1,1,1-Trichloroethane
TCE = Trichloroethene
VC = Vinyl Chloride
EDC, MC, MTBE, Naphthalene, PCE, TCA, TCE, VC in accordance with EPA Method 8260C
< = Less than the stated laboratory reporting limit
NE = Not Established; NM = Not Measured; ND = Not Detected ; -- = Not Analyzed or Sampled
Shaded values equal or exceed MTCA Method A Cleanup Levels
a = TPHg cleanup level for groundwater is 800 µg/L if benzene is present, or 1,000 µg/L if benzene is not present

TABLE 10
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS
TPH / BTEX / LEAD
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Well ID	Sampling Date	Wellhead Elev (feet)	DTW (feet bgs)	GW Elev (feet)	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Total Pb (µg/L)	Diss Pb (µg/L)
Screened Interval 5-13 feet bgs \ Total Depth 13 feet bgs													
MW1	02/10/16	102.13	4.64	97.49	138	<95.2	<95.2	<0.200	<1.00	1.59	10.9	5.30	<5.00
Screened Interval 5-13 feet bgs \ Total Depth 13 feet bgs													
MW2	02/10/16	101.63	4.37	97.26	**2,900**	**589**	<95.2	0.844	6.73	26.1	346	<5.00	<5.00
Screened Interval 5-15 feet bgs \ Total Depth 15 feet bgs													
MW3	02/10/16	103.38	6.13	97.25	**8,540**	**1,780**	<95.2	<0.200	1.05	99.4	919	6.10	<5.00
Screened Interval 5-15 feet bgs \ Total Depth 15 feet bgs													
MW4	02/10/16	104.10	7.52	96.58	<100	<95.2	<95.2	<0.200	<1.00	<1.00	<3.00	<5.00	<5.00
Screened Interval 5-15 feet bgs \ Total Depth 15 feet bgs													
MW5	02/10/16	100.93	6.49	94.44	<100	<95.2	<95.2	<0.200	<1.00	<1.00	<3.00	<5.00	<5.00
Screened Interval 3-8 feet bgs \ Total Depth 8 feet bgs													
MW6	02/11/16	100.00	7.48	92.52	<100	--	--	<0.200	<1.00	<1.00	<3.00	--	--
MTCA Method A Cleanup Levels					800/1,000[a]	500	500	5	1,000	700	1,000	15	15

Continued in Page 2

TABLE 10
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS
TPH / BTEX / LEAD
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

EXPLANATION:
µg/L = Micrograms per Liter
Wellhead Elev = Wellhead elevations were measured relative to MW6 which was assigned an arbitrarily established datum of 100 feet
DTW = Depth to water in feet below top of casing
GW Elev = Groundwater elevation relative to top of casing elevation
TPHg = Total Petroleum Hydrocarbons as Gasoline analyzed in accordance with Ecology Method NWTPH-Gx
TPHd and TPHmo = Total Petroleum Hydrocarbons as Diesel and Motor Oil analyzed in accordance with Ecology Method NWTPH-Dx
B = Benzene; T = Toluene; E = Ethylbenzene; X = Total Xylenes
BTEX = Aromatic compounds analyzed in accordance with EPA Method 8260B
Total Pb = Total Lead; Diss Pb = Dissolved Lead; Total and Dissolved Lead analyzed in accordance with EPA Method 6010C
< = Less than stated laboratory reporting limit
-- = Not analyzed; N/A = Not applicable
Shaded values equal or exceed MTCA Method A Cleanup Levels
a = TPHg cleanup level for groundwater is 800 µg/L if benzene is present, or 1,000 µg/L if benzene is not present

TABLE 11
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS
ADDITIONAL VOCs
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Well ID	Sample Date	Chloroform (µg/L)	EDC (µg/L)	EDB (µg/L)	Hexane (µg/L)	1,1-DCE (µg/L)	TCE (µg/L)	VC (µg/L)	Naphthalenes			
									Naphthalene (µg/L)	1-Methyl (µg/L)	2-Methyl (µg/L)	Total[a] (µg/L)
MW1	02/10/16	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<0.200	<2.00	<0.0990b	<0.0990b	ND
MW3	02/10/16	6.09	<1.00	<1.00	3.31	<1.00	<1.00	<0.200	89.0	44.6b	65.2b	**198.8**
MTCA Method A Cleanup Levels		N/A	5	0.01	N/A	N/A	5	0.2	N/A	N/A	N/A	160

EXPLANATION:
µg/L = Micrograms per Liter
EDB = 1,2-Dibromoethane
EDC = 1,2-Dichloroethane
MTBE = Methyl tertiary butyl ether
1,1-DCE = 1,1-Dichloroethene
TCE = Trichloroethene
1-Methyl = 1-Methyl Naphthalene
2-Methyl = 2-Methyl Naphthalene
VOCs in accordance with EPA Method 8260C
-- = Not analyzed
N/A = Not applicable; ND = Not detected
< = Less than laboratory reporting limit
Shaded values equal or exceed MTCA Method A Cleanup Levels
a = Total naphthalenes is a sum of naphthalene, 1-methyl naphthalene, and 2-methyl naphthalene
b = Analyzed in accordance with EPA Method 8270D

TABLE 12
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS
CARCINOGENIC PAHs
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Well ID	Sampling Date	B(a)A (µg/L)	B(a)P (µg/L)	B(b)F (µg/L)	B(k)F (µg/L)	Chrysene (µg/L)	DB(a,h)A (µg/L)	IP (µg/L)
MW1	02/10/16	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990
MW3	02/10/16	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990
MTCA Method A Cleanup Levels		N/A	0.1	N/A	N/A	N/A	N/A	N/A

EXPLANATION:
µg/L = Micrograms per Liter
B(a)A = Benzo(a)anthracene
B(b)F = Benzo(b)fluoranthene
B(k)F = Benzo(k)fluoranthene
B(a)P = Benzo(a)pyrene
DB(a,h)A = Dibenzo(a,h)anthracene
IP = Indeno(1,2,3-cd)pyrene
Carcinogenic PAHs = Carcinogenic Polycyclic Aromatic Hydrocarbons in accordance with EPA Method 8270D
< = Less than stated laboratory reporting limit
-- = Not analyzed; N/A = Not applicable
Shaded values equal or exceed MTCA Method A Cleanup Levels

TABLE 13
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS
POLYCHLORINATED BIPHENYLS
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington

Well ID	Sampling Date	PCB-1016 (µg/L)	PCB-1221 (µg/L)	PCB-1232 (µg/L)	PCB-1242 (µg/L)	PCB-1248 (µg/L)	PCB-1254 (µg/L)	PCB-1260 (µg/L)
MW1	02/10/16	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
MW3	02/10/16	<0.481	<0.481	<0.481	<0.481	<0.481	<0.481	<0.481
MTCA Method A Cleanup Level					0.1[a]			

EXPLANATION:
µg/L = Micrograms per liter
Polychlorinated Biphenyls = PCB-1016, -1221, -1232, -1242, -1248, -1254, and -1260 analyzed in accordance with EPA Method 8082A
< = Less than stated laboratory reporting limit
Shaded values equal or exceed MTCA Method A Cleanup Levels
a = MTCA Method A Cleanup Level is the cumulative value for all PCBs

APPENDIX A
FIELD PROTOCOLS

Cardno
Shaping the Future

Cardno
Soil Boring and Well Installation
Field Protocol

Preliminary Activities

Prior to the onset of field activities at the site, Cardno obtains the appropriate permit(s) from the governing agency(s). Advance notification is made as required by the agency(s) prior to the start of work. Cardno marks the borehole locations and contacts the local one call utility locating service at least 48 hours prior to the start of work to mark buried utilities. Borehole locations may also be checked for buried utilities by a private geophysical surveyor. Prior to drilling, the borehole location is cleared in accordance with the client's procedures. Fieldwork is conducted under the advisement of a registered professional geologist and in accordance with an updated site-specific safety plan prepared for the project, which is available at the job site during field activities.

Drilling and Soil Sampling Procedures

Cardno contracts a licensed driller to advance the boring and collect soil samples. The specific drilling method (e.g., hollow-stem auger, direct push method, or sonic drilling), sampling method [e.g., core barrel or California-modified split spoon sampler (CMSSS)] and sampling depths are documented on the boring log and may be specified in a work plan. Soil samples are typically collected at the capillary fringe and at 5-foot intervals to the total depth of the boring. To determine the depth of the capillary fringe prior to drilling, the static groundwater level is measured with a water level indicator in the closest monitoring well to the boring location, if available.

The borehole is advanced to just above the desired sampling depth. For CMSSSs, the sampler is placed inside the auger and driven to a depth of 18 inches past the bit of the auger. The sampler is driven into the soil with a standard 140-pound hammer repeatedly dropped from a height of 30 inches onto the sampler. The number of blows required to drive the sampler each 6-inch increment is recorded on the boring log. For core samplers (e.g., direct push), the core is driven 18 inches using the rig apparatus.

Soil samples are preserved in the metal or plastic sleeve used with the CMSSS or core sampler, in glass jars or other manner required by the local regulatory agency (e.g., Environmental Protection Agency Method 5035). Sleeves are removed from the sample barrel, and the lowermost sample sleeve is immediately sealed with Teflon™ tape, capped and labeled. Samples are placed in a cooler chilled to 4º Celsius and transported to a state-certified laboratory. The samples are transferred under chain-of-custody (COC) protocol.

Field Screening Procedures

Cardno places the soil from the middle of the sampling interval into a plastic re-sealable bag. The bag is placed away from direct sunlight for approximately 20 minutes, after which the tip of a photo-ionization detector (PID) or similar device is inserted through the plastic bag to measure organic vapor concentrations in the headspace. The PID measurement is recorded on the boring log. At a minimum, the PID or other device is calibrated on a daily basis in accordance with manufacturer's specifications using a hexane or isobutylene standard. The calibration gas and concentration are recorded on a calibration log. Instruments such as the PID are useful for evaluating relative concentrations of volatilized hydrocarbons, but they do not measure the concentration of petroleum hydrocarbons in the soil matrix with the same precision as laboratory analysis. Cardno trained personnel describe the soil in the bag according to the Unified Soil Classification System and record the description on the boring log, which is included in the final report.

Air Monitoring Procedures

Cardno performs a field evaluation for volatile hydrocarbon concentrations in the breathing zone using a calibrated PID or lower explosive level meter.

Groundwater Sampling

A groundwater sample, if desired, is collected from the boring by using Hydropunch™ sampling technology or installing a well in the borehole. In the case of using Hydropunch™ technology, after collecting the capillary fringe soil sample, the boring is advanced to the top of the soil/groundwater interface and a sampling probe is pushed to approximately 2 feet below the top of the static water level. The probe is opened by partially withdrawing it and thereby exposing the screen. A new or decontaminated bailer is used to collect a water sample from the probe. The water sample is then emptied into laboratory-supplied containers constructed of the correct material and with the correct volume and preservative to comply with the proposed laboratory test. The container is slowly filled with the retrieved water sample until no headspace remains and then promptly sealed with a Teflon-lined cap, checked for the presence of bubbles, labeled, entered onto a COC record and placed in chilled storage at 4° Celsius. Laboratory-supplied trip blanks accompany the water samples as a quality assurance/quality control procedure. Equipment blanks may be collected as required. The samples are kept in chilled storage and transported under COC protocol to a client-approved, state-certified laboratory for analysis.

Backfilling of Soil Boring

If a well is not installed, the boring is backfilled from total depth to approximately 5 feet below ground surface (bgs) with either neat cement or bentonite grout using a tremie pipe. The boring is backfilled from 5 feet bgs to approximately 1 foot bgs with hydrated bentonite chips. The borehole is completed from 1 foot bgs to surface grade with material that best matches existing surface conditions and meets local agency requirements. Site-specific backfilling details are shown on the respective boring log.

Well Construction

A well (if constructed) is completed using materials documented on the boring log or specified in a work plan. The well is constructed with slotted casing across the desired groundwater sampling depth(s) and completed with blank casing to within 6 inches of surface grade. No further construction is conducted on temporary wells. For permanent wells, the annular space of the well is backfilled with Monterey sand from the total depth to approximately 2 feet above the top of the screened casing. A hydrated granular bentonite seal is placed on top of the sand filter pack. Grout may be placed on top of the bentonite seal to the desired depth using a tremie pipe. The well may be completed to surface grade with a 1-foot thick concrete pad. A traffic-rated well vault and locking cap for the well casing may be installed to protect against surface-water infiltration and unauthorized entry. Site-specific well construction details including type of well, well depth, casing diameter, slot size, length of screen interval and sand size are documented on the boring log or specified in the work plan.

Well Development and Sampling

If a permanent groundwater monitoring well is installed, the grout is allowed to cure a minimum of 48 hours before development. Cardno personnel or a contracted driller use a submersible pump or surge block to develop the newly installed well. Prior to development, the pump is decontaminated by allowing it to run and re-circulate while immersed in a non-phosphate solution followed by successive immersions in potable water and de-ionized water baths. The well is developed until sufficient well casing volumes are removed so that turbidity is within allowable limits and pH, conductivity and temperature levels stabilize in the purge water. The volume of groundwater extracted is recorded on a log.

Following development, groundwater within the well is allowed to recharge until at least 80% of the drawdown is recovered. A new or decontaminated bailer is slowly lowered past the air/water interface in the well, and a water sample is collected and checked for the presence of non-aqueous phase liquid, sheen or emulsions. The water sample is then emptied into laboratory-supplied containers as discussed above.

Surveying

If required, wells are surveyed by a licensed land surveyor relative to an established benchmark of known elevation above mean sea level to an accuracy of +/- 0.01 foot. The casing is notched or marked on one side to identify a consistent surveying and measuring point.

Decontamination Procedures

Cardno or the contracted driller decontaminates soil and water sampling equipment between each sampling event with a non-phosphate solution, followed by a minimum of two tap water rinses. De-ionized water may be used for the final rinse. Downhole drilling equipment is steam-cleaned prior to drilling the borehole and at completion of the borehole.

Waste Treatment and Soil Disposal

Soil cuttings generated from the drilling or sampling are stored on site in labeled, Department of Transportation-approved, 55-gallon drums or other appropriate storage container. The soil is removed from the site and transported under manifest to a client- and regulatory-approved facility for recycling or disposal. Decontamination fluids and purge water from well development and sampling activities, if conducted, are stored on site in labeled, regulatory-approved storage containers. Fluids are subsequently transported under manifest to a client- and regulatory-approved facility for disposal or treated with a permitted mobile or fixed-base carbon treatment system.

Cardno
Soil Vapor Sampling Well Installation and Sampling
Field Protocol

Preliminary Activities

Prior to the onset of field activities at the site, Cardno obtains the appropriate permit(s) from the governing agency(s). Advance notification is made as required by the agency(s) prior to the start of work. Cardno marks the borehole locations and contacts the local one call utility locating service at least 48 hours prior to the start of work to mark buried utilities. Borehole locations may also be checked for buried utilities by a private geophysical surveyor. Prior to drilling, the borehole location is cleared in accordance with the client's procedures. Fieldwork is conducted under the advisement of a registered professional geologist and in accordance with an updated site-specific safety plan prepared for the project, which is available at the job site during field activities.

Well Construction

The borehole is advanced to the desired depth using either a direct-push rig, hand auger, or air vacuum rig. Lithologic conditions are recorded on a boring log during borehole advancement, and select soil matrix sampling may be conducted based on soil characteristics.

Each soil vapor sampling (SVS) well is constructed using inert screen material attached to $^{1}/_{8}$- to ¼-inch outer diameter inert tubing. A gas-tight vacuum fitting or valve is attached to the top of each length of tubing using a female compression fitting. Each screen is set within a minimum of a 12-inch thick appropriately sized sand pack, with a minimum of 3 inches of sand pack above the top of the screen. A minimum of 4 inches of dry granular bentonite is set above each screen and associated sand pack. In SVS wells with multiple and separate casings and screens, the annular space between the top of the dry granular bentonite above the deep screen and the bottom of the sand pack associated with the shallow screen is sealed with a minimum of 18 inches of hydrated bentonite. The remainder of the annular space of the well is sealed with hydrated bentonite to 1 foot below ground surface. Wellheads are finished with traffic-rated well boxes set in concrete flush with the surrounding grade. No glues, chemical cements, or solvents are used in well construction.

A boring log is completed with the construction details for each well, including the materials of construction, depth of the borehole, screen length, and annular seal thickness.

Soil Vapor Sampling

Samples are collected using a soil vapor purging and sampling manifold consisting of a flow regulator, vacuum gauges, vacuum pump, shroud, and laboratory-prepared, gas-tight, opaque containers such as Summa™ canisters. Prior to use, Summa™ canisters are checked to ensure they are under the laboratory induced vacuum between 30 and 25 inches of mercury (in. Hg). New inert tubing is used to purge and sample each well. Prior to purging and sampling each SVS well, Cardno will conduct a vacuum leak test on the sampling equipment. To perform the leak test, the Summa™ canister is connected to the sampling manifold which was connected to the gas-tight vacuum fitting or valve at the wellhead, and the downstream tubing and fittings are vacuum tested at approximately 20 to 30 in. Hg. Purging and sampling are conducted only on SVS wells when the tubing and fittings hold the applied vacuum for 5 minutes per vacuum gauge reading. If the vacuum is not maintained, Cardno will isolate the leak and re-fit the fittings and tubing until the vacuum is held for 5 minutes. Purging is performed with the sampling manifold equipped with a vacuum gauge and flow regulator and vacuum pump. The flow regulator will be set to a rate of no more than 200 ml/min.

Prior to sampling, a helium leak test is performed at each SVS well, including a Summa™ canister and its fittings, to check for leaks in the SVS well annulus. To assess the potential for leaks in the SVS well annulus, a shroud is placed over the SVS well and Summa™ canister and the shroud was filled with a measured amount of helium. Helium screening is performed in the field by pumping soil gas into a Tedlar bag and screening the contents of the Tedlar bag with a helium meter. Pumping is conducted at approximately the same rate of purging, at 100 to 200 ml/min. The concentration of helium in the sample divided by the concentration of helium in the shroud provides a measure of the proportion of the sample attributable to

leakage. A leak that comprises less than 5% of the sample is insignificant. Helium screening will also be performed using laboratory analysis of the contents of the Summa™ canister collected under the shroud.

After purging and the helium leak test, the Summa™ canister is opened and allowed to fill. Sampling is conducted at approximately the same rate of purging, at 100 to 200 ml/min. The canister vacuum readings at the beginning and end of sampling will be recorded. The soil vapor sample collection will end when the vacuum within the sample canister is approximately 5 in Hg. Cardno will label the sample containers, store the samples at ambient temperature in laboratory-supplied containers, and initiate COC records.

Decontamination Procedures

If soil samples are collected, Cardno or the contracted driller decontaminates the soil sampling equipment between each sampling interval using a non-phosphate solution, followed by a minimum of two tap water rinses. De-ionized water may be used for the final rinse. Downhole drilling equipment is steam-cleaned or triple-rinsed prior to advancing each borehole.

Waste Treatment and Disposal

Soil cuttings generated from the well installation are stored on site in labeled, Department of Transportation-approved, 55-gallon drums or other appropriate storage container. The soil is removed from the site and transported under manifest to a client- and regulatory-approved facility for recycling or disposal. Decontamination water is stored on site in labeled, regulatory-approved storage containers, and is subsequently transported under manifest to a client- and regulatory-approved facility for disposal or treated with a permitted mobile or fixed-base carbon treatment system.

Cardno
Groundwater Sampling Field Protocol – Low-flow Sampling

The static water level and non-aqueous phase liquid (NAPL) level, if present, in each groundwater monitoring well that contained water and/or NAPL are measured with an interface probe accurate to the nearest 0.01 foot. To calculate groundwater elevations and evaluate groundwater gradient, depth to water (DTW) levels are subtracted from wellhead elevations.

Before water samples are collected from the groundwater monitoring wells, the wells are purged using a peristaltic or a down-well pump at rates not exceeding 1 liter per minute (L/min) until stabilization of the dissolved oxygen (DO), pH, conductivity, and temperature are obtained. Readings of these parameters are taken and recorded every three minutes while the water is purged, and DTW readings are collected every three minutes to ensure drawdown in the well is less than 0.33 feet. If drawdown occurs too quickly, the rate of withdrawal will be reduced.

Purging will continue until three consecutive readings indicate the following:

- Temperature has a change of less than ±1 degree Celsius
- Conductivity has a change of less than ±3%
- pH has a change of less than ±0.10
- DO has a change of less than ±10% in concentrations (or less than ± 0.3 milligram per liter (mg/L) DO, whichever occurs first)

These are indicators of stabilized conditions.

Once groundwater conditions have stabilized, groundwater samples are carefully collected in 40-milliliter (ml) glass vials, which are filled so as to produce a positive meniscus. Each vial is preserved with hydrochloric acid, sealed with a cap containing a Teflon® septum, and subsequently examined for air bubbles to avoid headspace, which would allow volatilization to occur. Additional samples may be collected in other sampling containers. The samples are promptly transported in iced storage in a thermally insulated ice chest, accompanied by chain of custody documentation, to a state-certified laboratory.

APPENDIX B
BORING LOGS

Cardno
Shaping the Future

UNIFIED SOIL CLASSIFICATION SYSTEM KEY

MAJOR DIVISIONS		LTR	DESCRIPTION
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	GW	Well-graded gravels or gravel sand mixtures, little or no fines
		GP	Poorly-graded gravels or gravel sand mixture, little or no fines
		GM	Silty gravels, gravel-sand-clay mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	SAND AND SANDY SOILS	SW	Well-graded sands or gravelly sands, little or no fines
		SP	Poorly-graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures

MAJOR DIVISIONS		LTR	DESCRIPTION
FINE GRAINED SOILS	SILTS AND CLAYS LL<50	ML	Inorganic silts and very fine-grained sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silt-clays of low plasticity
	SILTS AND CLAYS LL>50	MH	Inorganic silts, micaceous or diatomaceous fine-grained sandy or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity
HIGHLY ORGANIC SOILS		Pt	Peat and other highly organic soils

BLOW COUNTS REPRESENT THE NUMBER OF BLOWS OF A 140- OR 300-POUND HAMMER FALLING 30 INCHES TO DRIVE THE SAMPLER THROUGH EACH 6 INCHES OF PENETRATION.

FN:QuiklogUSCS.dwg

DASHED LINES SEPARATING UNITS ON THE LOG REPRESENT APPROXIMATE BOUNDARIES ONLY. ACTUAL BOUNDARIES MAY BE GRADUAL. LOGS REPRESENT SUBSURFACE CONDITIONS AT THE BORING LOCATION AT THE TIME OF DRILLING ONLY.

Cardno®
Shaping the Future

UNIFIED SOIL CLASSIFICATION SYSTEM AND LOG OF BORINGS SYMBOL KEY

BORING LOG B12/MW4

Cardno Shaping the Future

Project No.:	: 031379
Site:	: Former Mobil Station 99CHT, 7323 Aurora Ave N, Seattle, WA
Logged By:	: Robert Thompson
Reviewed By:	: Don Clabaugh, P.E. 30454
Signature:	: Don Clabaugh

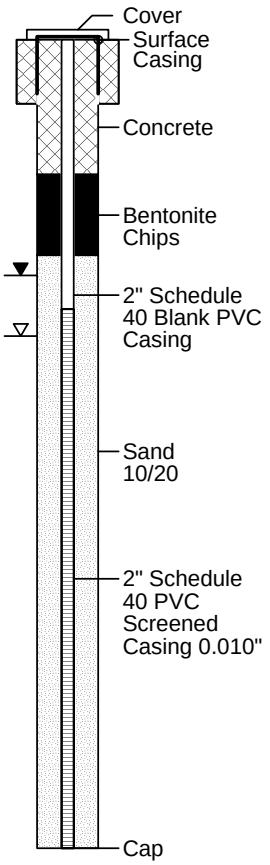
Date Drilled:	: 12/14 & 12/17/15
Drilling Co.:	: Holocene Drilling, Inc.
Drilling Method:	: Sonic
Sampling Method:	: Hand Auger; Cont. Core
Borehole Diameter:	: 6"
Latitude:	: N/A
Longtitude:	: N/A
Casing Diameter:	: 2"
Total Boring Depth:	: 15' bgs
First GW Depth:	: 5.5' bgs

Sample Condition: No Recovery; Sampled Interval; Described Sample; Preserved Sample

Water Levels: After Completion; During Drilling

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	DESCRIPTION (%clay/silt/sand/gravel)
0						Borehole was cleared on 12/14/15 to 8' bgs using air knife and hand tools.
5		0.1			SM	Silty SAND: very fine- to medium-grained, brown, saturated (5/30/55/10)
10		0.1			SM	very fine- to fine-grained, yellow-brown, wet (5/20/70/5)
15		0.1			ML	Clayey SILT: gray-brown, moist, medium plasticity (30/60/0/10)
20						
25						

Well: MW4
Elevation: 104.10*



Backfill Materials:

4 50-lb. bags of Sand
2 50-lb. bags of Bentonite Chips
2 50-lb. bags of Concrete

The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).

* - Wellhead elevations are relative to the top of casing of MW6, which was set as a local datum of 100.00'

BORING LOG B13/MW3

Cardno Shaping the Future

Project No.:	: 031379
Site:	: Former Mobil Station 99CHT, 7323 Aurora Ave N, Seattle, WA
Logged By:	: Robert Thompson
Reviewed By:	: Don Clabaugh, P.E. 30454
Signature:	: _____

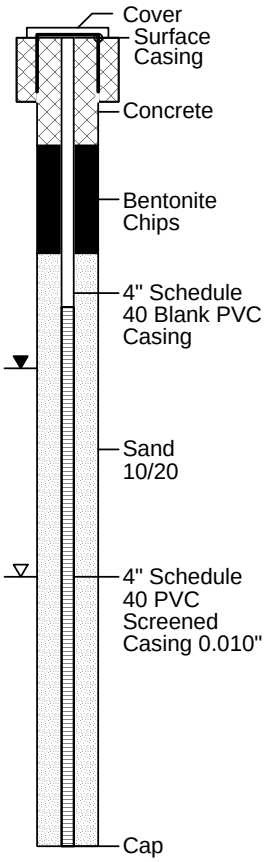
Date Drilled:	: 12/14 & 12/16/15
Drilling Co.:	: Holocene Drilling, Inc.
Drilling Method:	: Sonic
Sampling Method:	: Hand Auger; Cont. Core
Borehole Diameter:	: 8"
Latitude:	: N/A
Longtitude:	: N/A
Casing Diameter:	: 4"
Total Boring Depth:	: 15' bgs
First GW Depth:	: 10' bgs

Sample Condition: No Recovery; Sampled Interval; Described Sample; Preserved Sample

Water Levels: After Completion; During Drilling

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	DESCRIPTION (%clay/silt/sand/gravel)
0						Borehole was cleared on 12/14/15 to 8' bgs using air knife and hand tools.
5		0.0			SM	Sandy SILT: brown, moist to wet; fine-grained (5/65/20/10)
10		724			ML	SILT: gray, wet (10/85/0/5)
		1.3				with gravel: moist to wet (5/80/0/15)
15						
20						
25						

Well: MW3
Elevation: 103.38*



Backfill Materials:

6 50-lb. bags of Sand
2.5 50-lb. bags of Bentonite Chips
2 50-lb. bags of Concrete

The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).

* - Wellhead elevations are relative to the top of casing of MW6, which was set as a local datum of 100.00'

BORING LOG B14/MW2

Cardno Shaping the Future

Project No.:	031379
Site:	Former Mobil Station 99CHT, 7323 Aurora Ave N, Seattle, WA
Logged By:	Robert Thompson
Reviewed By:	Don Clabaugh, P.E. 30454
Signature:	

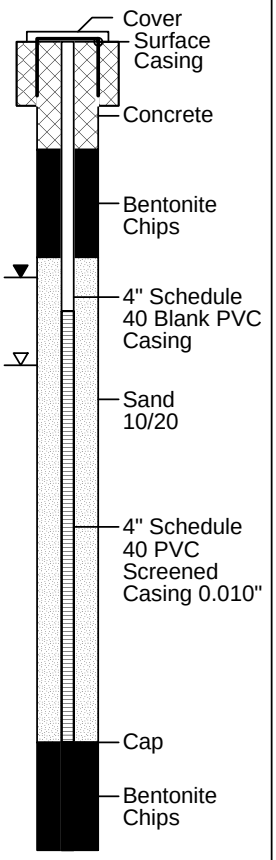
Date Drilled:	12/14 & 12/15/15
Drilling Co.:	Holocene Drilling, Inc.
Drilling Method:	Sonic
Sampling Method:	Hand Auger; Cont. Core
Borehole Diameter:	8"
Latitude:	N/A
Longtitude:	N/A
Casing Diameter:	4"
Total Boring Depth:	15' bgs
First GW Depth:	5.5' bgs

Sample Condition: No Recovery; Sampled Interval; Described Sample; Preserved Sample

Water Levels: After Completion; During Drilling

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	DESCRIPTION (%clay/silt/sand/gravel)
0						Borehole was cleared on 12/14/15 to 8' bgs using air knife and hand tools.
5		0.1			SC	Clayey SILT: yellow-brown, saturated, medium plasticitiy (40/50/10/0)
10		7.1			GM	SILT with Gravel: gray, saturated; moderately graded, subrounded
		0.0			ML	SILT: gray, dry to moist, dense (10/85/0/5)
15						
20						
25						

Well: MW2
Elev.: 101.63*



Backfill Materials:

6 50-lb. bags of Sand
2.5 50-lb. bags of Bentonite Chips
2 50-lb. bags of Concrete

The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).

* - Wellhead elevations are relative to the top of casing of MW6, which was set as a local datum of 100.00'

BORING LOG B15/MW5

Cardno Shaping the Future

Project No.:	: 031379
Site:	: Former Mobil Station 99CHT, 7323 Aurora Ave N, Seattle, WA
Logged By:	: Robert Thompson
Reviewed By:	: Don Clabaugh, P.E. 30454
Signature:	:

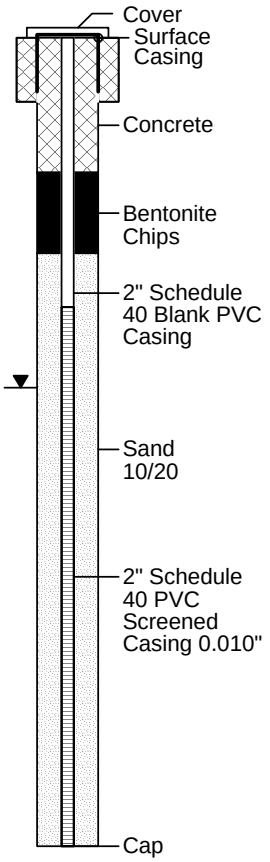
Date Drilled:	: 12/15/15
Drilling Co.:	: Holocene Drilling, Inc.
Drilling Method:	: Sonic
Sampling Method:	: Hand Auger; Cont. Core
Borehole Diameter:	: 6"
Latitude:	: N/A
Longtitude:	: N/A
Casing Diameter:	: 2"
Total Boring Depth:	: 15' bgs
First GW Depth:	: N/A

Sample Condition: No Recovery; Sampled Interval; Described Sample; Preserved Sample

Water Levels: After Completion; During Drilling

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	DESCRIPTION (%clay/silt/sand/gravel)
0						Borehole was cleared on 12/14/15 to 8' bgs using air knife and hand tools.
5		0.0			SM	Silty SAND: fine-grained, red-yellow, moist (5/30/65/0)
10		0.0			SW	Silty SAND with Gravel: coarse-grained, brown, wet; coarse gravel with cobbles (0/20/50/30)
		0.0			ML	SILT: gray, dry, extremely dense (0/95/0/5)
15						
20						
25						

Well: MW5
Elev.: 100.93*



Backfill Materials:

4 50-lb. bags of Sand
2 50-lb. bags of Bentonite Chips
2 50-lb. bags of Concrete

The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).

* - Wellhead elevations are relative to the top of casing of MW6, which was set as a local datum of 100.00'

BORING LOG B16/MW6

Cardno Shaping the Future

Project No.:	: 031379
Site:	: Former Mobil Station 99CHT, 7323 Aurora Ave N, Seattle, WA
Logged By:	: Robert Thompson
Reviewed By:	: Don Clabaugh, P.E. 30454
Signature:	:

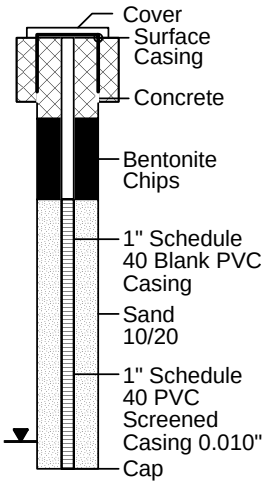
Date Drilled:	: 12/14/15
Drilling Co.:	: Holocene Drilling, Inc.
Drilling Method:	: Hand Auger
Sampling Method:	: Hand Auger
Borehole Diameter:	: 3"
Latitude:	: N/A
Longtitude:	: N/A
Casing Diameter:	: 1"
Total Boring Depth:	: 8' bgs
First GW Depth:	: 7.5' bgs

Sample Condition: No Recovery; Sampled Interval; Described Sample; Preserved Sample

Water Levels: After Completion; During Drilling

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	DESCRIPTION (%clay/silt/sand/gravel)
0						Borehole was cleared on 12/14/15 to 8' bgs using hand tools.
5		0.2			SM	Silty SAND: very fine- to medium-grained, brown, moist (5/40/50/5) saturated

Well: MW6
Elev.: 100.00*



Backfill Materials:
2 50-lb. bags of Sand
0.5 50-lb. bags of Bentonite Chips
1.5 50-lb. bags of Concrete

The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).

* - Wellhead elevations are relative to the top of casing of MW6, which was set as a local datum of 100.00'

10-27-2016 M:\EXXONMOBIL\EXXONMOBIL PROJECTS\031379 (99CHT)\BORING LOGS\031379.B16_MW6.bor

BORING LOG B17/MW1

Cardno Shaping the Future

Project No.:	031379
Site:	Former Mobil Station 99CHT, 7323 Aurora Ave N, Seattle, WA
Logged By:	Robert Thompson
Reviewed By:	Don Clabaugh, P.E. 30454
Signature:	

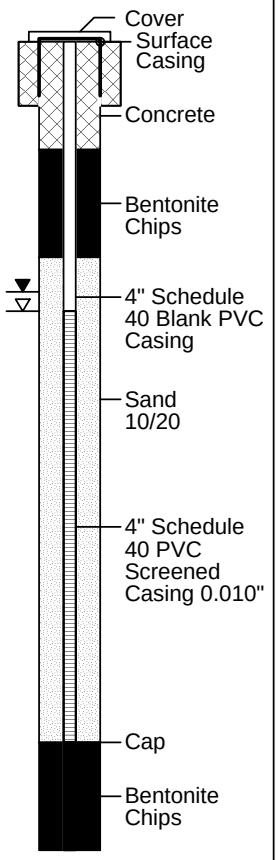
Date Drilled:	12/14 & 12/15/15
Drilling Co.:	Holocene Drilling, Inc.
Drilling Method:	Sonic
Sampling Method:	Hand Auger; Cont. Core
Borehole Diameter:	8"
Latitude:	N/A
Longtitude:	N/A
Casing Diameter:	4"
Total Boring Depth:	15' bgs
First GW Depth:	5' bgs

Sample Condition: No Recovery; Sampled Interval; Described Sample; Preserved Sample

Water Levels: After Completion; During Drilling

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	DESCRIPTION (%clay/silt/sand/gravel)
0						Borehole was cleared on 12/14/15 to 8' bgs using air knife and hand tools.
5		152			SM	Silty SAND: fine-grained, brown, saturated (5/40/50/5)
10		163			SM	Silty SAND with Gravel: gray-brown, wet, well graded; subrounded (0/20/50/30)
		0.0			ML	SILT: gray, dry to moist, dense (10/85/0/5)
15						
20						
25						

Well: MW1
Elev.: 102.13*



Backfill Materials:

6 50-lb. bags of Sand
2.5 50-lb. bags of Bentonite Chips
2 50-lb. bags of Concrete

The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).

* - Wellhead elevations are relative to the top of casing of MW6, which was set as a local datum of 100.00'

BORING LOG B18/SVS3

Cardno Shaping the Future

Project No.:	: 031379
Site:	: Former Mobil Station 99CHT, 7323 Aurora Ave N, Seattle, WA
Logged By:	: Robert Thompson
Reviewed By:	: Don Clabaugh, P.E. 30454
Signature:	:

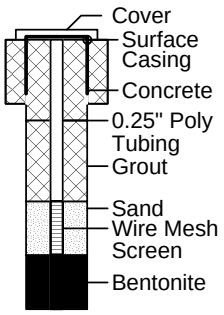
Date Drilled:	: 12/17/15
Drilling Co.:	: Holocene Drilling, Inc.
Drilling Method:	: Hand Auger
Sampling Method:	: Hand Auger
Borehole Diameter:	: 3"
Casing Diameter:	: 0.25"
Location N-S	: N/A
Location E-W	: N/A
Total Depth:	: 4'
First GW Depth:	: N/A

Sample Condition
- No Recovery
- Sampled Interval
- Described Sample
- Preserved Sample

Water Levels
- After Completion
- During Drilling

Well: SVS3
Elev.: NE

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	DESCRIPTION
0						Borehole was cleared on 12/17/15 to 8' bgs using hand tools.
		0.2			SM	Silty SAND with Gravel: fine- to coarse-grained, brown, wet/saturated (5/20/55/20)
5						
10						
15						
20						
25						



Backfill Materials:

0.5 50-lb. bags of Sand
0.5 50-lb. bags of Grout
1 50-lb. bag of Concrete

The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).

BORING LOG B19/SVS2

Cardno Shaping the Future

Project No.:	: 031379
Site:	: Former Mobil Station 99CHT, 7323 Aurora Ave N, Seattle, WA
Logged By:	: Robert Thompson
Reviewed By:	: Don Clabaugh, P.E. 30454
Signature:	: Don Clabaugh

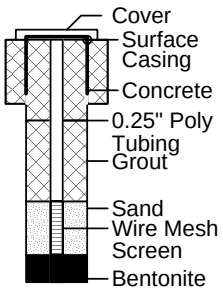
Date Drilled:	: 12/16/15
Drilling Co.:	: Holocene Drilling, Inc.
Drilling Method:	: Hand Auger
Sampling Method:	: Hand Auger
Borehole Diameter:	: 3"
Casing Diameter:	: 0.25"
Location N-S	: N/A
Location E-W	: N/A
Total Depth:	: 4.5'
First GW Depth:	: N/A

Sample Condition
- No Recovery
- Sampled Interval
- Described Sample
- Preserved Sample

Water Levels
- After Completion
- During Drilling

Well: SVS2
Elev.: NE

Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	DESCRIPTION
0						Borehole was cleared on 12/16/15 to 4.5' bgs using hand tools. No recovery. Water in boring. Made multiple attempts with hand auger to extract sample.



Backfill Materials:

0.5 50-lb. bags of Sand
0.5 50-lb. bags of Grout
1.5 50-lb. bags of Concrete

The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).

BORING LOG B20/SVS1

Cardno Shaping the Future

Project No.:	031379
Site:	Former Mobil Station 99CHT, 7323 Aurora Ave N, Seattle, WA
Logged By:	Robert Thompson
Reviewed By:	Don Clabaugh, P.E. 30454
Signature:	

Date Drilled:	12/14 & 12/16/15
Drilling Co.:	Holocene Drilling, Inc.
Drilling Method:	Sonic
Sampling Method:	Hand Auger; Cont. Core
Borehole Diameter:	6"
Casing Diameter:	0.25"
Location N-S	N/A
Location E-W	N/A
Total Depth:	15'
First GW Depth:	8'

Sample Condition: No Recovery; Sampled Interval; Described Sample; Preserved Sample

Water Levels: After Completion; During Drilling

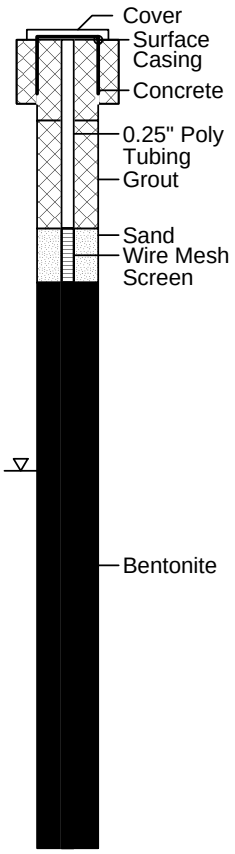
Depth (ft)	Blow Count	OVM/PID (ppmv)	Sample	Column	USCS	DESCRIPTION
0						Borehole was cleared on 12/14/15 to 8' bgs using hand tools.
5		0.2			SM	Silty SAND: very fine- to medium-grained, brown, moist (5/30/60/5)
10		515			ML	SILT: gray, wet (10/90/0/0)
		1.0				with gravel: dense (0/80/0/20)
15						
20						
25						

Backfill Materials:

0.5 50-lb. bags of Sand
1.5 50-lb. bags of Grout
1.5 50-lb. bags of Concrete

The descriptive information for classification symbol and name of soil is based on ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).

Well: SVS1
Elev.: NE



APPENDIX C
LABORATORY ANALYTICAL RESULTS

Cardno
Shaping the Future

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-94548-1
TestAmerica Sample Delivery Group: 31379
Client Project/Site: 99CHT
Revision: 1

For:
Cardno, Inc
801 Second Ave
Suite 700
Seattle, Washington 98104

Attn: Ryan Pozzuto

Authorized for release by:
1/28/2016 4:55:22 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Table of Contents

Sample Summary

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-94548-1
SDG: 31379

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-94548-1	S-5.5-B12	Soil	12/14/15 10:35	12/22/15 10:02
490-94548-2	S-10-B12	Soil	12/16/15 16:00	12/22/15 10:02
490-94548-3	S-15-B12	Soil	12/16/15 16:20	12/22/15 10:02
490-94548-4	S-5-B13	Soil	12/14/15 11:50	12/22/15 10:02
490-94548-5	S-10-B13	Soil	12/16/15 13:45	12/22/15 10:02
490-94548-6	S-15-B13	Soil	12/16/15 14:15	12/22/15 10:02
490-94548-7	S-6-B14	Soil	12/14/15 15:05	12/22/15 10:02
490-94548-8	S-10-B14	Soil	12/15/15 13:55	12/22/15 10:02
490-94548-9	S-15-B14	Soil	12/15/15 14:15	12/22/15 10:02
490-94548-10	S-5-B15	Soil	12/15/15 10:35	12/22/15 10:02
490-94548-11	S-10-B15	Soil	12/17/15 11:05	12/22/15 10:02
490-94548-12	S-15-B15	Soil	12/17/15 11:35	12/22/15 10:02
490-94548-13	S-5-B16	Soil	12/14/15 11:20	12/22/15 10:02
490-94548-14	S-5-B17	Soil	12/14/15 16:45	12/22/15 10:02
490-94548-15	S-10-B17	Soil	12/15/15 08:35	12/22/15 10:02
490-94548-16	S-15-B17	Soil	12/15/15 09:15	12/22/15 10:02
490-94548-17	S-5-B18	Soil	12/17/15 09:00	12/22/15 10:02
490-94548-18	S-5-B20	Soil	12/14/15 14:35	12/22/15 10:02
490-94548-19	S-10-B20	Soil	12/16/15 11:05	12/22/15 10:02
490-94548-20	S-15-B20	Soil	12/16/15 11:35	12/22/15 10:02

Job ID: 490-94548-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-94548-1

Comments
Revised Report
Report revised to add results for MTBE and naphthalene to samples S-5-B13 (490-94548-4), S-10-B13 (490-94548-5), S-15-B13 (490-94548-6), S-5-B17 (490-94548-14), S-10-B17 (490-94548-15), S-15-B17 (490-94548-16). Missing naphthalene results added to S-10-B13 (490-94548-5).
Supersedes report dated 1-7-16.

Receipt
The samples were received on 12/22/2015 10:02 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.6º C, 1.5º C and 2.7º C.

GC/MS VOA
Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample: S-10-B13 (490-94548-5). The sample(s) shows evidence of matrix interference.

Method(s) 8260B: Surrogate recovery for the following samples was outside control limits: S-10-B13 (490-94548-5), S-5-B17 (490-94548-14), S-10-B17 (490-94548-15), S-10-B20 (490-94548-19). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 490-308992 recovered outside control limits for the following analytes: trans-1,3-Dichloropropene

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-308992, 490-309345, 490-309337, 490-309522, 490-309772, 490-309961.

Method(s) 8260B: Reanalysis of the following sample was performed outside of the analytical holding time for required dilutions: S-10-B20 (490-94548-19).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270C SIM: The following sample was diluted due to the nature of the sample matrix: S-10-B17 (490-94548-15). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
Method(s) NWTPH-Gx: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 490-308521 was outside control limits. Sample non-homogeneity is suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) NWTPH-Dx: The following sample contained a hydrocarbon pattern that most closely resembles a mineral spirits product used by the laboratory for quantitative purposes: S-5-B17 (490-94548-14).

Method(s) NWTPH-Dx: The sample duplicate (DUP) precision for preparation batch 490-309672 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recoveries were within acceptance limits.

Method(s) NWTPH-Dx: There was insufficient contamination present to perform a pattern match for the following samples: S-10-B12 (490-94548-2), S-15-B12 (490-94548-3), S-5-B15 (490-94548-10), S-10-B15 (490-94548-11), S-15-B15 (490-94548-12), S-15-B17

Job ID: 490-94548-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

(490-94548-16), S-5-B18 (490-94548-17).

Method(s) NWTPH-Dx: The following sample contained a hydrocarbon pattern for analyte C10-C24 that most closely resembles a Gasoline product used by the laboratory for quantitative purposes: S-10-B13 (490-94548-5).

Method(s) NWTPH-Dx: The following samples contained a hydrocarbon pattern which does not match a typical Total Petroleum Hydrocarbon (TPH) pattern used by the laboratory for quantitative purposes: S-10-B17 (490-94548-15) and S-10-B20 (490-94548-19).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
H	Sample was prepped or analyzed beyond the specified holding time
*	ISTD response or retention time outside acceptable limits
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

GC VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample ID: S-5.5-B12

Date Collected: 12/14/15 10:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-1

Matrix: Soil
Percent Solids: 86.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00149		mg/Kg	☼	12/14/15 10:35	12/24/15 13:28	1
Toluene	ND		0.00149		mg/Kg	☼	12/14/15 10:35	12/24/15 13:28	1
Ethylbenzene	ND		0.00149		mg/Kg	☼	12/14/15 10:35	12/24/15 13:28	1
Xylenes, Total	ND		0.00446		mg/Kg	☼	12/14/15 10:35	12/24/15 13:28	1
1,2-Dibromoethane (EDB)	ND		0.00149		mg/Kg	☼	12/14/15 10:35	12/24/15 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*12/14/15 10:35*	*12/24/15 13:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*	*12/14/15 10:35*	*12/24/15 13:28*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*12/14/15 10:35*	*12/24/15 13:28*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*12/14/15 10:35*	*12/24/15 13:28*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.66		mg/Kg	☼	12/14/15 10:35	12/24/15 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*93*		*50 - 150*	*12/14/15 10:35*	*12/24/15 14:31*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		4.51		mg/Kg	☼	12/28/15 11:32	12/29/15 14:44	1
C24-C40	ND		4.51		mg/Kg	☼	12/28/15 11:32	12/29/15 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*70*		*50 - 150*	*12/28/15 11:32*	*12/29/15 14:44*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**5.17**		1.15		mg/Kg	☼	12/23/15 07:37	12/23/15 14:54	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**86**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-10-B12

Date Collected: 12/16/15 16:00
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-2

Matrix: Soil
Percent Solids: 89.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00143		mg/Kg	☼	12/16/15 16:00	12/24/15 16:34	1
Toluene	ND		0.00143		mg/Kg	☼	12/16/15 16:00	12/24/15 16:34	1
Ethylbenzene	ND		0.00143		mg/Kg	☼	12/16/15 16:00	12/24/15 16:34	1
Xylenes, Total	ND		0.00430		mg/Kg	☼	12/16/15 16:00	12/24/15 16:34	1
1,2-Dibromoethane (EDB)	ND		0.00143		mg/Kg	☼	12/16/15 16:00	12/24/15 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/16/15 16:00*	*12/24/15 16:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*	*12/16/15 16:00*	*12/24/15 16:34*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*12/16/15 16:00*	*12/24/15 16:34*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*12/16/15 16:00*	*12/24/15 16:34*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND	F2	4.44		mg/Kg	☼	12/16/15 16:00	12/24/15 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*	*12/16/15 16:00*	*12/24/15 15:30*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**6.34**		3.88		mg/Kg	☼	12/29/15 17:02	12/30/15 20:04	1
C24-C40	**11.5**		3.88		mg/Kg	☼	12/29/15 17:02	12/30/15 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*84*		*50 - 150*	*12/29/15 17:02*	*12/30/15 20:04*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**5.28**		1.12		mg/Kg	☼	12/23/15 07:37	12/23/15 15:14	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**89**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-15-B12

Date Collected: 12/16/15 16:20
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-3

Matrix: Soil
Percent Solids: 90.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00137		mg/Kg	☼	12/16/15 16:20	12/30/15 21:37	1
Toluene	ND		0.00137		mg/Kg	☼	12/16/15 16:20	12/30/15 21:37	1
Ethylbenzene	ND		0.00137		mg/Kg	☼	12/16/15 16:20	12/30/15 21:37	1
Xylenes, Total	ND		0.00411		mg/Kg	☼	12/16/15 16:20	12/30/15 21:37	1
1,2-Dibromoethane (EDB)	ND		0.00137		mg/Kg	☼	12/16/15 16:20	12/30/15 21:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*12/16/15 16:20*	*12/30/15 21:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 130*	*12/16/15 16:20*	*12/30/15 21:37*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*12/16/15 16:20*	*12/30/15 21:37*	*1*
Dibromofluoromethane (Surr)	*118*		*70 - 130*	*12/16/15 16:20*	*12/30/15 21:37*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.15		mg/Kg	☼	12/16/15 16:20	12/24/15 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*86*		*50 - 150*	*12/16/15 16:20*	*12/24/15 17:18*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**7.70**		3.92		mg/Kg	☼	12/29/15 17:02	12/30/15 21:25	1
C24-C40	**5.79**		3.92		mg/Kg	☼	12/29/15 17:02	12/30/15 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*106*		*50 - 150*	*12/29/15 17:02*	*12/30/15 21:25*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**3.88**		1.12		mg/Kg	☼	12/23/15 07:37	12/23/15 15:18	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**90**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-5-B13

Date Collected: 12/14/15 11:50
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-4

Matrix: Soil
Percent Solids: 83.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Toluene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Ethylbenzene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Xylenes, Total	ND		0.00595		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,2-Dibromoethane (EDB)	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Methyl tert-butyl ether	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Naphthalene	ND		0.00496		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Bromobenzene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Bromochloromethane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Bromodichloromethane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Bromoform	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Bromomethane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Carbon tetrachloride	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Chlorobenzene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Chlorodibromomethane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Chloroethane	ND		0.00496		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Chloroform	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Chloromethane	ND		0.00154		mg/Kg	☼	12/14/15 11:50	12/28/15 16:46	1
2-Chlorotoluene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
4-Chlorotoluene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
cis-1,2-Dichloroethene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
cis-1,3-Dichloropropene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,2-Dibromo-3-Chloropropane	ND		0.00496		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Dibromomethane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,2-Dichlorobenzene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,3-Dichlorobenzene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,4-Dichlorobenzene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Dichlorodifluoromethane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,1-Dichloroethane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,2-Dichloroethane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,1-Dichloroethene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,2-Dichloropropane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,3-Dichloropropane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
2,2-Dichloropropane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,1-Dichloropropene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Hexachlorobutadiene	ND		0.00496		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Methylene Chloride	ND		0.00992		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,1,1,2-Tetrachloroethane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,1,2,2-Tetrachloroethane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Tetrachloroethene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
trans-1,2-Dichloroethene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
trans-1,3-Dichloropropene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,2,3-Trichlorobenzene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,2,4-Trichlorobenzene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,1,1-Trichloroethane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,1,2-Trichloroethane	ND		0.00496		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Trichloroethene	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Trichlorofluoromethane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
1,2,3-Trichloropropane	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1

Client Sample ID: S-5-B13
Date Collected: 12/14/15 11:50
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-4
Matrix: Soil
Percent Solids: 83.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.00198		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1
Hexane	ND		0.00992		mg/Kg	☼	12/14/15 11:50	12/24/15 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*12/14/15 11:50*	*12/24/15 13:59*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*12/14/15 11:50*	*12/28/15 16:46*	*1*
Dibromofluoromethane (Surr)	*87*		*70 - 130*	*12/14/15 11:50*	*12/24/15 13:59*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*12/14/15 11:50*	*12/28/15 16:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*	*12/14/15 11:50*	*12/24/15 13:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*	*12/14/15 11:50*	*12/28/15 16:46*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*12/14/15 11:50*	*12/24/15 13:59*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*12/14/15 11:50*	*12/28/15 16:46*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Acenaphthylene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Anthracene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Benzo[a]anthracene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Benzo[a]pyrene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Benzo[b]fluoranthene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Benzo[g,h,i]perylene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Benzo[k]fluoranthene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Chrysene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Dibenz(a,h)anthracene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Fluorene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Fluoranthene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Indeno[1,2,3-cd]pyrene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Naphthalene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Phenanthrene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
Pyrene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
1-Methylnaphthalene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1
2-Methylnaphthalene	ND		0.00319		mg/Kg	☼	12/23/15 16:42	12/31/15 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*82*		*13 - 120*	*12/23/15 16:42*	*12/31/15 20:25*	*1*
Nitrobenzene-d5	*63*		*27 - 120*	*12/23/15 16:42*	*12/31/15 20:25*	*1*
2-Fluorobiphenyl (Surr)	*62*		*29 - 120*	*12/23/15 16:42*	*12/31/15 20:25*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.77		mg/Kg	☼	12/14/15 11:50	12/24/15 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*86*		*50 - 150*	*12/14/15 11:50*	*12/24/15 17:47*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0326		mg/Kg	☼	01/02/16 15:05	01/04/16 20:56	1
PCB-1221	ND		0.0326		mg/Kg	☼	01/02/16 15:05	01/04/16 20:56	1
PCB-1232	ND		0.0326		mg/Kg	☼	01/02/16 15:05	01/04/16 20:56	1

Client Sample ID: S-5-B13
Date Collected: 12/14/15 11:50
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-4
Matrix: Soil
Percent Solids: 83.3

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	ND		0.0326		mg/Kg	☼	01/02/16 15:05	01/04/16 20:56	1
PCB-1248	ND		0.0326		mg/Kg	☼	01/02/16 15:05	01/04/16 20:56	1
PCB-1254	ND		0.0326		mg/Kg	☼	01/02/16 15:05	01/04/16 20:56	1
PCB-1260	ND		0.0326		mg/Kg	☼	01/02/16 15:05	01/04/16 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*97*		*20 - 150*	*01/02/16 15:05*	*01/04/16 20:56*	*1*
Tetrachloro-m-xylene	*84*		*19 - 147*	*01/02/16 15:05*	*01/04/16 20:56*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		4.76		mg/Kg	☼	12/28/15 11:32	12/29/15 15:34	1
C24-C40	ND		4.76		mg/Kg	☼	12/28/15 11:32	12/29/15 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*98*		*50 - 150*	*12/28/15 11:32*	*12/29/15 15:34*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**4.91**		1.20		mg/Kg	☼	12/23/15 07:37	12/23/15 15:23	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**83**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-10-B13

Date Collected: 12/16/15 13:45
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-5

Matrix: Soil
Percent Solids: 87.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Toluene	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Ethylbenzene	**1.81**		0.0835		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1
Xylenes, Total	**0.963**		0.00422		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
1,2-Dibromoethane (EDB)	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Methyl tert-butyl ether	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Naphthalene	**4.31**		0.209		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1
Bromobenzene	ND		0.0835		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1
Bromochloromethane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Bromodichloromethane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Bromoform	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Bromomethane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Carbon tetrachloride	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Chlorobenzene	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Chlorodibromomethane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Chloroethane	ND		0.00352		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Chloroform	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Chloromethane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
2-Chlorotoluene	ND		0.0835		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1
4-Chlorotoluene	ND		0.0835		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1
cis-1,2-Dichloroethene	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
cis-1,3-Dichloropropene	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
1,2-Dibromo-3-Chloropropane	ND		0.209		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1
Dibromomethane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
1,2-Dichlorobenzene	ND		0.0835		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1
1,3-Dichlorobenzene	ND		0.0835		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1
1,4-Dichlorobenzene	ND		0.0835		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1
Dichlorodifluoromethane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
1,1-Dichloroethane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
1,2-Dichloroethane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
1,1-Dichloroethene	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
1,2-Dichloropropane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
1,3-Dichloropropane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
2,2-Dichloropropane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
1,1-Dichloropropene	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Hexachlorobutadiene	ND		0.209		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1
Methylene Chloride	ND		0.00704		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
1,1,1,2-Tetrachloroethane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
1,1,2,2-Tetrachloroethane	ND		0.0835		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1
Tetrachloroethene	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
trans-1,2-Dichloroethene	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
trans-1,3-Dichloropropene	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
1,2,3-Trichlorobenzene	ND		0.0835		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1
1,2,4-Trichlorobenzene	ND		0.0835		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1
1,1,1-Trichloroethane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
1,1,2-Trichloroethane	ND		0.00352		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Trichloroethene	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Trichlorofluoromethane	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
1,2,3-Trichloropropane	ND		0.0835		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1

Client Sample ID: S-10-B13
Date Collected: 12/16/15 13:45
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-5
Matrix: Soil
Percent Solids: 87.6

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.00141		mg/Kg	☼	12/16/15 13:45	12/24/15 19:41	1
Hexane	**10.6**		0.418		mg/Kg	☼	12/16/15 13:45	12/28/15 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*1007*	*X **	*70 - 130*	*12/16/15 13:45*	*12/24/15 19:41*	*1*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/16/15 13:45*	*12/28/15 21:08*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*12/16/15 13:45*	*12/24/15 19:41*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*12/16/15 13:45*	*12/28/15 21:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*	*12/16/15 13:45*	*12/24/15 19:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*	*12/16/15 13:45*	*12/28/15 21:08*	*1*
Toluene-d8 (Surr)	*222*	*X*	*70 - 130*	*12/16/15 13:45*	*12/24/15 19:41*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*12/16/15 13:45*	*12/28/15 21:08*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Acenaphthylene	ND		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Anthracene	**0.00337**		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Benzo[a]anthracene	ND		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Benzo[a]pyrene	ND		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Benzo[b]fluoranthene	ND		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Benzo[g,h,i]perylene	ND		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Benzo[k]fluoranthene	ND		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Chrysene	ND		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Dibenz(a,h)anthracene	ND		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Fluorene	**0.00644**		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Fluoranthene	**0.00352**		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Indeno[1,2,3-cd]pyrene	ND		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Naphthalene	**0.117**		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Phenanthrene	**0.0109**		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
Pyrene	**0.00504**		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
1-Methylnaphthalene	**0.168**		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1
2-Methylnaphthalene	**0.325**		0.00332		mg/Kg	☼	12/23/15 16:42	12/31/15 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*77*		*13 - 120*	*12/23/15 16:42*	*12/31/15 21:40*	*1*
Nitrobenzene-d5	*63*		*27 - 120*	*12/23/15 16:42*	*12/31/15 21:40*	*1*
2-Fluorobiphenyl (Surr)	*65*		*29 - 120*	*12/23/15 16:42*	*12/31/15 21:40*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**1430**		4.53		mg/Kg	☼	12/16/15 13:45	12/24/15 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*112*		*50 - 150*	*12/16/15 13:45*	*12/24/15 18:16*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0322		mg/Kg	☼	01/02/16 15:05	01/04/16 21:11	1
PCB-1221	ND		0.0322		mg/Kg	☼	01/02/16 15:05	01/04/16 21:11	1
PCB-1232	ND		0.0322		mg/Kg	☼	01/02/16 15:05	01/04/16 21:11	1

Client Sample ID: S-10-B13
Date Collected: 12/16/15 13:45
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-5
Matrix: Soil
Percent Solids: 87.6

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	ND		0.0322		mg/Kg	☼	01/02/16 15:05	01/04/16 21:11	1
PCB-1248	ND		0.0322		mg/Kg	☼	01/02/16 15:05	01/04/16 21:11	1
PCB-1254	ND		0.0322		mg/Kg	☼	01/02/16 15:05	01/04/16 21:11	1
PCB-1260	ND		0.0322		mg/Kg	☼	01/02/16 15:05	01/04/16 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*109*		*20 - 150*	*01/02/16 15:05*	*01/04/16 21:11*	*1*
Tetrachloro-m-xylene	*96*		*19 - 147*	*01/02/16 15:05*	*01/04/16 21:11*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**15.7**		3.96		mg/Kg	☼	12/29/15 17:02	12/30/15 21:41	1
C24-C40	ND		3.96		mg/Kg	☼	12/29/15 17:02	12/30/15 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*86*		*50 - 150*	*12/29/15 17:02*	*12/30/15 21:41*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**4.74**		1.11		mg/Kg	☼	12/23/15 07:37	12/23/15 15:35	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**88**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-15-B13

Date Collected: 12/16/15 14:15
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-6

Matrix: Soil
Percent Solids: 92.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Toluene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Ethylbenzene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Xylenes, Total	ND		0.00398		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,2-Dibromoethane (EDB)	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Methyl tert-butyl ether	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Naphthalene	**0.0916**		0.00332		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Bromobenzene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Bromochloromethane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Bromodichloromethane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Bromoform	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Bromomethane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Carbon tetrachloride	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Chlorobenzene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Chlorodibromomethane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Chloroethane	ND		0.00332		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Chloroform	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Chloromethane	ND		0.00147		mg/Kg	☼	12/16/15 14:15	12/28/15 17:45	1
2-Chlorotoluene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
4-Chlorotoluene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
cis-1,2-Dichloroethene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
cis-1,3-Dichloropropene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,2-Dibromo-3-Chloropropane	ND		0.00332		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Dibromomethane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,2-Dichlorobenzene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,3-Dichlorobenzene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,4-Dichlorobenzene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Dichlorodifluoromethane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,1-Dichloroethane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,2-Dichloroethane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,1-Dichloroethene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,2-Dichloropropane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,3-Dichloropropane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
2,2-Dichloropropane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,1-Dichloropropene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Hexachlorobutadiene	ND		0.00332		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Methylene Chloride	ND		0.00663		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,1,1,2-Tetrachloroethane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,1,2,2-Tetrachloroethane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Tetrachloroethene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
trans-1,2-Dichloroethene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
trans-1,3-Dichloropropene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,2,3-Trichlorobenzene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,2,4-Trichlorobenzene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,1,1-Trichloroethane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,1,2-Trichloroethane	ND		0.00332		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Trichloroethene	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Trichlorofluoromethane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
1,2,3-Trichloropropane	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1

Client Sample ID: S-15-B13
Date Collected: 12/16/15 14:15
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-6
Matrix: Soil
Percent Solids: 92.6

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.00133		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1
Hexane	ND		0.00663		mg/Kg	☼	12/16/15 14:15	12/24/15 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*12/16/15 14:15*	*12/24/15 20:12*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*12/16/15 14:15*	*12/28/15 17:45*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*12/16/15 14:15*	*12/24/15 20:12*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*	*12/16/15 14:15*	*12/28/15 17:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*	*12/16/15 14:15*	*12/24/15 20:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*	*12/16/15 14:15*	*12/28/15 17:45*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*12/16/15 14:15*	*12/24/15 20:12*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*12/16/15 14:15*	*12/28/15 17:45*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Acenaphthylene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Anthracene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Benzo[a]anthracene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Benzo[a]pyrene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Benzo[b]fluoranthene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Benzo[g,h,i]perylene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Benzo[k]fluoranthene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Chrysene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Dibenz(a,h)anthracene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Fluorene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Fluoranthene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Indeno[1,2,3-cd]pyrene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Naphthalene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Phenanthrene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
Pyrene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
1-Methylnaphthalene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1
2-Methylnaphthalene	ND		0.00324		mg/Kg	☼	12/23/15 16:42	12/31/15 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*74*		*13 - 120*	*12/23/15 16:42*	*12/31/15 22:05*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*12/23/15 16:42*	*12/31/15 22:05*	*1*
2-Fluorobiphenyl (Surr)	*67*		*29 - 120*	*12/23/15 16:42*	*12/31/15 22:05*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.32		mg/Kg	☼	12/16/15 14:15	12/24/15 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*50 - 150*	*12/16/15 14:15*	*12/24/15 18:46*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0328		mg/Kg	☼	01/02/16 15:05	01/04/16 21:27	1
PCB-1221	ND		0.0328		mg/Kg	☼	01/02/16 15:05	01/04/16 21:27	1
PCB-1232	ND		0.0328		mg/Kg	☼	01/02/16 15:05	01/04/16 21:27	1

Client Sample ID: S-15-B13
Date Collected: 12/16/15 14:15
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-6
Matrix: Soil
Percent Solids: 92.6

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	ND		0.0328		mg/Kg	☼	01/02/16 15:05	01/04/16 21:27	1
PCB-1248	ND		0.0328		mg/Kg	☼	01/02/16 15:05	01/04/16 21:27	1
PCB-1254	ND		0.0328		mg/Kg	☼	01/02/16 15:05	01/04/16 21:27	1
PCB-1260	ND		0.0328		mg/Kg	☼	01/02/16 15:05	01/04/16 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*106*		*20 - 150*	*01/02/16 15:05*	*01/04/16 21:27*	*1*
Tetrachloro-m-xylene	*94*		*19 - 147*	*01/02/16 15:05*	*01/04/16 21:27*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		3.77		mg/Kg	☼	12/29/15 17:02	12/30/15 21:58	1
C24-C40	ND		3.77		mg/Kg	☼	12/29/15 17:02	12/30/15 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*92*		*50 - 150*	*12/29/15 17:02*	*12/30/15 21:58*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**3.93**		1.03		mg/Kg	☼	12/23/15 07:37	12/23/15 15:39	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**93**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-6-B14

Date Collected: 12/14/15 15:05
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-7

Matrix: Soil
Percent Solids: 78.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00265		mg/Kg	☼	12/14/15 15:05	12/24/15 14:30	1
Toluene	ND		0.00265		mg/Kg	☼	12/14/15 15:05	12/24/15 14:30	1
Ethylbenzene	ND		0.00265		mg/Kg	☼	12/14/15 15:05	12/24/15 14:30	1
Xylenes, Total	ND		0.00796		mg/Kg	☼	12/14/15 15:05	12/24/15 14:30	1
1,2-Dibromoethane (EDB)	ND		0.00265		mg/Kg	☼	12/14/15 15:05	12/24/15 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*12/14/15 15:05*	*12/24/15 14:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*	*12/14/15 15:05*	*12/24/15 14:30*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*	*12/14/15 15:05*	*12/24/15 14:30*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*	*12/14/15 15:05*	*12/24/15 14:30*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		6.55		mg/Kg	☼	12/14/15 15:05	12/24/15 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*50 - 150*	*12/14/15 15:05*	*12/24/15 19:15*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		4.99		mg/Kg	☼	12/28/15 11:32	12/29/15 15:50	1
C24-C40	ND		4.99		mg/Kg	☼	12/28/15 11:32	12/29/15 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*80*		*50 - 150*	*12/28/15 11:32*	*12/29/15 15:50*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**9.03**		1.26		mg/Kg	☼	12/23/15 07:37	12/23/15 15:44	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**78**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-10-B14

Date Collected: 12/15/15 13:55
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-8

Matrix: Soil
Percent Solids: 88.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0150**		0.00155		mg/Kg	☼	12/15/15 13:55	12/24/15 17:05	1
Toluene	**0.0198**		0.00155		mg/Kg	☼	12/15/15 13:55	12/24/15 17:05	1
Ethylbenzene	**0.104**		0.00155		mg/Kg	☼	12/15/15 13:55	12/24/15 17:05	1
Xylenes, Total	**1.34**		0.171		mg/Kg	☼	12/15/15 13:55	12/28/15 20:37	1
1,2-Dibromoethane (EDB)	ND		0.00155		mg/Kg	☼	12/15/15 13:55	12/24/15 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*12/15/15 13:55*	*12/24/15 17:05*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*12/15/15 13:55*	*12/28/15 20:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*	*12/15/15 13:55*	*12/24/15 17:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*	*12/15/15 13:55*	*12/28/15 20:37*	*1*
Toluene-d8 (Surr)	*112*		*70 - 130*	*12/15/15 13:55*	*12/24/15 17:05*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*12/15/15 13:55*	*12/28/15 20:37*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*12/15/15 13:55*	*12/24/15 17:05*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*12/15/15 13:55*	*12/28/15 20:37*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**30.8**		5.90		mg/Kg	☼	12/15/15 13:55	12/24/15 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*92*		*50 - 150*	*12/15/15 13:55*	*12/24/15 19:44*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		3.80		mg/Kg	☼	12/29/15 17:02	12/30/15 22:14	1
C24-C40	ND		3.80		mg/Kg	☼	12/29/15 17:02	12/30/15 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*88*		*50 - 150*	*12/29/15 17:02*	*12/30/15 22:14*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**5.31**		1.11		mg/Kg	☼	12/23/15 07:37	12/23/15 15:48	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**89**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-15-B14

Date Collected: 12/15/15 14:15
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-9

Matrix: Soil
Percent Solids: 84.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00154		mg/Kg	☼	12/15/15 14:15	12/24/15 17:36	1
Toluene	ND		0.00154		mg/Kg	☼	12/15/15 14:15	12/24/15 17:36	1
Ethylbenzene	ND		0.00154		mg/Kg	☼	12/15/15 14:15	12/24/15 17:36	1
Xylenes, Total	ND		0.00462		mg/Kg	☼	12/15/15 14:15	12/24/15 17:36	1
1,2-Dibromoethane (EDB)	ND		0.00154		mg/Kg	☼	12/15/15 14:15	12/24/15 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*12/15/15 14:15*	*12/24/15 17:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*	*12/15/15 14:15*	*12/24/15 17:36*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*12/15/15 14:15*	*12/24/15 17:36*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*12/15/15 14:15*	*12/24/15 17:36*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.95		mg/Kg	☼	12/15/15 14:15	12/24/15 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*50 - 150*	*12/15/15 14:15*	*12/24/15 20:13*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		3.95		mg/Kg	☼	12/29/15 17:02	12/30/15 22:30	1
C24-C40	ND		3.95		mg/Kg	☼	12/29/15 17:02	12/30/15 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*94*		*50 - 150*	*12/29/15 17:02*	*12/30/15 22:30*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**4.34**		1.15		mg/Kg	☼	12/23/15 07:37	12/23/15 15:52	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**85**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-5-B15

Date Collected: 12/15/15 10:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-10

Matrix: Soil
Percent Solids: 77.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00189		mg/Kg	☼	12/15/15 10:35	12/24/15 18:07	1
Toluene	ND		0.00189		mg/Kg	☼	12/15/15 10:35	12/24/15 18:07	1
Ethylbenzene	ND		0.00189		mg/Kg	☼	12/15/15 10:35	12/24/15 18:07	1
Xylenes, Total	ND		0.00566		mg/Kg	☼	12/15/15 10:35	12/24/15 18:07	1
1,2-Dibromoethane (EDB)	ND		0.00189		mg/Kg	☼	12/15/15 10:35	12/24/15 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*12/15/15 10:35*	*12/24/15 18:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*	*12/15/15 10:35*	*12/24/15 18:07*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*12/15/15 10:35*	*12/24/15 18:07*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*12/15/15 10:35*	*12/24/15 18:07*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.79		mg/Kg	☼	12/15/15 10:35	12/24/15 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*85*		*50 - 150*	*12/15/15 10:35*	*12/24/15 20:42*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**5.25**		3.99		mg/Kg	☼	12/29/15 17:02	12/30/15 22:46	1
C24-C40	ND		3.99		mg/Kg	☼	12/29/15 17:02	12/30/15 22:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*50 - 150*	*12/29/15 17:02*	*12/30/15 22:46*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**4.55**		1.25		mg/Kg	☼	12/23/15 07:37	12/23/15 15:56	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**78**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-10-B15

Date Collected: 12/17/15 11:05
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-11

Matrix: Soil
Percent Solids: 87.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00158		mg/Kg	☼	12/17/15 11:05	12/24/15 18:38	1
Toluene	ND		0.00158		mg/Kg	☼	12/17/15 11:05	12/24/15 18:38	1
Ethylbenzene	ND		0.00158		mg/Kg	☼	12/17/15 11:05	12/24/15 18:38	1
Xylenes, Total	ND		0.00473		mg/Kg	☼	12/17/15 11:05	12/24/15 18:38	1
1,2-Dibromoethane (EDB)	ND		0.00158		mg/Kg	☼	12/17/15 11:05	12/24/15 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*12/17/15 11:05*	*12/24/15 18:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*	*12/17/15 11:05*	*12/24/15 18:38*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*12/17/15 11:05*	*12/24/15 18:38*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*	*12/17/15 11:05*	*12/24/15 18:38*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.78		mg/Kg	☼	12/17/15 11:05	12/24/15 21:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*50 - 150*	*12/17/15 11:05*	*12/24/15 21:12*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**4.76**		3.84		mg/Kg	☼	12/29/15 17:02	12/30/15 23:18	1
C24-C40	ND		3.84		mg/Kg	☼	12/29/15 17:02	12/30/15 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*99*		*50 - 150*	*12/29/15 17:02*	*12/30/15 23:18*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**4.47**		1.11		mg/Kg	☼	12/23/15 07:37	12/23/15 16:00	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**88**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-15-B15

Date Collected: 12/17/15 11:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-12

Matrix: Soil
Percent Solids: 90.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00149		mg/Kg	☼	12/17/15 11:35	12/24/15 19:10	1
Toluene	ND		0.00149		mg/Kg	☼	12/17/15 11:35	12/24/15 19:10	1
Ethylbenzene	ND		0.00149		mg/Kg	☼	12/17/15 11:35	12/24/15 19:10	1
Xylenes, Total	ND		0.00448		mg/Kg	☼	12/17/15 11:35	12/24/15 19:10	1
1,2-Dibromoethane (EDB)	ND		0.00149		mg/Kg	☼	12/17/15 11:35	12/24/15 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*12/17/15 11:35*	*12/24/15 19:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*	*12/17/15 11:35*	*12/24/15 19:10*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*	*12/17/15 11:35*	*12/24/15 19:10*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*12/17/15 11:35*	*12/24/15 19:10*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.49		mg/Kg	☼	12/17/15 11:35	12/24/15 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*84*		*50 - 150*	*12/17/15 11:35*	*12/24/15 21:41*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**5.88**		3.71		mg/Kg	☼	12/29/15 17:02	12/30/15 23:34	1
C24-C40	**4.23**		3.71		mg/Kg	☼	12/29/15 17:02	12/30/15 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*108*		*50 - 150*	*12/29/15 17:02*	*12/30/15 23:34*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**4.02**		1.08		mg/Kg	☼	12/23/15 07:37	12/23/15 16:04	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**91**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-5-B16

Date Collected: 12/14/15 11:20
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-13

Matrix: Soil
Percent Solids: 83.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00194		mg/Kg	☼	12/14/15 11:20	12/24/15 15:01	1
Toluene	ND		0.00194		mg/Kg	☼	12/14/15 11:20	12/24/15 15:01	1
Ethylbenzene	ND		0.00194		mg/Kg	☼	12/14/15 11:20	12/24/15 15:01	1
Xylenes, Total	ND		0.00582		mg/Kg	☼	12/14/15 11:20	12/24/15 15:01	1
1,2-Dibromoethane (EDB)	ND		0.00194		mg/Kg	☼	12/14/15 11:20	12/24/15 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*12/14/15 11:20*	*12/24/15 15:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*	*12/14/15 11:20*	*12/24/15 15:01*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*12/14/15 11:20*	*12/24/15 15:01*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*12/14/15 11:20*	*12/24/15 15:01*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.35		mg/Kg	☼	12/14/15 11:20	12/24/15 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*86*		*50 - 150*	*12/14/15 11:20*	*12/24/15 22:10*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		4.70		mg/Kg	☼	12/28/15 11:32	12/29/15 16:07	1
C24-C40	ND		4.70		mg/Kg	☼	12/28/15 11:32	12/29/15 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*103*		*50 - 150*	*12/28/15 11:32*	*12/29/15 16:07*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**6.39**		1.20		mg/Kg	☼	12/23/15 07:37	12/23/15 16:09	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**83**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-5-B17
Date Collected: 12/14/15 16:45
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-14
Matrix: Soil
Percent Solids: 86.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Toluene	**0.00247**		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Ethylbenzene	**0.0251**		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Xylenes, Total	**0.0861**		0.00426		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,2-Dibromoethane (EDB)	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Methyl tert-butyl ether	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Naphthalene	**0.115**		0.00355		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Bromobenzene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Bromochloromethane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Bromodichloromethane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Bromoform	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Bromomethane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Carbon tetrachloride	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Chlorobenzene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Chlorodibromomethane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Chloroethane	ND		0.00355		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Chloroform	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Chloromethane	ND		0.00132		mg/Kg	☼	12/14/15 16:45	12/28/15 17:15	1
2-Chlorotoluene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
4-Chlorotoluene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
cis-1,2-Dichloroethene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
cis-1,3-Dichloropropene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,2-Dibromo-3-Chloropropane	ND		0.00355		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Dibromomethane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,2-Dichlorobenzene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,3-Dichlorobenzene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,4-Dichlorobenzene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Dichlorodifluoromethane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,1-Dichloroethane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,2-Dichloroethane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,1-Dichloroethene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,2-Dichloropropane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,3-Dichloropropane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
2,2-Dichloropropane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,1-Dichloropropene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Hexachlorobutadiene	ND		0.00355		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Methylene Chloride	ND		0.00711		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,1,1,2-Tetrachloroethane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,1,2,2-Tetrachloroethane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Tetrachloroethene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
trans-1,2-Dichloroethene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
trans-1,3-Dichloropropene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,2,3-Trichlorobenzene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,2,4-Trichlorobenzene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,1,1-Trichloroethane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,1,2-Trichloroethane	ND		0.00355		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Trichloroethene	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Trichlorofluoromethane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
1,2,3-Trichloropropane	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1

Client Sample ID: S-5-B17
Date Collected: 12/14/15 16:45
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-14
Matrix: Soil
Percent Solids: 86.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.00142		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1
Hexane	**0.193**		0.00711		mg/Kg	☼	12/14/15 16:45	12/24/15 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*855*	*X*	*70 - 130*	*12/14/15 16:45*	*12/24/15 15:32*	*1*
4-Bromofluorobenzene (Surr)	*399*	*X*	*70 - 130*	*12/14/15 16:45*	*12/28/15 17:15*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*12/14/15 16:45*	*12/24/15 15:32*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*	*12/14/15 16:45*	*12/28/15 17:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*	*12/14/15 16:45*	*12/24/15 15:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*	*12/14/15 16:45*	*12/28/15 17:15*	*1*
Toluene-d8 (Surr)	*124*		*70 - 130*	*12/14/15 16:45*	*12/24/15 15:32*	*1*
Toluene-d8 (Surr)	*122*		*70 - 130*	*12/14/15 16:45*	*12/28/15 17:15*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Acenaphthylene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Anthracene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Benzo[a]anthracene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Benzo[a]pyrene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Benzo[b]fluoranthene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Benzo[g,h,i]perylene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Benzo[k]fluoranthene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Chrysene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Dibenz(a,h)anthracene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Fluorene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Fluoranthene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Indeno[1,2,3-cd]pyrene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Naphthalene	**0.0209**		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Phenanthrene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
Pyrene	ND		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
1-Methylnaphthalene	**0.0298**		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1
2-Methylnaphthalene	**0.0645**		0.00328		mg/Kg	☼	12/23/15 16:42	12/31/15 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*78*		*13 - 120*	*12/23/15 16:42*	*12/31/15 22:30*	*1*
Nitrobenzene-d5	*100*		*27 - 120*	*12/23/15 16:42*	*12/31/15 22:30*	*1*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*	*12/23/15 16:42*	*12/31/15 22:30*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**807**		4.67		mg/Kg	☼	12/14/15 16:45	12/24/15 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*108*		*50 - 150*	*12/14/15 16:45*	*12/24/15 22:39*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0329		mg/Kg	☼	01/02/16 15:05	01/04/16 21:42	1
PCB-1221	ND		0.0329		mg/Kg	☼	01/02/16 15:05	01/04/16 21:42	1
PCB-1232	ND		0.0329		mg/Kg	☼	01/02/16 15:05	01/04/16 21:42	1

Client Sample ID: S-5-B17
Date Collected: 12/14/15 16:45
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-14
Matrix: Soil
Percent Solids: 86.3

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	ND		0.0329		mg/Kg	☼	01/02/16 15:05	01/04/16 21:42	1
PCB-1248	ND		0.0329		mg/Kg	☼	01/02/16 15:05	01/04/16 21:42	1
PCB-1254	ND		0.0329		mg/Kg	☼	01/02/16 15:05	01/04/16 21:42	1
PCB-1260	ND		0.0329		mg/Kg	☼	01/02/16 15:05	01/04/16 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*102*		*20 - 150*	*01/02/16 15:05*	*01/04/16 21:42*	*1*
Tetrachloro-m-xylene	*90*		*19 - 147*	*01/02/16 15:05*	*01/04/16 21:42*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	67.7		4.51		mg/Kg	☼	12/28/15 11:32	12/29/15 17:45	1
C24-C40	7.29		4.51		mg/Kg	☼	12/28/15 11:32	12/29/15 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*102*		*50 - 150*	*12/28/15 11:32*	*12/29/15 17:45*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.26		1.14		mg/Kg	☼	12/23/15 07:37	12/23/15 16:13	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10		%			12/22/15 16:47	1

Client Sample ID: S-10-B17

Date Collected: 12/15/15 08:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-15

Matrix: Soil
Percent Solids: 90.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0128**		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Toluene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Ethylbenzene	**7.65**		0.0805		mg/Kg	☼	12/15/15 08:35	12/28/15 23:43	1
Xylenes, Total	**46.6**		2.42		mg/Kg	☼	12/15/15 08:35	12/29/15 16:30	20
1,2-Dibromoethane (EDB)	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Methyl tert-butyl ether	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Naphthalene	**3.93**		0.201		mg/Kg	☼	12/15/15 08:35	12/28/15 23:43	1
Bromobenzene	**0.0147**		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Bromochloromethane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Bromodichloromethane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Bromoform	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Bromomethane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Carbon tetrachloride	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Chlorobenzene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Chlorodibromomethane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Chloroethane	ND		0.00333		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Chloroform	ND		0.0805		mg/Kg	☼	12/15/15 08:35	12/28/15 23:43	1
Chloromethane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
2-Chlorotoluene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
4-Chlorotoluene	**0.105**		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
cis-1,2-Dichloroethene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
cis-1,3-Dichloropropene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,2-Dibromo-3-Chloropropane	ND		0.00333		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Dibromomethane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,2-Dichlorobenzene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,3-Dichlorobenzene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,4-Dichlorobenzene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Dichlorodifluoromethane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,1-Dichloroethane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,2-Dichloroethane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,1-Dichloroethene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,2-Dichloropropane	**0.106**		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,3-Dichloropropane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
2,2-Dichloropropane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,1-Dichloropropene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Hexachlorobutadiene	ND		0.00333		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Methylene Chloride	ND		0.00667		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,1,1,2-Tetrachloroethane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,1,2,2-Tetrachloroethane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Tetrachloroethene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
trans-1,2-Dichloroethene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
trans-1,3-Dichloropropene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,2,3-Trichlorobenzene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,2,4-Trichlorobenzene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,1,1-Trichloroethane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,1,2-Trichloroethane	ND		0.201		mg/Kg	☼	12/15/15 08:35	12/28/15 23:43	1
Trichloroethene	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Trichlorofluoromethane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
1,2,3-Trichloropropane	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1

Client Sample ID: S-10-B17
Date Collected: 12/15/15 08:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-15
Matrix: Soil
Percent Solids: 90.7

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.00133		mg/Kg	☼	12/15/15 08:35	12/24/15 20:43	1
Hexane	**15.7**		8.05		mg/Kg	☼	12/15/15 08:35	12/29/15 16:30	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*205*	*X*	*70 - 130*	*12/15/15 08:35*	*12/24/15 20:43*	*1*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*12/15/15 08:35*	*12/28/15 23:43*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*12/15/15 08:35*	*12/29/15 16:30*	*20*
Dibromofluoromethane (Surr)	*95*		*70 - 130*	*12/15/15 08:35*	*12/24/15 20:43*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*12/15/15 08:35*	*12/28/15 23:43*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*	*12/15/15 08:35*	*12/29/15 16:30*	*20*
1,2-Dichloroethane-d4 (Surr)	*70*		*70 - 130*	*12/15/15 08:35*	*12/24/15 20:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*	*12/15/15 08:35*	*12/28/15 23:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*	*12/15/15 08:35*	*12/29/15 16:30*	*20*
Toluene-d8 (Surr)	*741*	*X*	*70 - 130*	*12/15/15 08:35*	*12/24/15 20:43*	*1*
Toluene-d8 (Surr)	*119*		*70 - 130*	*12/15/15 08:35*	*12/28/15 23:43*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*12/15/15 08:35*	*12/29/15 16:30*	*20*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Acenaphthylene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Anthracene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Benzo[a]anthracene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Benzo[a]pyrene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Benzo[b]fluoranthene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Benzo[g,h,i]perylene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Benzo[k]fluoranthene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Chrysene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Dibenz(a,h)anthracene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Fluorene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Fluoranthene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Indeno[1,2,3-cd]pyrene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Naphthalene	**0.184**		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Phenanthrene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
Pyrene	ND		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
1-Methylnaphthalene	**0.0473**		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5
2-Methylnaphthalene	**0.107**		0.0159		mg/Kg	☼	12/23/15 16:42	12/31/15 22:56	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*13 - 120*	*12/23/15 16:42*	*12/31/15 22:56*	*5*
Nitrobenzene-d5	*100*		*27 - 120*	*12/23/15 16:42*	*12/31/15 22:56*	*5*
2-Fluorobiphenyl (Surr)	*80*		*29 - 120*	*12/23/15 16:42*	*12/31/15 22:56*	*5*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**758**		3.86		mg/Kg	☼	12/15/15 08:35	12/24/15 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*104*		*50 - 150*	*12/15/15 08:35*	*12/24/15 23:08*	*1*

Client Sample ID: S-10-B17

Date Collected: 12/15/15 08:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-15

Matrix: Soil
Percent Solids: 90.7

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0331		mg/Kg	☼	01/02/16 15:05	01/04/16 21:58	1
PCB-1221	ND		0.0331		mg/Kg	☼	01/02/16 15:05	01/04/16 21:58	1
PCB-1232	ND		0.0331		mg/Kg	☼	01/02/16 15:05	01/04/16 21:58	1
PCB-1242	ND		0.0331		mg/Kg	☼	01/02/16 15:05	01/04/16 21:58	1
PCB-1248	ND		0.0331		mg/Kg	☼	01/02/16 15:05	01/04/16 21:58	1
PCB-1254	ND		0.0331		mg/Kg	☼	01/02/16 15:05	01/04/16 21:58	1
PCB-1260	ND		0.0331		mg/Kg	☼	01/02/16 15:05	01/04/16 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*91*		*20 - 150*	*01/02/16 15:05*	*01/04/16 21:58*	*1*
Tetrachloro-m-xylene	*84*		*19 - 147*	*01/02/16 15:05*	*01/04/16 21:58*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**19.8**		3.98		mg/Kg	☼	12/29/15 17:02	12/31/15 01:43	1
C24-C40	**37.4**		3.98		mg/Kg	☼	12/29/15 17:02	12/31/15 01:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*121*		*50 - 150*	*12/29/15 17:02*	*12/31/15 01:43*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**6.35**		1.10		mg/Kg	☼	12/23/15 07:37	12/23/15 16:25	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**91**		0.10		%			12/22/15 16:47	1

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-94548-1
SDG: 31379

Client Sample ID: S-15-B17
Date Collected: 12/15/15 09:15
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-16
Matrix: Soil
Percent Solids: 87.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Toluene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Ethylbenzene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Xylenes, Total	ND		0.00481		mg/Kg	☼	12/15/15 09:15	12/28/15 18:14	1
1,2-Dibromoethane (EDB)	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Methyl tert-butyl ether	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Naphthalene	ND		0.00401		mg/Kg	☼	12/15/15 09:15	12/28/15 18:14	1
Bromobenzene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Bromochloromethane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Bromodichloromethane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Bromoform	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Bromomethane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Carbon tetrachloride	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Chlorobenzene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Chlorodibromomethane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Chloroethane	ND		0.00393		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Chloroform	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Chloromethane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
2-Chlorotoluene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
4-Chlorotoluene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
cis-1,2-Dichloroethene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
cis-1,3-Dichloropropene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,2-Dibromo-3-Chloropropane	ND		0.00393		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Dibromomethane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,2-Dichlorobenzene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,3-Dichlorobenzene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,4-Dichlorobenzene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Dichlorodifluoromethane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,1-Dichloroethane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,2-Dichloroethane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,1-Dichloroethene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,2-Dichloropropane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,3-Dichloropropane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
2,2-Dichloropropane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,1-Dichloropropene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Hexachlorobutadiene	ND		0.00393		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Methylene Chloride	ND		0.00787		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,1,1,2-Tetrachloroethane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,1,2,2-Tetrachloroethane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Tetrachloroethene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
trans-1,2-Dichloroethene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
trans-1,3-Dichloropropene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,2,3-Trichlorobenzene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,2,4-Trichlorobenzene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,1,1-Trichloroethane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,1,2-Trichloroethane	ND		0.00393		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Trichloroethene	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Trichlorofluoromethane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
1,2,3-Trichloropropane	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1

Client Sample ID: S-15-B17
Date Collected: 12/15/15 09:15
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-16
Matrix: Soil
Percent Solids: 87.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.00157		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1
Hexane	ND		0.00787		mg/Kg	☼	12/15/15 09:15	12/24/15 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*12/15/15 09:15*	*12/24/15 21:14*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*12/15/15 09:15*	*12/28/15 18:14*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*12/15/15 09:15*	*12/24/15 21:14*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*	*12/15/15 09:15*	*12/28/15 18:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*	*12/15/15 09:15*	*12/24/15 21:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*	*12/15/15 09:15*	*12/28/15 18:14*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*12/15/15 09:15*	*12/24/15 21:14*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*12/15/15 09:15*	*12/28/15 18:14*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Acenaphthylene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Anthracene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Benzo[a]anthracene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Benzo[a]pyrene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Benzo[b]fluoranthene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Benzo[g,h,i]perylene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Benzo[k]fluoranthene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Chrysene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Dibenz(a,h)anthracene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Fluorene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Fluoranthene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Indeno[1,2,3-cd]pyrene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Naphthalene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Phenanthrene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
Pyrene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
1-Methylnaphthalene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1
2-Methylnaphthalene	ND		0.00331		mg/Kg	☼	12/23/15 16:42	12/31/15 23:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*85*		*13 - 120*	*12/23/15 16:42*	*12/31/15 23:21*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*12/23/15 16:42*	*12/31/15 23:21*	*1*
2-Fluorobiphenyl (Surr)	*68*		*29 - 120*	*12/23/15 16:42*	*12/31/15 23:21*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.68		mg/Kg	☼	12/15/15 09:15	12/24/15 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*86*		*50 - 150*	*12/15/15 09:15*	*12/24/15 23:38*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0332		mg/Kg	☼	01/02/16 15:05	01/04/16 22:13	1
PCB-1221	ND		0.0332		mg/Kg	☼	01/02/16 15:05	01/04/16 22:13	1
PCB-1232	ND		0.0332		mg/Kg	☼	01/02/16 15:05	01/04/16 22:13	1

Client Sample ID: S-15-B17
Date Collected: 12/15/15 09:15
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-16
Matrix: Soil
Percent Solids: 87.3

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	ND		0.0332		mg/Kg	☼	01/02/16 15:05	01/04/16 22:13	1
PCB-1248	ND		0.0332		mg/Kg	☼	01/02/16 15:05	01/04/16 22:13	1
PCB-1254	ND		0.0332		mg/Kg	☼	01/02/16 15:05	01/04/16 22:13	1
PCB-1260	ND		0.0332		mg/Kg	☼	01/02/16 15:05	01/04/16 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*105*		*20 - 150*	*01/02/16 15:05*	*01/04/16 22:13*	*1*
Tetrachloro-m-xylene	*84*		*19 - 147*	*01/02/16 15:05*	*01/04/16 22:13*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	7.92		3.92		mg/Kg	☼	12/29/15 17:02	12/31/15 00:22	1
C24-C40	6.67		3.92		mg/Kg	☼	12/29/15 17:02	12/31/15 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*116*		*50 - 150*	*12/29/15 17:02*	*12/31/15 00:22*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.65		1.09		mg/Kg	☼	12/23/15 07:37	12/23/15 16:30	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	87		0.10		%			12/22/15 16:47	1

Client Sample ID: S-5-B18

Date Collected: 12/17/15 09:00
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-17

Matrix: Soil
Percent Solids: 87.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00145		mg/Kg	☼	12/17/15 09:00	12/30/15 21:07	1
Toluene	ND		0.00145		mg/Kg	☼	12/17/15 09:00	12/30/15 21:07	1
Ethylbenzene	ND		0.00145		mg/Kg	☼	12/17/15 09:00	12/30/15 21:07	1
Xylenes, Total	ND		0.00436		mg/Kg	☼	12/17/15 09:00	12/30/15 21:07	1
1,2-Dibromoethane (EDB)	ND		0.00145		mg/Kg	☼	12/17/15 09:00	12/30/15 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*12/17/15 09:00*	*12/30/15 21:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*	*12/17/15 09:00*	*12/30/15 21:07*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*	*12/17/15 09:00*	*12/30/15 21:07*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*	*12/17/15 09:00*	*12/30/15 21:07*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.44		mg/Kg	☼	12/17/15 09:00	12/25/15 00:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*86*		*50 - 150*	*12/17/15 09:00*	*12/25/15 00:07*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**4.55**		3.77		mg/Kg	☼	12/29/15 17:02	12/31/15 01:27	1
C24-C40	**6.88**		3.77		mg/Kg	☼	12/29/15 17:02	12/31/15 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*50 - 150*	*12/29/15 17:02*	*12/31/15 01:27*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**11.8**		1.13		mg/Kg	☼	12/23/15 07:37	12/23/15 16:34	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**88**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-5-B20
Date Collected: 12/14/15 14:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-18
Matrix: Soil
Percent Solids: 86.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00156		mg/Kg	☼	12/14/15 14:35	12/24/15 16:03	1
Toluene	ND		0.00156		mg/Kg	☼	12/14/15 14:35	12/24/15 16:03	1
Ethylbenzene	ND		0.00156		mg/Kg	☼	12/14/15 14:35	12/24/15 16:03	1
Xylenes, Total	ND		0.00469		mg/Kg	☼	12/14/15 14:35	12/24/15 16:03	1
1,2-Dibromoethane (EDB)	ND		0.00156		mg/Kg	☼	12/14/15 14:35	12/24/15 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*12/14/15 14:35*	*12/24/15 16:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*	*12/14/15 14:35*	*12/24/15 16:03*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*12/14/15 14:35*	*12/24/15 16:03*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*	*12/14/15 14:35*	*12/24/15 16:03*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		4.94		mg/Kg	☼	12/14/15 14:35	12/25/15 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*86*		*50 - 150*	*12/14/15 14:35*	*12/25/15 00:36*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		4.54		mg/Kg	☼	12/28/15 11:32	12/29/15 16:39	1
C24-C40	ND		4.54		mg/Kg	☼	12/28/15 11:32	12/29/15 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*50 - 150*	*12/28/15 11:32*	*12/29/15 16:39*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**7.23**		1.15		mg/Kg	☼	12/23/15 07:37	12/23/15 16:38	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**86**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-10-B20

Date Collected: 12/16/15 11:05
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-19

Matrix: Soil
Percent Solids: 88.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00136		mg/Kg	☼	12/16/15 11:05	12/30/15 10:06	1
Toluene	ND		0.00136		mg/Kg	☼	12/16/15 11:05	12/30/15 10:06	1
Ethylbenzene	**1.72**	**H**	0.0860		mg/Kg	☼	12/16/15 11:05	12/31/15 01:54	1
Xylenes, Total	**2.25**	**H**	0.129		mg/Kg	☼	12/16/15 11:05	12/31/15 01:54	1
1,2-Dibromoethane (EDB)	ND		0.00136		mg/Kg	☼	12/16/15 11:05	12/30/15 10:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*281*	*X*	*70 - 130*	*12/16/15 11:05*	*12/30/15 10:06*	*1*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*12/16/15 11:05*	*12/31/15 01:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*76*		*70 - 130*	*12/16/15 11:05*	*12/30/15 10:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*	*12/16/15 11:05*	*12/31/15 01:54*	*1*
Toluene-d8 (Surr)	*1215*	*X*	*70 - 130*	*12/16/15 11:05*	*12/30/15 10:06*	*1*
Toluene-d8 (Surr)	*135*	*X*	*70 - 130*	*12/16/15 11:05*	*12/31/15 01:54*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*	*12/16/15 11:05*	*12/30/15 10:06*	*1*
Dibromofluoromethane (Surr)	*86*		*70 - 130*	*12/16/15 11:05*	*12/31/15 01:54*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**1510**		4.36		mg/Kg	☼	12/16/15 11:05	12/25/15 01:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*120*		*50 - 150*	*12/16/15 11:05*	*12/25/15 01:05*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**65.0**		3.95		mg/Kg	☼	12/29/15 17:02	12/31/15 00:38	1
C24-C40	**49.8**		3.95		mg/Kg	☼	12/29/15 17:02	12/31/15 00:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*108*		*50 - 150*	*12/29/15 17:02*	*12/31/15 00:38*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**4.74**		1.13		mg/Kg	☼	12/23/15 07:37	12/23/15 16:42	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**88**		0.10		%			12/22/15 16:47	1

Client Sample ID: S-15-B20

Date Collected: 12/16/15 11:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-20

Matrix: Soil
Percent Solids: 84.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00181		mg/Kg	☼	12/16/15 11:35	12/30/15 22:08	1
Toluene	ND		0.00181		mg/Kg	☼	12/16/15 11:35	12/30/15 22:08	1
Ethylbenzene	ND		0.00181		mg/Kg	☼	12/16/15 11:35	12/30/15 22:08	1
Xylenes, Total	ND		0.00544		mg/Kg	☼	12/16/15 11:35	12/30/15 22:08	1
1,2-Dibromoethane (EDB)	ND		0.00181		mg/Kg	☼	12/16/15 11:35	12/30/15 22:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*12/16/15 11:35*	*12/30/15 22:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*	*12/16/15 11:35*	*12/30/15 22:08*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*12/16/15 11:35*	*12/30/15 22:08*	*1*
Dibromofluoromethane (Surr)	*116*		*70 - 130*	*12/16/15 11:35*	*12/30/15 22:08*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.35		mg/Kg	☼	12/16/15 11:35	12/25/15 01:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*86*		*50 - 150*	*12/16/15 11:35*	*12/25/15 01:35*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		3.91		mg/Kg	☼	12/29/15 17:02	12/31/15 00:54	1
C24-C40	ND		3.91		mg/Kg	☼	12/29/15 17:02	12/31/15 00:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*85*		*50 - 150*	*12/29/15 17:02*	*12/31/15 00:54*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**4.03**		1.19		mg/Kg	☼	12/23/15 07:37	12/23/15 16:46	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**84**		0.10		%			12/22/15 16:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 490-94604-A-1-E MS
Matrix: Solid
Analysis Batch: 309696

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 308633

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		0.0465	0.04252		mg/Kg		92	31 - 143
Toluene	ND		0.0465	0.02805		mg/Kg		58	30 - 155
Ethylbenzene	ND		0.0465	0.02595		mg/Kg		56	23 - 161
Xylenes, Total	ND		0.0929	0.04879		mg/Kg		52	25 - 162
1,2-Dibromoethane (EDB)	ND		0.0465	0.02046		mg/Kg		44	18 - 156

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*116*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*
Toluene-d8 (Surr)	*89*		*70 - 130*

Lab Sample ID: 490-94604-A-1-F MSD
Matrix: Solid
Analysis Batch: 309696

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 308633

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		0.0492	0.05071		mg/Kg		103	31 - 143	18	50
Toluene	ND		0.0492	0.03336		mg/Kg		66	30 - 155	17	50
Ethylbenzene	ND		0.0492	0.03092		mg/Kg		63	23 - 161	17	50
Xylenes, Total	ND		0.0984	0.05839		mg/Kg		59	25 - 162	18	50
1,2-Dibromoethane (EDB)	ND		0.0492	0.02507		mg/Kg		51	18 - 156	20	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*116*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*
Toluene-d8 (Surr)	*89*		*70 - 130*

Lab Sample ID: MB 490-308992/7
Matrix: Solid
Analysis Batch: 308992

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			12/24/15 12:57	1
Toluene	ND		0.00200		mg/Kg			12/24/15 12:57	1
Ethylbenzene	ND		0.00200		mg/Kg			12/24/15 12:57	1
Xylenes, Total	ND		0.00600		mg/Kg			12/24/15 12:57	1
1,2-Dibromoethane (EDB)	ND		0.00200		mg/Kg			12/24/15 12:57	1
Methyl tert-butyl ether	ND		0.00200		mg/Kg			12/24/15 12:57	1
Naphthalene	ND		0.00500		mg/Kg			12/24/15 12:57	1
Bromobenzene	ND		0.00200		mg/Kg			12/24/15 12:57	1
Bromochloromethane	ND		0.00200		mg/Kg			12/24/15 12:57	1
Bromodichloromethane	ND		0.00200		mg/Kg			12/24/15 12:57	1
Bromoform	ND		0.00200		mg/Kg			12/24/15 12:57	1
Bromomethane	ND		0.00200		mg/Kg			12/24/15 12:57	1
Carbon tetrachloride	ND		0.00200		mg/Kg			12/24/15 12:57	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-308992/7
Matrix: Solid
Analysis Batch: 308992

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.00200		mg/Kg			12/24/15 12:57	1
Chlorodibromomethane	ND		0.00200		mg/Kg			12/24/15 12:57	1
Chloroethane	ND		0.00500		mg/Kg			12/24/15 12:57	1
Chloroform	ND		0.00200		mg/Kg			12/24/15 12:57	1
Chloromethane	0.004399		0.00200		mg/Kg			12/24/15 12:57	1
2-Chlorotoluene	ND		0.00200		mg/Kg			12/24/15 12:57	1
4-Chlorotoluene	ND		0.00200		mg/Kg			12/24/15 12:57	1
cis-1,2-Dichloroethene	ND		0.00200		mg/Kg			12/24/15 12:57	1
cis-1,3-Dichloropropene	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,2-Dibromo-3-Chloropropane	ND		0.00500		mg/Kg			12/24/15 12:57	1
Dibromomethane	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,2-Dichlorobenzene	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,3-Dichlorobenzene	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,4-Dichlorobenzene	ND		0.00200		mg/Kg			12/24/15 12:57	1
Dichlorodifluoromethane	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,1-Dichloroethane	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,2-Dichloroethane	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,1-Dichloroethene	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,2-Dichloropropane	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,3-Dichloropropane	ND		0.00200		mg/Kg			12/24/15 12:57	1
2,2-Dichloropropane	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,1-Dichloropropene	ND		0.00200		mg/Kg			12/24/15 12:57	1
Hexachlorobutadiene	ND		0.00500		mg/Kg			12/24/15 12:57	1
Methylene Chloride	ND		0.0100		mg/Kg			12/24/15 12:57	1
1,1,1,2-Tetrachloroethane	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,1,2,2-Tetrachloroethane	ND		0.00200		mg/Kg			12/24/15 12:57	1
Tetrachloroethene	ND		0.00200		mg/Kg			12/24/15 12:57	1
trans-1,2-Dichloroethene	ND		0.00200		mg/Kg			12/24/15 12:57	1
trans-1,3-Dichloropropene	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,2,3-Trichlorobenzene	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,2,4-Trichlorobenzene	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,1,1-Trichloroethane	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,1,2-Trichloroethane	ND		0.00500		mg/Kg			12/24/15 12:57	1
Trichloroethene	ND		0.00200		mg/Kg			12/24/15 12:57	1
Trichlorofluoromethane	ND		0.00200		mg/Kg			12/24/15 12:57	1
1,2,3-Trichloropropane	ND		0.00200		mg/Kg			12/24/15 12:57	1
Vinyl chloride	ND		0.00200		mg/Kg			12/24/15 12:57	1
Hexane	ND		0.0100		mg/Kg			12/24/15 12:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*12/24/15 12:57*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*12/24/15 12:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*12/24/15 12:57*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*12/24/15 12:57*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-308992/3
Matrix: Solid
Analysis Batch: 308992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05181		mg/Kg		104	75 - 127
Toluene	0.0500	0.04850		mg/Kg		97	80 - 132
Ethylbenzene	0.0500	0.05096		mg/Kg		102	80 - 134
Xylenes, Total	0.100	0.1005		mg/Kg		101	80 - 137
1,2-Dibromoethane (EDB)	0.0500	0.04417		mg/Kg		88	80 - 135
Methyl tert-butyl ether	0.0500	0.04947		mg/Kg		99	70 - 136
Naphthalene	0.0500	0.04651		mg/Kg		93	69 - 150
Bromobenzene	0.0500	0.04681		mg/Kg		94	75 - 130
Bromochloromethane	0.0500	0.04873		mg/Kg		97	70 - 132
Bromodichloromethane	0.0500	0.04726		mg/Kg		95	68 - 135
Bromoform	0.0500	0.04213		mg/Kg		84	36 - 150
Bromomethane	0.0500	0.05350		mg/Kg		107	43 - 142
Carbon tetrachloride	0.0500	0.04966		mg/Kg		99	70 - 141
Chlorobenzene	0.0500	0.05006		mg/Kg		100	84 - 125
Chlorodibromomethane	0.0500	0.04538		mg/Kg		91	66 - 134
Chloroethane	0.0500	0.04939		mg/Kg		99	53 - 144
Chloroform	0.0500	0.04706		mg/Kg		94	76 - 130
Chloromethane	0.0500	0.06720		mg/Kg		134	23 - 150
2-Chlorotoluene	0.0500	0.05076		mg/Kg		102	78 - 132
4-Chlorotoluene	0.0500	0.05180		mg/Kg		104	77 - 138
cis-1,2-Dichloroethene	0.0500	0.05800		mg/Kg		116	75 - 125
cis-1,3-Dichloropropene	0.0500	0.04542		mg/Kg		91	73 - 148
1,2-Dibromo-3-Chloropropane	0.0500	0.04018		mg/Kg		80	49 - 142
Dibromomethane	0.0500	0.04865		mg/Kg		97	71 - 130
1,2-Dichlorobenzene	0.0500	0.04753		mg/Kg		95	80 - 134
1,3-Dichlorobenzene	0.0500	0.04999		mg/Kg		100	79 - 137
1,4-Dichlorobenzene	0.0500	0.04896		mg/Kg		98	77 - 139
Dichlorodifluoromethane	0.0500	0.04728		mg/Kg		95	12 - 144
1,1-Dichloroethane	0.0500	0.05331		mg/Kg		107	75 - 124
1,2-Dichloroethane	0.0500	0.04516		mg/Kg		90	65 - 134
1,1-Dichloroethene	0.0500	0.05098		mg/Kg		102	75 - 131
1,2-Dichloropropane	0.0500	0.05425		mg/Kg		108	69 - 120
1,3-Dichloropropane	0.0500	0.04616		mg/Kg		92	78 - 126
2,2-Dichloropropane	0.0500	0.05238		mg/Kg		105	68 - 145
1,1-Dichloropropene	0.0500	0.05598		mg/Kg		112	79 - 127
Hexachlorobutadiene	0.0500	0.04880		mg/Kg		98	65 - 148
Methylene Chloride	0.0500	0.05152		mg/Kg		103	68 - 144
1,1,1,2-Tetrachloroethane	0.0500	0.04650		mg/Kg		93	80 - 136
1,1,2,2-Tetrachloroethane	0.0500	0.04247		mg/Kg		85	66 - 134
Tetrachloroethene	0.0500	0.04797		mg/Kg		96	78 - 140
trans-1,2-Dichloroethene	0.0500	0.05375		mg/Kg		108	76 - 128
trans-1,3-Dichloropropene	0.0500	0.05190		mg/Kg		104	62 - 139
1,2,3-Trichlorobenzene	0.0500	0.05205		mg/Kg		104	70 - 150
1,2,4-Trichlorobenzene	0.0500	0.05588		mg/Kg		112	62 - 150
1,1,1-Trichloroethane	0.0500	0.04765		mg/Kg		95	72 - 140
1,1,2-Trichloroethane	0.0500	0.04291		mg/Kg		86	78 - 128
Trichloroethene	0.0500	0.05247		mg/Kg		105	77 - 127
Trichlorofluoromethane	0.0500	0.05006		mg/Kg		100	50 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-308992/3
Matrix: Solid
Analysis Batch: 308992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3-Trichloropropane			0.0500	0.04654		mg/Kg		93	65 - 139		
Vinyl chloride			0.0500	0.05920		mg/Kg		118	47 - 136		
Hexane			0.0500	0.06201		mg/Kg		124	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 490-308992/4
Matrix: Solid
Analysis Batch: 308992

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05233		mg/Kg		105	75 - 127	1	50
Toluene			0.0500	0.04810		mg/Kg		96	80 - 132	1	50
Ethylbenzene			0.0500	0.05136		mg/Kg		103	80 - 134	1	50
Xylenes, Total			0.100	0.1002		mg/Kg		100	80 - 137	0	50
1,2-Dibromoethane (EDB)			0.0500	0.04374		mg/Kg		87	80 - 135	1	50
Methyl tert-butyl ether			0.0500	0.04981		mg/Kg		100	70 - 136	1	50
Naphthalene			0.0500	0.04570		mg/Kg		91	69 - 150	2	50
Bromobenzene			0.0500	0.04568		mg/Kg		91	75 - 130	2	50
Bromochloromethane			0.0500	0.04989		mg/Kg		100	70 - 132	2	50
Bromodichloromethane			0.0500	0.04863		mg/Kg		97	68 - 135	3	50
Bromoform			0.0500	0.04127		mg/Kg		83	36 - 150	2	50
Bromomethane			0.0500	0.05353		mg/Kg		107	43 - 142	0	50
Carbon tetrachloride			0.0500	0.05027		mg/Kg		101	70 - 141	1	50
Chlorobenzene			0.0500	0.04954		mg/Kg		99	84 - 125	1	50
Chlorodibromomethane			0.0500	0.04674		mg/Kg		93	66 - 134	3	50
Chloroethane			0.0500	0.05490		mg/Kg		110	53 - 144	11	50
Chloroform			0.0500	0.04772		mg/Kg		95	76 - 130	1	49
Chloromethane			0.0500	0.06659		mg/Kg		133	23 - 150	1	50
2-Chlorotoluene			0.0500	0.05098		mg/Kg		102	78 - 132	0	50
4-Chlorotoluene			0.0500	0.05119		mg/Kg		102	77 - 138	1	50
cis-1,2-Dichloroethene			0.0500	0.05764		mg/Kg		115	75 - 125	1	50
cis-1,3-Dichloropropene			0.0500	0.04532		mg/Kg		91	73 - 148	0	50
1,2-Dibromo-3-Chloropropane			0.0500	0.03844		mg/Kg		77	49 - 142	4	50
Dibromomethane			0.0500	0.04921		mg/Kg		98	71 - 130	1	50
1,2-Dichlorobenzene			0.0500	0.04701		mg/Kg		94	80 - 134	1	50
1,3-Dichlorobenzene			0.0500	0.04920		mg/Kg		98	79 - 137	2	50
1,4-Dichlorobenzene			0.0500	0.04776		mg/Kg		96	77 - 139	2	50
Dichlorodifluoromethane			0.0500	0.04735		mg/Kg		95	12 - 144	0	50
1,1-Dichloroethane			0.0500	0.05301		mg/Kg		106	75 - 124	1	50
1,2-Dichloroethane			0.0500	0.04518		mg/Kg		90	65 - 134	0	50
1,1-Dichloroethene			0.0500	0.05142		mg/Kg		103	75 - 131	1	50
1,2-Dichloropropane			0.0500	0.05483		mg/Kg		110	69 - 120	1	50
1,3-Dichloropropane			0.0500	0.04568		mg/Kg		91	78 - 126	1	42

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-308992/4
Matrix: Solid
Analysis Batch: 308992

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,2-Dichloropropane			0.0500	0.05171		mg/Kg		103	68 - 145	1	50
1,1-Dichloropropene			0.0500	0.05545		mg/Kg		111	79 - 127	1	50
Hexachlorobutadiene			0.0500	0.04860		mg/Kg		97	65 - 148	0	50
Methylene Chloride			0.0500	0.05185		mg/Kg		104	68 - 144	1	50
1,1,1,2-Tetrachloroethane			0.0500	0.04641		mg/Kg		93	80 - 136	0	50
1,1,2,2-Tetrachloroethane			0.0500	0.04193		mg/Kg		84	66 - 134	1	50
Tetrachloroethene			0.0500	0.04797		mg/Kg		96	78 - 140	0	50
trans-1,2-Dichloroethene			0.0500	0.05315		mg/Kg		106	76 - 128	1	50
trans-1,3-Dichloropropene			0.0500	0.05141		mg/Kg		103	62 - 139	1	50
1,2,3-Trichlorobenzene			0.0500	0.05062		mg/Kg		101	70 - 150	3	50
1,2,4-Trichlorobenzene			0.0500	0.05437		mg/Kg		109	62 - 150	3	50
1,1,1-Trichloroethane			0.0500	0.04714		mg/Kg		94	72 - 140	1	50
1,1,2-Trichloroethane			0.0500	0.04295		mg/Kg		86	78 - 128	0	50
Trichloroethene			0.0500	0.05285		mg/Kg		106	77 - 127	1	50
Trichlorofluoromethane			0.0500	0.04977		mg/Kg		100	50 - 140	1	50
1,2,3-Trichloropropane			0.0500	0.04541		mg/Kg		91	65 - 139	2	50
Vinyl chloride			0.0500	0.05981		mg/Kg		120	47 - 136	1	50
Hexane			0.0500	0.06084		mg/Kg		122	60 - 144	2	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 490-309337/9
Matrix: Solid
Analysis Batch: 309337

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100		mg/Kg			12/28/15 18:32	1
Toluene	ND		0.100		mg/Kg			12/28/15 18:32	1
Ethylbenzene	ND		0.100		mg/Kg			12/28/15 18:32	1
Xylenes, Total	ND		0.150		mg/Kg			12/28/15 18:32	1
1,2-Dibromoethane (EDB)	ND		0.100		mg/Kg			12/28/15 18:32	1
Methyl tert-butyl ether	ND		0.100		mg/Kg			12/28/15 18:32	1
Naphthalene	ND		0.250		mg/Kg			12/28/15 18:32	1
Bromobenzene	ND		0.100		mg/Kg			12/28/15 18:32	1
Bromochloromethane	ND		0.100		mg/Kg			12/28/15 18:32	1
Bromodichloromethane	ND		0.100		mg/Kg			12/28/15 18:32	1
Bromoform	ND		0.100		mg/Kg			12/28/15 18:32	1
Bromomethane	ND		0.100		mg/Kg			12/28/15 18:32	1
Carbon tetrachloride	ND		0.100		mg/Kg			12/28/15 18:32	1
Chlorobenzene	ND		0.100		mg/Kg			12/28/15 18:32	1
Chlorodibromomethane	ND		0.100		mg/Kg			12/28/15 18:32	1
Chloroethane	ND		0.250		mg/Kg			12/28/15 18:32	1
Chloroform	ND		0.100		mg/Kg			12/28/15 18:32	1
Chloromethane	ND		0.100		mg/Kg			12/28/15 18:32	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-309337/9
Matrix: Solid
Analysis Batch: 309337

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.100		mg/Kg			12/28/15 18:32	1
4-Chlorotoluene	ND		0.100		mg/Kg			12/28/15 18:32	1
cis-1,2-Dichloroethene	ND		0.100		mg/Kg			12/28/15 18:32	1
cis-1,3-Dichloropropene	ND		0.100		mg/Kg			12/28/15 18:32	1
1,2-Dibromo-3-Chloropropane	ND		0.250		mg/Kg			12/28/15 18:32	1
Dibromomethane	ND		0.100		mg/Kg			12/28/15 18:32	1
1,2-Dichlorobenzene	ND		0.100		mg/Kg			12/28/15 18:32	1
1,3-Dichlorobenzene	ND		0.100		mg/Kg			12/28/15 18:32	1
1,4-Dichlorobenzene	ND		0.100		mg/Kg			12/28/15 18:32	1
Dichlorodifluoromethane	ND		0.100		mg/Kg			12/28/15 18:32	1
1,1-Dichloroethane	ND		0.100		mg/Kg			12/28/15 18:32	1
1,2-Dichloroethane	ND		0.100		mg/Kg			12/28/15 18:32	1
1,1-Dichloroethene	ND		0.100		mg/Kg			12/28/15 18:32	1
1,2-Dichloropropane	ND		0.100		mg/Kg			12/28/15 18:32	1
1,3-Dichloropropane	ND		0.100		mg/Kg			12/28/15 18:32	1
2,2-Dichloropropane	ND		0.100		mg/Kg			12/28/15 18:32	1
1,1-Dichloropropene	ND		0.100		mg/Kg			12/28/15 18:32	1
Hexachlorobutadiene	ND		0.250		mg/Kg			12/28/15 18:32	1
Methylene Chloride	ND		0.500		mg/Kg			12/28/15 18:32	1
1,1,1,2-Tetrachloroethane	ND		0.100		mg/Kg			12/28/15 18:32	1
1,1,2,2-Tetrachloroethane	ND		0.100		mg/Kg			12/28/15 18:32	1
Tetrachloroethene	ND		0.100		mg/Kg			12/28/15 18:32	1
trans-1,2-Dichloroethene	ND		0.100		mg/Kg			12/28/15 18:32	1
trans-1,3-Dichloropropene	ND		0.100		mg/Kg			12/28/15 18:32	1
1,2,3-Trichlorobenzene	ND		0.100		mg/Kg			12/28/15 18:32	1
1,2,4-Trichlorobenzene	ND		0.100		mg/Kg			12/28/15 18:32	1
1,1,1-Trichloroethane	ND		0.100		mg/Kg			12/28/15 18:32	1
1,1,2-Trichloroethane	ND		0.250		mg/Kg			12/28/15 18:32	1
Trichloroethene	ND		0.100		mg/Kg			12/28/15 18:32	1
Trichlorofluoromethane	ND		0.100		mg/Kg			12/28/15 18:32	1
1,2,3-Trichloropropane	ND		0.100		mg/Kg			12/28/15 18:32	1
Vinyl chloride	ND		0.100		mg/Kg			12/28/15 18:32	1
Hexane	ND		0.500		mg/Kg			12/28/15 18:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*12/28/15 18:32*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*12/28/15 18:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*12/28/15 18:32*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*12/28/15 18:32*	*1*

Lab Sample ID: LCS 490-309337/5
Matrix: Solid
Analysis Batch: 309337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.50	2.638		mg/Kg		106	75 - 127
Toluene	2.50	2.439		mg/Kg		98	80 - 132
Ethylbenzene	2.50	2.595		mg/Kg		104	80 - 134

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-309337/5
Matrix: Solid
Analysis Batch: 309337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	5.00	5.081		mg/Kg		102	80 - 137
1,2-Dibromoethane (EDB)	2.50	2.243		mg/Kg		90	80 - 135
Methyl tert-butyl ether	2.50	2.671		mg/Kg		107	70 - 136
Naphthalene	2.50	2.492		mg/Kg		100	69 - 150
Bromobenzene	2.50	2.299		mg/Kg		92	75 - 130
Bromochloromethane	2.50	2.380		mg/Kg		95	70 - 132
Bromodichloromethane	2.50	2.562		mg/Kg		102	68 - 135
Bromoform	2.50	2.227		mg/Kg		89	36 - 150
Bromomethane	2.50	2.212		mg/Kg		88	43 - 142
Carbon tetrachloride	2.50	2.585		mg/Kg		103	70 - 141
Chlorobenzene	2.50	2.497		mg/Kg		100	84 - 125
Chlorodibromomethane	2.50	2.403		mg/Kg		96	66 - 134
Chloroethane	2.50	1.798		mg/Kg		72	53 - 144
Chloroform	2.50	2.439		mg/Kg		98	76 - 130
Chloromethane	2.50	2.895		mg/Kg		116	23 - 150
2-Chlorotoluene	2.50	2.492		mg/Kg		100	78 - 132
4-Chlorotoluene	2.50	2.590		mg/Kg		104	77 - 138
cis-1,2-Dichloroethene	2.50	3.038		mg/Kg		122	75 - 125
cis-1,3-Dichloropropene	2.50	2.368		mg/Kg		95	73 - 148
1,2-Dibromo-3-Chloropropane	2.50	2.221		mg/Kg		89	49 - 142
Dibromomethane	2.50	2.651		mg/Kg		106	71 - 130
1,2-Dichlorobenzene	2.50	2.367		mg/Kg		95	80 - 134
1,3-Dichlorobenzene	2.50	2.575		mg/Kg		103	79 - 137
1,4-Dichlorobenzene	2.50	2.525		mg/Kg		101	77 - 139
Dichlorodifluoromethane	2.50	2.377		mg/Kg		95	12 - 144
1,1-Dichloroethane	2.50	2.556		mg/Kg		102	75 - 124
1,2-Dichloroethane	2.50	2.371		mg/Kg		95	65 - 134
1,1-Dichloroethene	2.50	2.698		mg/Kg		108	75 - 131
1,2-Dichloropropane	2.50	2.706		mg/Kg		108	69 - 120
1,3-Dichloropropane	2.50	2.330		mg/Kg		93	78 - 126
2,2-Dichloropropane	2.50	2.797		mg/Kg		112	68 - 145
1,1-Dichloropropene	2.50	2.891		mg/Kg		116	79 - 127
Hexachlorobutadiene	2.50	2.549		mg/Kg		102	65 - 148
Methylene Chloride	2.50	2.483		mg/Kg		99	68 - 144
1,1,1,2-Tetrachloroethane	2.50	2.369		mg/Kg		95	80 - 136
1,1,2,2-Tetrachloroethane	2.50	2.140		mg/Kg		86	66 - 134
Tetrachloroethene	2.50	2.526		mg/Kg		101	78 - 140
trans-1,2-Dichloroethene	2.50	2.755		mg/Kg		110	76 - 128
trans-1,3-Dichloropropene	2.50	2.696		mg/Kg		108	62 - 139
1,2,3-Trichlorobenzene	2.50	2.851		mg/Kg		114	70 - 150
1,2,4-Trichlorobenzene	2.50	3.182		mg/Kg		127	62 - 150
1,1,1-Trichloroethane	2.50	2.470		mg/Kg		99	72 - 140
1,1,2-Trichloroethane	2.50	2.197		mg/Kg		88	78 - 128
Trichloroethene	2.50	2.791		mg/Kg		112	77 - 127
Trichlorofluoromethane	2.50	2.595		mg/Kg		104	50 - 140
1,2,3-Trichloropropane	2.50	2.307		mg/Kg		92	65 - 139
Vinyl chloride	2.50	2.755		mg/Kg		110	47 - 136
Hexane	2.50	3.251		mg/Kg		130	60 - 144

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-309337/5
Matrix: Solid
Analysis Batch: 309337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 490-309337/6
Matrix: Solid
Analysis Batch: 309337

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			2.50	2.642		mg/Kg		106	75 - 127	0	50
Toluene			2.50	2.403		mg/Kg		96	80 - 132	1	50
Ethylbenzene			2.50	2.533		mg/Kg		101	80 - 134	2	50
Xylenes, Total			5.00	4.975		mg/Kg		100	80 - 137	2	50
1,2-Dibromoethane (EDB)			2.50	2.237		mg/Kg		89	80 - 135	0	50
Methyl tert-butyl ether			2.50	2.652		mg/Kg		106	70 - 136	1	50
Naphthalene			2.50	2.363		mg/Kg		95	69 - 150	5	50
Bromobenzene			2.50	2.215		mg/Kg		89	75 - 130	4	50
Bromochloromethane			2.50	2.496		mg/Kg		100	70 - 132	5	50
Bromodichloromethane			2.50	2.548		mg/Kg		102	68 - 135	1	50
Bromoform			2.50	2.083		mg/Kg		83	36 - 150	7	50
Bromomethane			2.50	2.303		mg/Kg		92	43 - 142	4	50
Carbon tetrachloride			2.50	2.655		mg/Kg		106	70 - 141	3	50
Chlorobenzene			2.50	2.465		mg/Kg		99	84 - 125	1	50
Chlorodibromomethane			2.50	2.373		mg/Kg		95	66 - 134	1	50
Chloroethane			2.50	1.808		mg/Kg		72	53 - 144	1	50
Chloroform			2.50	2.448		mg/Kg		98	76 - 130	0	49
Chloromethane			2.50	2.895		mg/Kg		116	23 - 150	0	50
2-Chlorotoluene			2.50	2.411		mg/Kg		96	78 - 132	3	50
4-Chlorotoluene			2.50	2.464		mg/Kg		99	77 - 138	5	50
cis-1,2-Dichloroethene			2.50	3.010		mg/Kg		120	75 - 125	1	50
cis-1,3-Dichloropropene			2.50	2.312		mg/Kg		92	73 - 148	2	50
1,2-Dibromo-3-Chloropropane			2.50	2.110		mg/Kg		84	49 - 142	5	50
Dibromomethane			2.50	2.531		mg/Kg		101	71 - 130	5	50
1,2-Dichlorobenzene			2.50	2.335		mg/Kg		93	80 - 134	1	50
1,3-Dichlorobenzene			2.50	2.491		mg/Kg		100	79 - 137	3	50
1,4-Dichlorobenzene			2.50	2.455		mg/Kg		98	77 - 139	3	50
Dichlorodifluoromethane			2.50	2.371		mg/Kg		95	12 - 144	0	50
1,1-Dichloroethane			2.50	2.593		mg/Kg		104	75 - 124	1	50
1,2-Dichloroethane			2.50	2.402		mg/Kg		96	65 - 134	1	50
1,1-Dichloroethene			2.50	2.713		mg/Kg		109	75 - 131	1	50
1,2-Dichloropropane			2.50	2.727		mg/Kg		109	69 - 120	1	50
1,3-Dichloropropane			2.50	2.297		mg/Kg		92	78 - 126	1	42
2,2-Dichloropropane			2.50	2.761		mg/Kg		110	68 - 145	1	50
1,1-Dichloropropene			2.50	2.867		mg/Kg		115	79 - 127	1	50
Hexachlorobutadiene			2.50	2.541		mg/Kg		102	65 - 148	0	50
Methylene Chloride			2.50	2.460		mg/Kg		98	68 - 144	1	50
1,1,1,2-Tetrachloroethane			2.50	2.322		mg/Kg		93	80 - 136	2	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-309337/6
Matrix: Solid
Analysis Batch: 309337

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane			2.50	2.017		mg/Kg		81	66 - 134	6	50
Tetrachloroethene			2.50	2.470		mg/Kg		99	78 - 140	2	50
trans-1,2-Dichloroethene			2.50	2.763		mg/Kg		111	76 - 128	0	50
trans-1,3-Dichloropropene			2.50	2.647		mg/Kg		106	62 - 139	2	50
1,2,3-Trichlorobenzene			2.50	2.746		mg/Kg		110	70 - 150	4	50
1,2,4-Trichlorobenzene			2.50	2.969		mg/Kg		119	62 - 150	7	50
1,1,1-Trichloroethane			2.50	2.476		mg/Kg		99	72 - 140	0	50
1,1,2-Trichloroethane			2.50	2.144		mg/Kg		86	78 - 128	2	50
Trichloroethene			2.50	2.729		mg/Kg		109	77 - 127	2	50
Trichlorofluoromethane			2.50	2.549		mg/Kg		102	50 - 140	2	50
1,2,3-Trichloropropane			2.50	2.202		mg/Kg		88	65 - 139	5	50
Vinyl chloride			2.50	2.738		mg/Kg		110	47 - 136	1	50
Hexane			2.50	3.162		mg/Kg		126	60 - 144	3	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 490-309345/7
Matrix: Solid
Analysis Batch: 309345

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			12/28/15 16:16	1
Toluene	ND		0.00200		mg/Kg			12/28/15 16:16	1
Ethylbenzene	ND		0.00200		mg/Kg			12/28/15 16:16	1
Xylenes, Total	ND		0.00600		mg/Kg			12/28/15 16:16	1
1,2-Dibromoethane (EDB)	ND		0.00200		mg/Kg			12/28/15 16:16	1
Methyl tert-butyl ether	ND		0.00200		mg/Kg			12/28/15 16:16	1
Naphthalene	ND		0.00500		mg/Kg			12/28/15 16:16	1
Bromobenzene	ND		0.00200		mg/Kg			12/28/15 16:16	1
Bromochloromethane	ND		0.00200		mg/Kg			12/28/15 16:16	1
Bromodichloromethane	ND		0.00200		mg/Kg			12/28/15 16:16	1
Bromoform	ND		0.00200		mg/Kg			12/28/15 16:16	1
Bromomethane	ND		0.00200		mg/Kg			12/28/15 16:16	1
Carbon tetrachloride	ND		0.00200		mg/Kg			12/28/15 16:16	1
Chlorobenzene	ND		0.00200		mg/Kg			12/28/15 16:16	1
Chlorodibromomethane	ND		0.00200		mg/Kg			12/28/15 16:16	1
Chloroethane	ND		0.00500		mg/Kg			12/28/15 16:16	1
Chloroform	ND		0.00200		mg/Kg			12/28/15 16:16	1
Chloromethane	ND		0.00200		mg/Kg			12/28/15 16:16	1
2-Chlorotoluene	ND		0.00200		mg/Kg			12/28/15 16:16	1
4-Chlorotoluene	ND		0.00200		mg/Kg			12/28/15 16:16	1
cis-1,2-Dichloroethene	ND		0.00200		mg/Kg			12/28/15 16:16	1
cis-1,3-Dichloropropene	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,2-Dibromo-3-Chloropropane	ND		0.00500		mg/Kg			12/28/15 16:16	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-309345/7
Matrix: Solid
Analysis Batch: 309345

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,2-Dichlorobenzene	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,3-Dichlorobenzene	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,4-Dichlorobenzene	ND		0.00200		mg/Kg			12/28/15 16:16	1
Dichlorodifluoromethane	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,1-Dichloroethane	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,2-Dichloroethane	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,1-Dichloroethene	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,2-Dichloropropane	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,3-Dichloropropane	ND		0.00200		mg/Kg			12/28/15 16:16	1
2,2-Dichloropropane	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,1-Dichloropropene	ND		0.00200		mg/Kg			12/28/15 16:16	1
Hexachlorobutadiene	ND		0.00500		mg/Kg			12/28/15 16:16	1
Methylene Chloride	ND		0.0100		mg/Kg			12/28/15 16:16	1
1,1,1,2-Tetrachloroethane	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,1,2,2-Tetrachloroethane	ND		0.00200		mg/Kg			12/28/15 16:16	1
Tetrachloroethene	ND		0.00200		mg/Kg			12/28/15 16:16	1
trans-1,2-Dichloroethene	ND		0.00200		mg/Kg			12/28/15 16:16	1
trans-1,3-Dichloropropene	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,2,3-Trichlorobenzene	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,2,4-Trichlorobenzene	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,1,1-Trichloroethane	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,1,2-Trichloroethane	ND		0.00500		mg/Kg			12/28/15 16:16	1
Trichloroethene	ND		0.00200		mg/Kg			12/28/15 16:16	1
Trichlorofluoromethane	ND		0.00200		mg/Kg			12/28/15 16:16	1
1,2,3-Trichloropropane	ND		0.00200		mg/Kg			12/28/15 16:16	1
Vinyl chloride	ND		0.00200		mg/Kg			12/28/15 16:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*12/28/15 16:16*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*12/28/15 16:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*12/28/15 16:16*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*12/28/15 16:16*	*1*

Lab Sample ID: LCS 490-309345/3
Matrix: Solid
Analysis Batch: 309345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05614		mg/Kg		112	75 - 127
Toluene	0.0500	0.05836		mg/Kg		117	80 - 132
Ethylbenzene	0.0500	0.05508		mg/Kg		110	80 - 134
Xylenes, Total	0.100	0.1110		mg/Kg		111	80 - 137
1,2-Dibromoethane (EDB)	0.0500	0.05935		mg/Kg		119	80 - 135
Methyl tert-butyl ether	0.0500	0.06112		mg/Kg		122	70 - 136
Naphthalene	0.0500	0.06043		mg/Kg		121	69 - 150
Bromobenzene	0.0500	0.05563		mg/Kg		111	75 - 130
Bromochloromethane	0.0500	0.05553		mg/Kg		111	70 - 132

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-309345/3
Matrix: Solid
Analysis Batch: 309345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	0.0500	0.05576		mg/Kg		112	68 - 135
Bromoform	0.0500	0.05683		mg/Kg		114	36 - 150
Bromomethane	0.0500	0.05426		mg/Kg		109	43 - 142
Carbon tetrachloride	0.0500	0.05325		mg/Kg		107	70 - 141
Chlorobenzene	0.0500	0.05538		mg/Kg		111	84 - 125
Chlorodibromomethane	0.0500	0.04968		mg/Kg		99	66 - 134
Chloroethane	0.0500	0.05266		mg/Kg		105	53 - 144
Chloroform	0.0500	0.05433		mg/Kg		109	76 - 130
Chloromethane	0.0500	0.05711		mg/Kg		114	23 - 150
2-Chlorotoluene	0.0500	0.05655		mg/Kg		113	78 - 132
4-Chlorotoluene	0.0500	0.05618		mg/Kg		112	77 - 138
cis-1,2-Dichloroethene	0.0500	0.05675		mg/Kg		113	75 - 125
cis-1,3-Dichloropropene	0.0500	0.05792		mg/Kg		116	73 - 148
1,2-Dibromo-3-Chloropropane	0.0500	0.05694		mg/Kg		114	49 - 142
Dibromomethane	0.0500	0.05535		mg/Kg		111	71 - 130
1,2-Dichlorobenzene	0.0500	0.05676		mg/Kg		114	80 - 134
1,3-Dichlorobenzene	0.0500	0.05658		mg/Kg		113	79 - 137
1,4-Dichlorobenzene	0.0500	0.05703		mg/Kg		114	77 - 139
Dichlorodifluoromethane	0.0500	0.05682		mg/Kg		114	12 - 144
1,1-Dichloroethane	0.0500	0.05648		mg/Kg		113	75 - 124
1,2-Dichloroethane	0.0500	0.05336		mg/Kg		107	65 - 134
1,1-Dichloroethene	0.0500	0.05765		mg/Kg		115	75 - 131
1,2-Dichloropropane	0.0500	0.05460		mg/Kg		109	69 - 120
1,3-Dichloropropane	0.0500	0.05332		mg/Kg		107	78 - 126
2,2-Dichloropropane	0.0500	0.05268		mg/Kg		105	68 - 145
1,1-Dichloropropene	0.0500	0.05520		mg/Kg		110	79 - 127
Hexachlorobutadiene	0.0500	0.05114		mg/Kg		102	65 - 148
Methylene Chloride	0.0500	0.05908		mg/Kg		118	68 - 144
1,1,1,2-Tetrachloroethane	0.0500	0.05233		mg/Kg		105	80 - 136
1,1,2,2-Tetrachloroethane	0.0500	0.05565		mg/Kg		111	66 - 134
Tetrachloroethene	0.0500	0.05522		mg/Kg		110	78 - 140
trans-1,2-Dichloroethene	0.0500	0.05596		mg/Kg		112	76 - 128
trans-1,3-Dichloropropene	0.0500	0.05655		mg/Kg		113	62 - 139
1,2,3-Trichlorobenzene	0.0500	0.06050		mg/Kg		121	70 - 150
1,2,4-Trichlorobenzene	0.0500	0.06111		mg/Kg		122	62 - 150
1,1,1-Trichloroethane	0.0500	0.05264		mg/Kg		105	72 - 140
1,1,2-Trichloroethane	0.0500	0.05613		mg/Kg		112	78 - 128
Trichloroethene	0.0500	0.05326		mg/Kg		107	77 - 127
Trichlorofluoromethane	0.0500	0.05153		mg/Kg		103	50 - 140
1,2,3-Trichloropropane	0.0500	0.05533		mg/Kg		111	65 - 139
Vinyl chloride	0.0500	0.05507		mg/Kg		110	47 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-309345/4
Matrix: Solid
Analysis Batch: 309345

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.05091		mg/Kg		102	75 - 127	10	50
Toluene	0.0500	0.05306		mg/Kg		106	80 - 132	10	50
Ethylbenzene	0.0500	0.05014		mg/Kg		100	80 - 134	9	50
Xylenes, Total	0.100	0.09939		mg/Kg		99	80 - 137	11	50
1,2-Dibromoethane (EDB)	0.0500	0.05526		mg/Kg		111	80 - 135	7	50
Methyl tert-butyl ether	0.0500	0.05451		mg/Kg		109	70 - 136	11	50
Naphthalene	0.0500	0.05783		mg/Kg		116	69 - 150	4	50
Bromobenzene	0.0500	0.05209		mg/Kg		104	75 - 130	7	50
Bromochloromethane	0.0500	0.05157		mg/Kg		103	70 - 132	7	50
Bromodichloromethane	0.0500	0.05341		mg/Kg		107	68 - 135	4	50
Bromoform	0.0500	0.05367		mg/Kg		107	36 - 150	6	50
Bromomethane	0.0500	0.04725		mg/Kg		95	43 - 142	14	50
Carbon tetrachloride	0.0500	0.04893		mg/Kg		98	70 - 141	8	50
Chlorobenzene	0.0500	0.05053		mg/Kg		101	84 - 125	9	50
Chlorodibromomethane	0.0500	0.04691		mg/Kg		94	66 - 134	6	50
Chloroethane	0.0500	0.04787		mg/Kg		96	53 - 144	10	50
Chloroform	0.0500	0.04991		mg/Kg		100	76 - 130	8	49
Chloromethane	0.0500	0.05320		mg/Kg		106	23 - 150	7	50
2-Chlorotoluene	0.0500	0.05083		mg/Kg		102	78 - 132	11	50
4-Chlorotoluene	0.0500	0.05182		mg/Kg		104	77 - 138	8	50
cis-1,2-Dichloroethene	0.0500	0.04976		mg/Kg		100	75 - 125	13	50
cis-1,3-Dichloropropene	0.0500	0.05588		mg/Kg		112	73 - 148	4	50
1,2-Dibromo-3-Chloropropane	0.0500	0.05175		mg/Kg		103	49 - 142	10	50
Dibromomethane	0.0500	0.05193		mg/Kg		104	71 - 130	6	50
1,2-Dichlorobenzene	0.0500	0.05290		mg/Kg		106	80 - 134	7	50
1,3-Dichlorobenzene	0.0500	0.05100		mg/Kg		102	79 - 137	10	50
1,4-Dichlorobenzene	0.0500	0.05138		mg/Kg		103	77 - 139	10	50
Dichlorodifluoromethane	0.0500	0.05000		mg/Kg		100	12 - 144	13	50
1,1-Dichloroethane	0.0500	0.04971		mg/Kg		99	75 - 124	13	50
1,2-Dichloroethane	0.0500	0.05144		mg/Kg		103	65 - 134	4	50
1,1-Dichloroethene	0.0500	0.04923		mg/Kg		98	75 - 131	16	50
1,2-Dichloropropane	0.0500	0.05062		mg/Kg		101	69 - 120	8	50
1,3-Dichloropropane	0.0500	0.04992		mg/Kg		100	78 - 126	7	42
2,2-Dichloropropane	0.0500	0.04696		mg/Kg		94	68 - 145	11	50
1,1-Dichloropropene	0.0500	0.04979		mg/Kg		100	79 - 127	10	50
Hexachlorobutadiene	0.0500	0.04816		mg/Kg		96	65 - 148	6	50
Methylene Chloride	0.0500	0.05175		mg/Kg		103	68 - 144	13	50
1,1,1,2-Tetrachloroethane	0.0500	0.04911		mg/Kg		98	80 - 136	6	50
1,1,2,2-Tetrachloroethane	0.0500	0.05341		mg/Kg		107	66 - 134	4	50
Tetrachloroethene	0.0500	0.04955		mg/Kg		99	78 - 140	11	50
trans-1,2-Dichloroethene	0.0500	0.05081		mg/Kg		102	76 - 128	10	50
trans-1,3-Dichloropropene	0.0500	0.05270		mg/Kg		105	62 - 139	7	50
1,2,3-Trichlorobenzene	0.0500	0.05658		mg/Kg		113	70 - 150	7	50
1,2,4-Trichlorobenzene	0.0500	0.05679		mg/Kg		114	62 - 150	7	50
1,1,1-Trichloroethane	0.0500	0.04879		mg/Kg		98	72 - 140	8	50
1,1,2-Trichloroethane	0.0500	0.05276		mg/Kg		106	78 - 128	6	50
Trichloroethene	0.0500	0.04902		mg/Kg		98	77 - 127	8	50
Trichlorofluoromethane	0.0500	0.04448		mg/Kg		89	50 - 140	15	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-309345/4
Matrix: Solid
Analysis Batch: 309345

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane			0.0500	0.05316		mg/Kg		106	65 - 139	4	50
Vinyl chloride			0.0500	0.05043		mg/Kg		101	47 - 136	9	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: MB 490-309522/8
Matrix: Solid
Analysis Batch: 309522

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100		mg/Kg			12/29/15 15:28	1
Toluene	ND		0.100		mg/Kg			12/29/15 15:28	1
Ethylbenzene	ND		0.100		mg/Kg			12/29/15 15:28	1
Xylenes, Total	ND		0.150		mg/Kg			12/29/15 15:28	1
1,2-Dibromoethane (EDB)	ND		0.100		mg/Kg			12/29/15 15:28	1
Methyl tert-butyl ether	ND		0.100		mg/Kg			12/29/15 15:28	1
Naphthalene	ND		0.250		mg/Kg			12/29/15 15:28	1
Bromobenzene	ND		0.100		mg/Kg			12/29/15 15:28	1
Bromochloromethane	ND		0.100		mg/Kg			12/29/15 15:28	1
Bromodichloromethane	ND		0.100		mg/Kg			12/29/15 15:28	1
Bromoform	ND		0.100		mg/Kg			12/29/15 15:28	1
Bromomethane	ND		0.100		mg/Kg			12/29/15 15:28	1
Carbon tetrachloride	ND		0.100		mg/Kg			12/29/15 15:28	1
Chlorobenzene	ND		0.100		mg/Kg			12/29/15 15:28	1
Chlorodibromomethane	ND		0.100		mg/Kg			12/29/15 15:28	1
Chloroethane	ND		0.250		mg/Kg			12/29/15 15:28	1
Chloroform	ND		0.100		mg/Kg			12/29/15 15:28	1
Chloromethane	ND		0.100		mg/Kg			12/29/15 15:28	1
2-Chlorotoluene	ND		0.100		mg/Kg			12/29/15 15:28	1
4-Chlorotoluene	ND		0.100		mg/Kg			12/29/15 15:28	1
cis-1,2-Dichloroethene	ND		0.100		mg/Kg			12/29/15 15:28	1
cis-1,3-Dichloropropene	ND		0.100		mg/Kg			12/29/15 15:28	1
1,2-Dibromo-3-Chloropropane	ND		0.250		mg/Kg			12/29/15 15:28	1
Dibromomethane	ND		0.100		mg/Kg			12/29/15 15:28	1
1,2-Dichlorobenzene	ND		0.100		mg/Kg			12/29/15 15:28	1
1,3-Dichlorobenzene	ND		0.100		mg/Kg			12/29/15 15:28	1
1,4-Dichlorobenzene	ND		0.100		mg/Kg			12/29/15 15:28	1
Dichlorodifluoromethane	ND		0.100		mg/Kg			12/29/15 15:28	1
1,1-Dichloroethane	ND		0.100		mg/Kg			12/29/15 15:28	1
1,2-Dichloroethane	ND		0.100		mg/Kg			12/29/15 15:28	1
1,1-Dichloroethene	ND		0.100		mg/Kg			12/29/15 15:28	1
1,2-Dichloropropane	ND		0.100		mg/Kg			12/29/15 15:28	1
1,3-Dichloropropane	ND		0.100		mg/Kg			12/29/15 15:28	1
2,2-Dichloropropane	ND		0.100		mg/Kg			12/29/15 15:28	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-309522/8
Matrix: Solid
Analysis Batch: 309522

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		0.100		mg/Kg			12/29/15 15:28	1
Hexachlorobutadiene	ND		0.250		mg/Kg			12/29/15 15:28	1
Methylene Chloride	ND		0.500		mg/Kg			12/29/15 15:28	1
1,1,1,2-Tetrachloroethane	ND		0.100		mg/Kg			12/29/15 15:28	1
1,1,2,2-Tetrachloroethane	ND		0.100		mg/Kg			12/29/15 15:28	1
Tetrachloroethene	ND		0.100		mg/Kg			12/29/15 15:28	1
trans-1,2-Dichloroethene	ND		0.100		mg/Kg			12/29/15 15:28	1
trans-1,3-Dichloropropene	ND		0.100		mg/Kg			12/29/15 15:28	1
1,2,3-Trichlorobenzene	ND		0.100		mg/Kg			12/29/15 15:28	1
1,2,4-Trichlorobenzene	ND		0.100		mg/Kg			12/29/15 15:28	1
1,1,1-Trichloroethane	ND		0.100		mg/Kg			12/29/15 15:28	1
1,1,2-Trichloroethane	ND		0.250		mg/Kg			12/29/15 15:28	1
Trichloroethene	ND		0.100		mg/Kg			12/29/15 15:28	1
Trichlorofluoromethane	ND		0.100		mg/Kg			12/29/15 15:28	1
1,2,3-Trichloropropane	ND		0.100		mg/Kg			12/29/15 15:28	1
Vinyl chloride	ND		0.100		mg/Kg			12/29/15 15:28	1
Hexane	ND		0.500		mg/Kg			12/29/15 15:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*12/29/15 15:28*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*12/29/15 15:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*12/29/15 15:28*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*12/29/15 15:28*	*1*

Lab Sample ID: MB 490-309522/9
Matrix: Solid
Analysis Batch: 309522

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			12/29/15 15:59	1
Toluene	ND		0.00200		mg/Kg			12/29/15 15:59	1
Ethylbenzene	ND		0.00200		mg/Kg			12/29/15 15:59	1
Xylenes, Total	ND		0.00300		mg/Kg			12/29/15 15:59	1
1,2-Dibromoethane (EDB)	ND		0.00200		mg/Kg			12/29/15 15:59	1
Methyl tert-butyl ether	ND		0.00200		mg/Kg			12/29/15 15:59	1
Naphthalene	ND		0.00500		mg/Kg			12/29/15 15:59	1
Bromobenzene	ND		0.00200		mg/Kg			12/29/15 15:59	1
Bromochloromethane	ND		0.00200		mg/Kg			12/29/15 15:59	1
Bromodichloromethane	ND		0.00200		mg/Kg			12/29/15 15:59	1
Bromoform	ND		0.00200		mg/Kg			12/29/15 15:59	1
Bromomethane	ND		0.00200		mg/Kg			12/29/15 15:59	1
Carbon tetrachloride	ND		0.00200		mg/Kg			12/29/15 15:59	1
Chlorobenzene	ND		0.00200		mg/Kg			12/29/15 15:59	1
Chlorodibromomethane	ND		0.00200		mg/Kg			12/29/15 15:59	1
Chloroethane	ND		0.00500		mg/Kg			12/29/15 15:59	1
Chloroform	ND		0.00200		mg/Kg			12/29/15 15:59	1
Chloromethane	ND		0.00200		mg/Kg			12/29/15 15:59	1
2-Chlorotoluene	ND		0.00200		mg/Kg			12/29/15 15:59	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-309522/9
Matrix: Solid
Analysis Batch: 309522

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		0.00200		mg/Kg			12/29/15 15:59	1
cis-1,2-Dichloroethene	ND		0.00200		mg/Kg			12/29/15 15:59	1
cis-1,3-Dichloropropene	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,2-Dibromo-3-Chloropropane	ND		0.00500		mg/Kg			12/29/15 15:59	1
Dibromomethane	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,2-Dichlorobenzene	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,3-Dichlorobenzene	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,4-Dichlorobenzene	ND		0.00200		mg/Kg			12/29/15 15:59	1
Dichlorodifluoromethane	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,1-Dichloroethane	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,2-Dichloroethane	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,1-Dichloroethene	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,2-Dichloropropane	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,3-Dichloropropane	ND		0.00200		mg/Kg			12/29/15 15:59	1
2,2-Dichloropropane	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,1-Dichloropropene	ND		0.00200		mg/Kg			12/29/15 15:59	1
Hexachlorobutadiene	ND		0.00500		mg/Kg			12/29/15 15:59	1
Methylene Chloride	ND		0.0100		mg/Kg			12/29/15 15:59	1
1,1,1,2-Tetrachloroethane	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,1,2,2-Tetrachloroethane	ND		0.00200		mg/Kg			12/29/15 15:59	1
Tetrachloroethene	ND		0.00200		mg/Kg			12/29/15 15:59	1
trans-1,2-Dichloroethene	ND		0.00200		mg/Kg			12/29/15 15:59	1
trans-1,3-Dichloropropene	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,2,3-Trichlorobenzene	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,2,4-Trichlorobenzene	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,1,1-Trichloroethane	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,1,2-Trichloroethane	ND		0.00500		mg/Kg			12/29/15 15:59	1
Trichloroethene	ND		0.00200		mg/Kg			12/29/15 15:59	1
Trichlorofluoromethane	ND		0.00200		mg/Kg			12/29/15 15:59	1
1,2,3-Trichloropropane	ND		0.00200		mg/Kg			12/29/15 15:59	1
Vinyl chloride	ND		0.00200		mg/Kg			12/29/15 15:59	1
Hexane	ND		0.0100		mg/Kg			12/29/15 15:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*12/29/15 15:59*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*12/29/15 15:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*12/29/15 15:59*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*12/29/15 15:59*	*1*

Lab Sample ID: LCS 490-309522/5
Matrix: Solid
Analysis Batch: 309522

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.50	2.739		mg/Kg		110	75 - 127
Toluene	2.50	2.416		mg/Kg		97	80 - 132
Ethylbenzene	2.50	2.476		mg/Kg		99	80 - 134
Xylenes, Total	5.00	4.844		mg/Kg		97	80 - 137

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-309522/5
Matrix: Solid
Analysis Batch: 309522

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	2.50	2.182		mg/Kg		87	80 - 135
Methyl tert-butyl ether	2.50	2.711		mg/Kg		108	70 - 136
Naphthalene	2.50	2.263		mg/Kg		91	69 - 150
Bromobenzene	2.50	2.103		mg/Kg		84	75 - 130
Bromochloromethane	2.50	2.549		mg/Kg		102	70 - 132
Bromodichloromethane	2.50	2.642		mg/Kg		106	68 - 135
Bromoform	2.50	2.108		mg/Kg		84	36 - 150
Bromomethane	2.50	2.268		mg/Kg		91	43 - 142
Carbon tetrachloride	2.50	2.757		mg/Kg		110	70 - 141
Chlorobenzene	2.50	2.445		mg/Kg		98	84 - 125
Chlorodibromomethane	2.50	2.363		mg/Kg		95	66 - 134
Chloroethane	2.50	1.452		mg/Kg		58	53 - 144
Chloroform	2.50	2.496		mg/Kg		100	76 - 130
Chloromethane	2.50	2.788		mg/Kg		112	23 - 150
2-Chlorotoluene	2.50	2.283		mg/Kg		91	78 - 132
4-Chlorotoluene	2.50	2.344		mg/Kg		94	77 - 138
cis-1,2-Dichloroethene	2.50	3.044		mg/Kg		122	75 - 125
cis-1,3-Dichloropropene	2.50	2.315		mg/Kg		93	73 - 148
1,2-Dibromo-3-Chloropropane	2.50	1.947		mg/Kg		78	49 - 142
Dibromomethane	2.50	2.625		mg/Kg		105	71 - 130
1,2-Dichlorobenzene	2.50	2.239		mg/Kg		90	80 - 134
1,3-Dichlorobenzene	2.50	2.355		mg/Kg		94	79 - 137
1,4-Dichlorobenzene	2.50	2.305		mg/Kg		92	77 - 139
Dichlorodifluoromethane	2.50	2.311		mg/Kg		92	12 - 144
1,1-Dichloroethane	2.50	2.679		mg/Kg		107	75 - 124
1,2-Dichloroethane	2.50	2.456		mg/Kg		98	65 - 134
1,1-Dichloroethene	2.50	2.770		mg/Kg		111	75 - 131
1,2-Dichloropropane	2.50	2.776		mg/Kg		111	69 - 120
1,3-Dichloropropane	2.50	2.271		mg/Kg		91	78 - 126
2,2-Dichloropropane	2.50	2.868		mg/Kg		115	68 - 145
1,1-Dichloropropene	2.50	2.959		mg/Kg		118	79 - 127
Hexachlorobutadiene	2.50	2.419		mg/Kg		97	65 - 148
Methylene Chloride	2.50	2.484		mg/Kg		99	68 - 144
1,1,1,2-Tetrachloroethane	2.50	2.340		mg/Kg		94	80 - 136
1,1,2,2-Tetrachloroethane	2.50	1.927		mg/Kg		77	66 - 134
Tetrachloroethene	2.50	2.463		mg/Kg		99	78 - 140
trans-1,2-Dichloroethene	2.50	2.877		mg/Kg		115	76 - 128
trans-1,3-Dichloropropene	2.50	0.1046	*	mg/Kg		4	62 - 139
1,2,3-Trichlorobenzene	2.50	2.498		mg/Kg		100	70 - 150
1,2,4-Trichlorobenzene	2.50	2.693		mg/Kg		108	62 - 150
1,1,1-Trichloroethane	2.50	2.640		mg/Kg		106	72 - 140
1,1,2-Trichloroethane	2.50	2.106		mg/Kg		84	78 - 128
Trichloroethene	2.50	2.856		mg/Kg		114	77 - 127
Trichlorofluoromethane	2.50	2.549		mg/Kg		102	50 - 140
1,2,3-Trichloropropane	2.50	2.106		mg/Kg		84	65 - 139
Vinyl chloride	2.50	2.759		mg/Kg		110	47 - 136
Hexane	2.50	2.888		mg/Kg		116	60 - 144

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-309522/5
Matrix: Solid
Analysis Batch: 309522

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 490-309522/6
Matrix: Solid
Analysis Batch: 309522

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			2.50	2.804		mg/Kg		112	75 - 127	2	50
Toluene			2.50	2.475		mg/Kg		99	80 - 132	2	50
Ethylbenzene			2.50	2.528		mg/Kg		101	80 - 134	2	50
Xylenes, Total			5.00	4.993		mg/Kg		100	80 - 137	3	50
1,2-Dibromoethane (EDB)			2.50	2.275		mg/Kg		91	80 - 135	4	50
Methyl tert-butyl ether			2.50	2.781		mg/Kg		111	70 - 136	3	50
Naphthalene			2.50	2.347		mg/Kg		94	69 - 150	4	50
Bromobenzene			2.50	2.141		mg/Kg		86	75 - 130	2	50
Bromochloromethane			2.50	2.683		mg/Kg		107	70 - 132	5	50
Bromodichloromethane			2.50	2.693		mg/Kg		108	68 - 135	2	50
Bromoform			2.50	2.243		mg/Kg		90	36 - 150	6	50
Bromomethane			2.50	2.417		mg/Kg		97	43 - 142	6	50
Carbon tetrachloride			2.50	2.849		mg/Kg		114	70 - 141	3	50
Chlorobenzene			2.50	2.483		mg/Kg		99	84 - 125	2	50
Chlorodibromomethane			2.50	2.399		mg/Kg		96	66 - 134	2	50
Chloroethane			2.50	1.766		mg/Kg		71	53 - 144	20	50
Chloroform			2.50	2.643		mg/Kg		106	76 - 130	6	49
Chloromethane			2.50	3.102		mg/Kg		124	23 - 150	11	50
2-Chlorotoluene			2.50	2.383		mg/Kg		95	78 - 132	4	50
4-Chlorotoluene			2.50	2.404		mg/Kg		96	77 - 138	3	50
cis-1,2-Dichloroethene			2.50	3.103		mg/Kg		124	75 - 125	2	50
cis-1,3-Dichloropropene			2.50	ND	*	mg/Kg		0	73 - 148	200	50
1,2-Dibromo-3-Chloropropane			2.50	2.081		mg/Kg		83	49 - 142	7	50
Dibromomethane			2.50	2.678		mg/Kg		107	71 - 130	2	50
1,2-Dichlorobenzene			2.50	2.303		mg/Kg		92	80 - 134	3	50
1,3-Dichlorobenzene			2.50	2.409		mg/Kg		96	79 - 137	2	50
1,4-Dichlorobenzene			2.50	2.350		mg/Kg		94	77 - 139	2	50
Dichlorodifluoromethane			2.50	1.381		mg/Kg		55	12 - 144	50	50
1,1-Dichloroethane			2.50	2.794		mg/Kg		112	75 - 124	4	50
1,2-Dichloroethane			2.50	2.552		mg/Kg		102	65 - 134	4	50
1,1-Dichloroethene			2.50	2.912		mg/Kg		116	75 - 131	5	50
1,2-Dichloropropane			2.50	2.890		mg/Kg		116	69 - 120	4	50
1,3-Dichloropropane			2.50	2.332		mg/Kg		93	78 - 126	3	42
2,2-Dichloropropane			2.50	2.882		mg/Kg		115	68 - 145	0	50
1,1-Dichloropropene			2.50	2.992		mg/Kg		120	79 - 127	1	50
Hexachlorobutadiene			2.50	2.384		mg/Kg		95	65 - 148	1	50
Methylene Chloride			2.50	2.194		mg/Kg		88	68 - 144	12	50
1,1,1,2-Tetrachloroethane			2.50	2.371		mg/Kg		95	80 - 136	1	50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-309522/6
Matrix: Solid
Analysis Batch: 309522

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane			2.50	2.009		mg/Kg		80	66 - 134	4	50
Tetrachloroethene			2.50	2.454		mg/Kg		98	78 - 140	0	50
trans-1,2-Dichloroethene			2.50	2.902		mg/Kg		116	76 - 128	1	50
trans-1,3-Dichloropropene			2.50	2.626	*	mg/Kg		105	62 - 139	185	50
1,2,3-Trichlorobenzene			2.50	2.578		mg/Kg		103	70 - 150	3	50
1,2,4-Trichlorobenzene			2.50	2.676		mg/Kg		107	62 - 150	1	50
1,1,1-Trichloroethane			2.50	2.774		mg/Kg		111	72 - 140	5	50
1,1,2-Trichloroethane			2.50	2.190		mg/Kg		88	78 - 128	4	50
Trichloroethene			2.50	2.950		mg/Kg		118	77 - 127	3	50
Trichlorofluoromethane			2.50	2.730		mg/Kg		109	50 - 140	7	50
1,2,3-Trichloropropane			2.50	2.210		mg/Kg		88	65 - 139	5	50
Vinyl chloride			2.50	2.941		mg/Kg		118	47 - 136	6	50
Hexane			2.50	3.040		mg/Kg		122	60 - 144	5	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 490-309696/9
Matrix: Solid
Analysis Batch: 309696

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			12/30/15 05:57	1
Toluene	ND		0.00200		mg/Kg			12/30/15 05:57	1
Ethylbenzene	ND		0.00200		mg/Kg			12/30/15 05:57	1
Xylenes, Total	ND		0.00600		mg/Kg			12/30/15 05:57	1
1,2-Dibromoethane (EDB)	ND		0.00200		mg/Kg			12/30/15 05:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*12/30/15 05:57*	*1*
Dibromofluoromethane (Surr)	*117*		*70 - 130*		*12/30/15 05:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*12/30/15 05:57*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*12/30/15 05:57*	*1*

Lab Sample ID: LCS 490-309696/3
Matrix: Solid
Analysis Batch: 309696

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.06107		mg/Kg		122	75 - 127		
Toluene			0.0500	0.04580		mg/Kg		92	80 - 132		
Ethylbenzene			0.0500	0.04500		mg/Kg		90	80 - 134		
Xylenes, Total			0.100	0.08750		mg/Kg		88	80 - 137		
1,2-Dibromoethane (EDB)			0.0500	0.04103		mg/Kg		82	80 - 135		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-309696/3
Matrix: Solid
Analysis Batch: 309696

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*116*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 490-309696/4
Matrix: Solid
Analysis Batch: 309696

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.06093		mg/Kg		122	75 - 127	0	50
Toluene			0.0500	0.04530		mg/Kg		91	80 - 132	1	50
Ethylbenzene			0.0500	0.04610		mg/Kg		92	80 - 134	2	50
Xylenes, Total			0.100	0.09020		mg/Kg		90	80 - 137	3	50
1,2-Dibromoethane (EDB)			0.0500	0.04024		mg/Kg		80	80 - 135	2	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*116*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: MB 490-309772/11
Matrix: Solid
Analysis Batch: 309772

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			12/30/15 17:33	1
Toluene	ND		0.00200		mg/Kg			12/30/15 17:33	1
Ethylbenzene	ND		0.00200		mg/Kg			12/30/15 17:33	1
Xylenes, Total	ND		0.00600		mg/Kg			12/30/15 17:33	1
1,2-Dibromoethane (EDB)	ND		0.00200		mg/Kg			12/30/15 17:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*12/30/15 17:33*	*1*
Dibromofluoromethane (Surr)	*117*		*70 - 130*		*12/30/15 17:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*		*12/30/15 17:33*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*12/30/15 17:33*	*1*

Lab Sample ID: LCS 490-309772/4
Matrix: Solid
Analysis Batch: 309772

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05668		mg/Kg		113	75 - 127		
Toluene			0.0500	0.05275		mg/Kg		105	80 - 132		
Ethylbenzene			0.0500	0.05237		mg/Kg		105	80 - 134		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-309772/4
Matrix: Solid
Analysis Batch: 309772

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Xylenes, Total			0.100	0.1038		mg/Kg		104	80 - 137		
1,2-Dibromoethane (EDB)			0.0500	0.06106		mg/Kg		122	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*115*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 490-309772/5
Matrix: Solid
Analysis Batch: 309772

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05940		mg/Kg		119	75 - 127	5	50
Toluene			0.0500	0.05526		mg/Kg		111	80 - 132	5	50
Ethylbenzene			0.0500	0.05477		mg/Kg		110	80 - 134	4	50
Xylenes, Total			0.100	0.1093		mg/Kg		109	80 - 137	5	50
1,2-Dibromoethane (EDB)			0.0500	0.06149		mg/Kg		123	80 - 135	1	50

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*116*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 490-309961/8
Matrix: Solid
Analysis Batch: 309961

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100		mg/Kg			12/30/15 21:15	1
Toluene	ND		0.100		mg/Kg			12/30/15 21:15	1
Ethylbenzene	ND		0.100		mg/Kg			12/30/15 21:15	1
Xylenes, Total	ND		0.150		mg/Kg			12/30/15 21:15	1
1,2-Dibromoethane (EDB)	ND		0.100		mg/Kg			12/30/15 21:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*12/30/15 21:15*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*12/30/15 21:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*12/30/15 21:15*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*		*12/30/15 21:15*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-309961/7
Matrix: Solid
Analysis Batch: 309961

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.50	2.187		mg/Kg		87	75 - 127
Toluene	2.50	2.417		mg/Kg		97	80 - 132
Ethylbenzene	2.50	2.468		mg/Kg		99	80 - 134
Xylenes, Total	5.00	4.791		mg/Kg		96	80 - 137
1,2-Dibromoethane (EDB)	2.50	2.106		mg/Kg		84	80 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*110*		*70 - 130*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 490-308836/1-A
Matrix: Solid
Analysis Batch: 310118

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 308836

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Acenaphthylene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Anthracene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Benzo[a]anthracene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Benzo[a]pyrene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Benzo[b]fluoranthene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Benzo[g,h,i]perylene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Benzo[k]fluoranthene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Chrysene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Dibenz(a,h)anthracene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Fluorene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Fluoranthene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Indeno[1,2,3-cd]pyrene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Naphthalene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Phenanthrene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
Pyrene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
1-Methylnaphthalene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1
2-Methylnaphthalene	ND		0.00333		mg/Kg		12/23/15 16:42	12/31/15 19:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*61*		*13 - 120*	*12/23/15 16:42*	*12/31/15 19:35*	*1*
Nitrobenzene-d5	*57*		*27 - 120*	*12/23/15 16:42*	*12/31/15 19:35*	*1*
2-Fluorobiphenyl (Surr)	*51*		*29 - 120*	*12/23/15 16:42*	*12/31/15 19:35*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 490-308836/2-A
Matrix: Solid
Analysis Batch: 310118

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 308836

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.0333	0.02590		mg/Kg		78	36 - 120
Acenaphthylene	0.0333	0.02611		mg/Kg		78	38 - 120
Anthracene	0.0333	0.02776		mg/Kg		83	46 - 124
Benzo[a]anthracene	0.0333	0.02762		mg/Kg		83	45 - 120
Benzo[a]pyrene	0.0333	0.02740		mg/Kg		82	45 - 120
Benzo[b]fluoranthene	0.0333	0.02789		mg/Kg		84	42 - 120
Benzo[g,h,i]perylene	0.0333	0.02691		mg/Kg		81	38 - 120
Benzo[k]fluoranthene	0.0333	0.02817		mg/Kg		85	42 - 120
Chrysene	0.0333	0.02431		mg/Kg		73	43 - 120
Dibenz(a,h)anthracene	0.0333	0.02813		mg/Kg		84	32 - 128
Fluorene	0.0333	0.02583		mg/Kg		77	42 - 120
Fluoranthene	0.0333	0.02625		mg/Kg		79	46 - 120
Indeno[1,2,3-cd]pyrene	0.0333	0.02716		mg/Kg		81	41 - 121
Naphthalene	0.0333	0.02529		mg/Kg		76	32 - 120
Phenanthrene	0.0333	0.02583		mg/Kg		77	45 - 120
Pyrene	0.0333	0.02776		mg/Kg		83	43 - 120
1-Methylnaphthalene	0.0333	0.02607		mg/Kg		78	32 - 120
2-Methylnaphthalene	0.0333	0.02438		mg/Kg		73	28 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*85*		*13 - 120*
Nitrobenzene-d5	*83*		*27 - 120*
2-Fluorobiphenyl (Surr)	*77*		*29 - 120*

Lab Sample ID: 490-94548-4 MS
Matrix: Soil
Analysis Batch: 310118

Client Sample ID: S-5-B13
Prep Type: Total/NA
Prep Batch: 308836

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		0.0397	0.02921		mg/Kg	☼	74	19 - 120
Acenaphthylene	ND		0.0397	0.02952		mg/Kg	☼	74	25 - 120
Anthracene	ND		0.0397	0.03068		mg/Kg	☼	77	28 - 125
Benzo[a]anthracene	ND		0.0397	0.03182		mg/Kg	☼	80	23 - 120
Benzo[a]pyrene	ND		0.0397	0.02991		mg/Kg	☼	75	15 - 128
Benzo[b]fluoranthene	ND		0.0397	0.02904		mg/Kg	☼	73	12 - 133
Benzo[g,h,i]perylene	ND		0.0397	0.02931		mg/Kg	☼	74	22 - 120
Benzo[k]fluoranthene	ND		0.0397	0.02988		mg/Kg	☼	75	28 - 120
Chrysene	ND		0.0397	0.03003		mg/Kg	☼	76	20 - 120
Dibenz(a,h)anthracene	ND		0.0397	0.02698		mg/Kg	☼	68	12 - 128
Fluorene	ND		0.0397	0.02956		mg/Kg	☼	75	20 - 120
Fluoranthene	ND		0.0397	0.02992		mg/Kg	☼	75	10 - 143
Indeno[1,2,3-cd]pyrene	ND		0.0397	0.02628		mg/Kg	☼	66	22 - 121
Naphthalene	ND		0.0397	0.02831		mg/Kg	☼	71	10 - 120
Phenanthrene	ND		0.0397	0.02931		mg/Kg	☼	74	21 - 122
Pyrene	ND		0.0397	0.03258		mg/Kg	☼	82	20 - 123
1-Methylnaphthalene	ND		0.0397	0.02975		mg/Kg	☼	75	10 - 120
2-Methylnaphthalene	ND		0.0397	0.02780		mg/Kg	☼	70	13 - 120

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 490-94548-4 MS
Matrix: Soil
Analysis Batch: 310118

Client Sample ID: S-5-B13
Prep Type: Total/NA
Prep Batch: 308836

Surrogate	MS %Recovery	MS Qualifier	Limits
Terphenyl-d14	*79*		*13 - 120*
Nitrobenzene-d5	*75*		*27 - 120*
2-Fluorobiphenyl (Surr)	*69*		*29 - 120*

Lab Sample ID: 490-94548-4 MSD
Matrix: Soil
Analysis Batch: 310118

Client Sample ID: S-5-B13
Prep Type: Total/NA
Prep Batch: 308836

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		0.0395	0.02899		mg/Kg	☼	73	19 - 120	1	50
Acenaphthylene	ND		0.0395	0.02838		mg/Kg	☼	72	25 - 120	4	50
Anthracene	ND		0.0395	0.03105		mg/Kg	☼	79	28 - 125	1	49
Benzo[a]anthracene	ND		0.0395	0.03115		mg/Kg	☼	79	23 - 120	2	50
Benzo[a]pyrene	ND		0.0395	0.02954		mg/Kg	☼	75	15 - 128	1	50
Benzo[b]fluoranthene	ND		0.0395	0.03104		mg/Kg	☼	79	12 - 133	7	50
Benzo[g,h,i]perylene	ND		0.0395	0.02690		mg/Kg	☼	68	22 - 120	9	50
Benzo[k]fluoranthene	ND		0.0395	0.02957		mg/Kg	☼	75	28 - 120	1	45
Chrysene	ND		0.0395	0.03011		mg/Kg	☼	76	20 - 120	0	49
Dibenz(a,h)anthracene	ND		0.0395	0.02990		mg/Kg	☼	76	12 - 128	10	50
Fluorene	ND		0.0395	0.02982		mg/Kg	☼	75	20 - 120	1	50
Fluoranthene	ND		0.0395	0.03035		mg/Kg	☼	77	10 - 143	1	50
Indeno[1,2,3-cd]pyrene	ND		0.0395	0.02898		mg/Kg	☼	73	22 - 121	10	50
Naphthalene	ND		0.0395	0.02820		mg/Kg	☼	71	10 - 120	0	50
Phenanthrene	ND		0.0395	0.02980		mg/Kg	☼	75	21 - 122	2	50
Pyrene	ND		0.0395	0.03101		mg/Kg	☼	78	20 - 123	5	50
1-Methylnaphthalene	ND		0.0395	0.02966		mg/Kg	☼	75	10 - 120	0	50
2-Methylnaphthalene	ND		0.0395	0.02753		mg/Kg	☼	70	13 - 120	1	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Terphenyl-d14	*79*		*13 - 120*
Nitrobenzene-d5	*75*		*27 - 120*
2-Fluorobiphenyl (Surr)	*69*		*29 - 120*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: 490-94548-2 MS
Matrix: Soil
Analysis Batch: 308965

Client Sample ID: S-10-B12
Prep Type: Total/NA
Prep Batch: 308521

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12	ND	F2	463	469.4		mg/Kg	☼	101	69 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	*105*		*50 - 150*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 490-94548-2 MSD — **Client Sample ID: S-10-B12**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 308965 — **Prep Batch: 308521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12	ND	F2	463	582.9	F2	mg/Kg	☼	126	69 - 130	22	10

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*106*		*50 - 150*

Lab Sample ID: 490-94548-1 DU — **Client Sample ID: S-5.5-B12**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 308965 — **Prep Batch: 308521**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C6-C12	ND			ND		mg/Kg	☼			NC	10

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*90*		*50 - 150*

Lab Sample ID: MB 490-308965/5 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 308965

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			12/24/15 11:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*		*12/24/15 11:49*	*1*

Lab Sample ID: LCS 490-308965/4 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 308965

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12			10.0	8.767		mg/Kg		88	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*119*		*50 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-310375/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 310495 — **Prep Batch: 310375**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0333		mg/Kg		01/02/16 15:00	01/04/16 17:16	1
PCB-1221	ND		0.0333		mg/Kg		01/02/16 15:00	01/04/16 17:16	1
PCB-1232	ND		0.0333		mg/Kg		01/02/16 15:00	01/04/16 17:16	1
PCB-1242	ND		0.0333		mg/Kg		01/02/16 15:00	01/04/16 17:16	1
PCB-1248	ND		0.0333		mg/Kg		01/02/16 15:00	01/04/16 17:16	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 490-310375/1-A
Matrix: Solid
Analysis Batch: 310495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 310375

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254	ND		0.0333		mg/Kg		01/02/16 15:00	01/04/16 17:16	1
PCB-1260	ND		0.0333		mg/Kg		01/02/16 15:00	01/04/16 17:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*108*		*20 - 150*	*01/02/16 15:00*	*01/04/16 17:16*	*1*
Tetrachloro-m-xylene	*104*		*19 - 147*	*01/02/16 15:00*	*01/04/16 17:16*	*1*

Lab Sample ID: LCS 490-310375/2-A
Matrix: Solid
Analysis Batch: 310495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 310375

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.167	0.1794		mg/Kg		108	65 - 125
PCB-1260	0.167	0.1699		mg/Kg		102	52 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*107*		*20 - 150*
Tetrachloro-m-xylene	*98*		*19 - 147*

Lab Sample ID: 490-94852-C-1-C MS
Matrix: Solid
Analysis Batch: 310495

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 310375

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		0.177	0.1882		mg/Kg	☼	106	42 - 140
PCB-1260	ND		0.177	0.1801		mg/Kg	☼	102	37 - 159

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*105*		*20 - 150*
Tetrachloro-m-xylene	*96*		*19 - 147*

Lab Sample ID: 490-94852-C-1-D MSD
Matrix: Solid
Analysis Batch: 310495

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 310375

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		0.175	0.1952		mg/Kg	☼	111	42 - 140	4	50
PCB-1260	ND		0.175	0.1841		mg/Kg	☼	105	37 - 159	2	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*109*		*20 - 150*
Tetrachloro-m-xylene	*101*		*19 - 147*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 490-309326/1-A
Matrix: Solid
Analysis Batch: 309428

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 309326

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		4.00		mg/Kg		12/28/15 11:32	12/29/15 14:11	1
C24-C40	ND		4.00		mg/Kg		12/28/15 11:32	12/29/15 14:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*90*		*50 - 150*	*12/28/15 11:32*	*12/29/15 14:11*	*1*

Lab Sample ID: LCS 490-309326/2-A
Matrix: Solid
Analysis Batch: 309428

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 309326

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C24			40.0	34.54		mg/Kg		86	55 - 129		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*89*		*50 - 150*

Lab Sample ID: 490-94548-1 DU
Matrix: Soil
Analysis Batch: 309428

Client Sample ID: S-5.5-B12
Prep Type: Total/NA
Prep Batch: 309326

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C10-C24	ND			ND		mg/Kg	☼			17	50
C24-C40	ND			4.870		mg/Kg	☼			33	50

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*97*		*50 - 150*

Lab Sample ID: MB 490-309672/1-A
Matrix: Solid
Analysis Batch: 309756

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 309672

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		4.00		mg/Kg		12/29/15 17:02	12/30/15 19:32	1
C24-C40	ND		4.00		mg/Kg		12/29/15 17:02	12/30/15 19:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*90*		*50 - 150*	*12/29/15 17:02*	*12/30/15 19:32*	*1*

Lab Sample ID: LCS 490-309672/2-A
Matrix: Solid
Analysis Batch: 309756

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 309672

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C24			40.0	39.29		mg/Kg		98	55 - 129		

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup (Continued)

Lab Sample ID: LCS 490-309672/2-A
Matrix: Solid
Analysis Batch: 309756

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 309672

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	70		50 - 150

Lab Sample ID: 490-94548-2 MS
Matrix: Soil
Analysis Batch: 309756

Client Sample ID: S-10-B12
Prep Type: Total/NA
Prep Batch: 309672

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C24	6.34		43.4	37.37		mg/Kg	☼	71	10 - 153

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl	79		50 - 150

Lab Sample ID: 490-94548-2 MSD
Matrix: Soil
Analysis Batch: 309756

Client Sample ID: S-10-B12
Prep Type: Total/NA
Prep Batch: 309672

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C24	6.34		44.7	37.87		mg/Kg	☼	71	10 - 153	1	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	61		50 - 150

Lab Sample ID: 490-94548-2 DU
Matrix: Soil
Analysis Batch: 309756

Client Sample ID: S-10-B12
Prep Type: Total/NA
Prep Batch: 309672

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
C10-C24	6.34		7.576		mg/Kg	☼	18	50
C24-C40	11.5		8.022		mg/Kg	☼	35	50

Surrogate	DU %Recovery	DU Qualifier	Limits
o-Terphenyl	93		50 - 150

Lab Sample ID: 490-94548-10 DU
Matrix: Soil
Analysis Batch: 309756

Client Sample ID: S-5-B15
Prep Type: Total/NA
Prep Batch: 309672

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
C10-C24	5.25		6.174		mg/Kg	☼	16	50
C24-C40	ND		ND		mg/Kg	☼	40	50

Surrogate	DU %Recovery	DU Qualifier	Limits
o-Terphenyl	92		50 - 150

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup (Continued)

Lab Sample ID: 490-94548-20 DU — **Client Sample ID: S-15-B20**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 309756 — **Prep Batch: 309672**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C10-C24	ND			6.077	F5	mg/Kg	☼			63	50
C24-C40	ND			ND	F5	mg/Kg	☼			60	50

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*96*		*50 - 150*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-308615/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 308945 — **Prep Batch: 308615**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.998		mg/Kg		12/23/15 07:37	12/23/15 14:45	1

Lab Sample ID: LCS 490-308615/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 308945 — **Prep Batch: 308615**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			19.3	18.96		mg/Kg		98	80 - 120		

Lab Sample ID: 490-94548-1 MS — **Client Sample ID: S-5.5-B12**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 308945 — **Prep Batch: 308615**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	5.17		23.3	26.49		mg/Kg	☼	92	75 - 125		

Lab Sample ID: 490-94548-1 MSD — **Client Sample ID: S-5.5-B12**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 308945 — **Prep Batch: 308615**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	5.17		22.1	25.90		mg/Kg	☼	94	75 - 125	2	20

Method: Moisture - Percent Moisture

Lab Sample ID: 490-94548-1 DU — **Client Sample ID: S-5.5-B12**
Matrix: Soil — **Prep Type: Total/NA**
Analysis Batch: 308542

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	86			87		%				1	20

Method: Moisture - Percent Moisture (Continued)

Lab Sample ID: 490-94548-20 DU
Matrix: Soil
Analysis Batch: 308542

Client Sample ID: S-15-B20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	84			85		%				0.8	20

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Prep Batch: 308521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-5	S-10-B13	Total/NA	Soil	5035	
490-94548-8	S-10-B14	Total/NA	Soil	5035	
490-94548-15	S-10-B17	Total/NA	Soil	5035	
490-94548-19	S-10-B20	Total/NA	Soil	5035	

Prep Batch: 308527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-1	S-5.5-B12	Total/NA	Soil	5035	
490-94548-2	S-10-B12	Total/NA	Soil	5035	
490-94548-3	S-15-B12	Total/NA	Soil	5035	
490-94548-4	S-5-B13	Total/NA	Soil	5035	
490-94548-4	S-5-B13	Total/NA	Soil	5035	
490-94548-5	S-10-B13	Total/NA	Soil	5035	
490-94548-6	S-15-B13	Total/NA	Soil	5035	
490-94548-6	S-15-B13	Total/NA	Soil	5035	
490-94548-7	S-6-B14	Total/NA	Soil	5035	
490-94548-8	S-10-B14	Total/NA	Soil	5035	
490-94548-9	S-15-B14	Total/NA	Soil	5035	
490-94548-10	S-5-B15	Total/NA	Soil	5035	
490-94548-11	S-10-B15	Total/NA	Soil	5035	
490-94548-12	S-15-B15	Total/NA	Soil	5035	
490-94548-13	S-5-B16	Total/NA	Soil	5035	
490-94548-14	S-5-B17	Total/NA	Soil	5035	
490-94548-14	S-5-B17	Total/NA	Soil	5035	
490-94548-15	S-10-B17	Total/NA	Soil	5035	
490-94548-16	S-15-B17	Total/NA	Soil	5035	
490-94548-16	S-15-B17	Total/NA	Soil	5035	
490-94548-17	S-5-B18	Total/NA	Soil	5035	
490-94548-18	S-5-B20	Total/NA	Soil	5035	
490-94548-19	S-10-B20	Total/NA	Soil	5035	
490-94548-20	S-15-B20	Total/NA	Soil	5035	

Prep Batch: 308633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94604-A-1-E MS	Matrix Spike	Total/NA	Solid	5030B	
490-94604-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Analysis Batch: 308992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-1	S-5.5-B12	Total/NA	Soil	8260B	308527
490-94548-2	S-10-B12	Total/NA	Soil	8260B	308527
490-94548-4	S-5-B13	Total/NA	Soil	8260B	308527
490-94548-5	S-10-B13	Total/NA	Soil	8260B	308527
490-94548-6	S-15-B13	Total/NA	Soil	8260B	308527
490-94548-7	S-6-B14	Total/NA	Soil	8260B	308527
490-94548-8	S-10-B14	Total/NA	Soil	8260B	308527
490-94548-9	S-15-B14	Total/NA	Soil	8260B	308527
490-94548-10	S-5-B15	Total/NA	Soil	8260B	308527
490-94548-11	S-10-B15	Total/NA	Soil	8260B	308527
490-94548-12	S-15-B15	Total/NA	Soil	8260B	308527
490-94548-13	S-5-B16	Total/NA	Soil	8260B	308527

GC/MS VOA (Continued)

Analysis Batch: 308992 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-14	S-5-B17	Total/NA	Soil	8260B	308527
490-94548-15	S-10-B17	Total/NA	Soil	8260B	308527
490-94548-16	S-15-B17	Total/NA	Soil	8260B	308527
490-94548-18	S-5-B20	Total/NA	Soil	8260B	308527
LCS 490-308992/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-308992/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-308992/7	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 309337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-5	S-10-B13	Total/NA	Soil	8260B	308521
490-94548-8	S-10-B14	Total/NA	Soil	8260B	308521
490-94548-15	S-10-B17	Total/NA	Soil	8260B	308521
LCS 490-309337/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-309337/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-309337/9	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 309345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-4	S-5-B13	Total/NA	Soil	8260B	308527
490-94548-6	S-15-B13	Total/NA	Soil	8260B	308527
490-94548-14	S-5-B17	Total/NA	Soil	8260B	308527
490-94548-16	S-15-B17	Total/NA	Soil	8260B	308527
LCS 490-309345/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-309345/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-309345/7	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 309522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-15	S-10-B17	Total/NA	Soil	8260B	308521
LCS 490-309522/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-309522/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-309522/8	Method Blank	Total/NA	Solid	8260B	
MB 490-309522/9	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 309696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-19	S-10-B20	Total/NA	Soil	8260B	308527
490-94604-A-1-E MS	Matrix Spike	Total/NA	Solid	8260B	308633
490-94604-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	308633
LCS 490-309696/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-309696/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 490-309696/9	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 309772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-3	S-15-B12	Total/NA	Soil	8260B	308527
490-94548-17	S-5-B18	Total/NA	Soil	8260B	308527
490-94548-20	S-15-B20	Total/NA	Soil	8260B	308527
LCS 490-309772/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-309772/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS VOA (Continued)

Analysis Batch: 309772 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-309772/11	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 309961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-19	S-10-B20	Total/NA	Soil	8260B	308521
LCS 490-309961/7	Lab Control Sample	Total/NA	Solid	8260B	
MB 490-309961/8	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 308836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-4	S-5-B13	Total/NA	Soil	3550B	
490-94548-4 MS	S-5-B13	Total/NA	Soil	3550B	
490-94548-4 MSD	S-5-B13	Total/NA	Soil	3550B	
490-94548-5	S-10-B13	Total/NA	Soil	3550B	
490-94548-6	S-15-B13	Total/NA	Soil	3550B	
490-94548-14	S-5-B17	Total/NA	Soil	3550B	
490-94548-15	S-10-B17	Total/NA	Soil	3550B	
490-94548-16	S-15-B17	Total/NA	Soil	3550B	
LCS 490-308836/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 490-308836/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 310118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-4	S-5-B13	Total/NA	Soil	8270C SIM	308836
490-94548-4 MS	S-5-B13	Total/NA	Soil	8270C SIM	308836
490-94548-4 MSD	S-5-B13	Total/NA	Soil	8270C SIM	308836
490-94548-5	S-10-B13	Total/NA	Soil	8270C SIM	308836
490-94548-6	S-15-B13	Total/NA	Soil	8270C SIM	308836
490-94548-14	S-5-B17	Total/NA	Soil	8270C SIM	308836
490-94548-15	S-10-B17	Total/NA	Soil	8270C SIM	308836
490-94548-16	S-15-B17	Total/NA	Soil	8270C SIM	308836
LCS 490-308836/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	308836
MB 490-308836/1-A	Method Blank	Total/NA	Solid	8270C SIM	308836

GC VOA

Prep Batch: 308521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-1	S-5.5-B12	Total/NA	Soil	5035	
490-94548-1 DU	S-5.5-B12	Total/NA	Soil	5035	
490-94548-2	S-10-B12	Total/NA	Soil	5035	
490-94548-2 MS	S-10-B12	Total/NA	Soil	5035	
490-94548-2 MSD	S-10-B12	Total/NA	Soil	5035	
490-94548-3	S-15-B12	Total/NA	Soil	5035	
490-94548-4	S-5-B13	Total/NA	Soil	5035	
490-94548-5	S-10-B13	Total/NA	Soil	5035	
490-94548-6	S-15-B13	Total/NA	Soil	5035	
490-94548-7	S-6-B14	Total/NA	Soil	5035	

GC VOA (Continued)

Prep Batch: 308521 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-8	S-10-B14	Total/NA	Soil	5035	
490-94548-9	S-15-B14	Total/NA	Soil	5035	
490-94548-10	S-5-B15	Total/NA	Soil	5035	
490-94548-11	S-10-B15	Total/NA	Soil	5035	
490-94548-12	S-15-B15	Total/NA	Soil	5035	
490-94548-13	S-5-B16	Total/NA	Soil	5035	
490-94548-14	S-5-B17	Total/NA	Soil	5035	
490-94548-15	S-10-B17	Total/NA	Soil	5035	
490-94548-16	S-15-B17	Total/NA	Soil	5035	
490-94548-17	S-5-B18	Total/NA	Soil	5035	
490-94548-18	S-5-B20	Total/NA	Soil	5035	
490-94548-19	S-10-B20	Total/NA	Soil	5035	
490-94548-20	S-15-B20	Total/NA	Soil	5035	

Analysis Batch: 308965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-1	S-5.5-B12	Total/NA	Soil	NWTPH-Gx	308521
490-94548-1 DU	S-5.5-B12	Total/NA	Soil	NWTPH-Gx	308521
490-94548-2	S-10-B12	Total/NA	Soil	NWTPH-Gx	308521
490-94548-2 MS	S-10-B12	Total/NA	Soil	NWTPH-Gx	308521
490-94548-2 MSD	S-10-B12	Total/NA	Soil	NWTPH-Gx	308521
490-94548-3	S-15-B12	Total/NA	Soil	NWTPH-Gx	308521
490-94548-4	S-5-B13	Total/NA	Soil	NWTPH-Gx	308521
490-94548-5	S-10-B13	Total/NA	Soil	NWTPH-Gx	308521
490-94548-6	S-15-B13	Total/NA	Soil	NWTPH-Gx	308521
490-94548-7	S-6-B14	Total/NA	Soil	NWTPH-Gx	308521
490-94548-8	S-10-B14	Total/NA	Soil	NWTPH-Gx	308521
490-94548-9	S-15-B14	Total/NA	Soil	NWTPH-Gx	308521
490-94548-10	S-5-B15	Total/NA	Soil	NWTPH-Gx	308521
490-94548-11	S-10-B15	Total/NA	Soil	NWTPH-Gx	308521
490-94548-12	S-15-B15	Total/NA	Soil	NWTPH-Gx	308521
490-94548-13	S-5-B16	Total/NA	Soil	NWTPH-Gx	308521
490-94548-14	S-5-B17	Total/NA	Soil	NWTPH-Gx	308521
490-94548-15	S-10-B17	Total/NA	Soil	NWTPH-Gx	308521
490-94548-16	S-15-B17	Total/NA	Soil	NWTPH-Gx	308521
490-94548-17	S-5-B18	Total/NA	Soil	NWTPH-Gx	308521
490-94548-18	S-5-B20	Total/NA	Soil	NWTPH-Gx	308521
490-94548-19	S-10-B20	Total/NA	Soil	NWTPH-Gx	308521
490-94548-20	S-15-B20	Total/NA	Soil	NWTPH-Gx	308521
LCS 490-308965/4	Lab Control Sample	Total/NA	Solid	NWTPH-Gx	
MB 490-308965/5	Method Blank	Total/NA	Solid	NWTPH-Gx	

GC Semi VOA

Prep Batch: 309326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-1	S-5.5-B12	Total/NA	Soil	3550B	
490-94548-1 DU	S-5.5-B12	Total/NA	Soil	3550B	
490-94548-4	S-5-B13	Total/NA	Soil	3550B	
490-94548-7	S-6-B14	Total/NA	Soil	3550B	

GC Semi VOA (Continued)

Prep Batch: 309326 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-13	S-5-B16	Total/NA	Soil	3550B	
490-94548-14	S-5-B17	Total/NA	Soil	3550B	
490-94548-18	S-5-B20	Total/NA	Soil	3550B	
LCS 490-309326/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 490-309326/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 309428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-1	S-5.5-B12	Total/NA	Soil	NWTPH-Dx	309326
490-94548-1 DU	S-5.5-B12	Total/NA	Soil	NWTPH-Dx	309326
490-94548-4	S-5-B13	Total/NA	Soil	NWTPH-Dx	309326
490-94548-7	S-6-B14	Total/NA	Soil	NWTPH-Dx	309326
490-94548-13	S-5-B16	Total/NA	Soil	NWTPH-Dx	309326
490-94548-14	S-5-B17	Total/NA	Soil	NWTPH-Dx	309326
490-94548-18	S-5-B20	Total/NA	Soil	NWTPH-Dx	309326
LCS 490-309326/2-A	Lab Control Sample	Total/NA	Solid	NWTPH-Dx	309326
MB 490-309326/1-A	Method Blank	Total/NA	Solid	NWTPH-Dx	309326

Prep Batch: 309672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-2	S-10-B12	Total/NA	Soil	3550B	
490-94548-2 DU	S-10-B12	Total/NA	Soil	3550B	
490-94548-2 MS	S-10-B12	Total/NA	Soil	3550B	
490-94548-2 MSD	S-10-B12	Total/NA	Soil	3550B	
490-94548-3	S-15-B12	Total/NA	Soil	3550B	
490-94548-5	S-10-B13	Total/NA	Soil	3550B	
490-94548-6	S-15-B13	Total/NA	Soil	3550B	
490-94548-8	S-10-B14	Total/NA	Soil	3550B	
490-94548-9	S-15-B14	Total/NA	Soil	3550B	
490-94548-10	S-5-B15	Total/NA	Soil	3550B	
490-94548-10 DU	S-5-B15	Total/NA	Soil	3550B	
490-94548-11	S-10-B15	Total/NA	Soil	3550B	
490-94548-12	S-15-B15	Total/NA	Soil	3550B	
490-94548-15	S-10-B17	Total/NA	Soil	3550B	
490-94548-16	S-15-B17	Total/NA	Soil	3550B	
490-94548-17	S-5-B18	Total/NA	Soil	3550B	
490-94548-19	S-10-B20	Total/NA	Soil	3550B	
490-94548-20	S-15-B20	Total/NA	Soil	3550B	
490-94548-20 DU	S-15-B20	Total/NA	Soil	3550B	
LCS 490-309672/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 490-309672/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 309756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-2	S-10-B12	Total/NA	Soil	NWTPH-Dx	309672
490-94548-2 DU	S-10-B12	Total/NA	Soil	NWTPH-Dx	309672
490-94548-2 MS	S-10-B12	Total/NA	Soil	NWTPH-Dx	309672
490-94548-2 MSD	S-10-B12	Total/NA	Soil	NWTPH-Dx	309672
490-94548-3	S-15-B12	Total/NA	Soil	NWTPH-Dx	309672
490-94548-5	S-10-B13	Total/NA	Soil	NWTPH-Dx	309672
490-94548-6	S-15-B13	Total/NA	Soil	NWTPH-Dx	309672

GC Semi VOA (Continued)

Analysis Batch: 309756 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-8	S-10-B14	Total/NA	Soil	NWTPH-Dx	309672
490-94548-9	S-15-B14	Total/NA	Soil	NWTPH-Dx	309672
490-94548-10	S-5-B15	Total/NA	Soil	NWTPH-Dx	309672
490-94548-10 DU	S-5-B15	Total/NA	Soil	NWTPH-Dx	309672
490-94548-11	S-10-B15	Total/NA	Soil	NWTPH-Dx	309672
490-94548-12	S-15-B15	Total/NA	Soil	NWTPH-Dx	309672
490-94548-15	S-10-B17	Total/NA	Soil	NWTPH-Dx	309672
490-94548-16	S-15-B17	Total/NA	Soil	NWTPH-Dx	309672
490-94548-17	S-5-B18	Total/NA	Soil	NWTPH-Dx	309672
490-94548-19	S-10-B20	Total/NA	Soil	NWTPH-Dx	309672
490-94548-20	S-15-B20	Total/NA	Soil	NWTPH-Dx	309672
490-94548-20 DU	S-15-B20	Total/NA	Soil	NWTPH-Dx	309672
LCS 490-309672/2-A	Lab Control Sample	Total/NA	Solid	NWTPH-Dx	309672
MB 490-309672/1-A	Method Blank	Total/NA	Solid	NWTPH-Dx	309672

Prep Batch: 310375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-4	S-5-B13	Total/NA	Soil	3550C	
490-94548-5	S-10-B13	Total/NA	Soil	3550C	
490-94548-6	S-15-B13	Total/NA	Soil	3550C	
490-94548-14	S-5-B17	Total/NA	Soil	3550C	
490-94548-15	S-10-B17	Total/NA	Soil	3550C	
490-94548-16	S-15-B17	Total/NA	Soil	3550C	
490-94852-C-1-C MS	Matrix Spike	Total/NA	Solid	3550C	
490-94852-C-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	
LCS 490-310375/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 490-310375/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 310495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-4	S-5-B13	Total/NA	Soil	8082A	310375
490-94548-5	S-10-B13	Total/NA	Soil	8082A	310375
490-94548-6	S-15-B13	Total/NA	Soil	8082A	310375
490-94548-14	S-5-B17	Total/NA	Soil	8082A	310375
490-94548-15	S-10-B17	Total/NA	Soil	8082A	310375
490-94548-16	S-15-B17	Total/NA	Soil	8082A	310375
490-94852-C-1-C MS	Matrix Spike	Total/NA	Solid	8082A	310375
490-94852-C-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8082A	310375
LCS 490-310375/2-A	Lab Control Sample	Total/NA	Solid	8082A	310375
MB 490-310375/1-A	Method Blank	Total/NA	Solid	8082A	310375

Metals

Prep Batch: 308615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-1	S-5.5-B12	Total/NA	Soil	3051A	
490-94548-1 MS	S-5.5-B12	Total/NA	Soil	3051A	
490-94548-1 MSD	S-5.5-B12	Total/NA	Soil	3051A	
490-94548-2	S-10-B12	Total/NA	Soil	3051A	
490-94548-3	S-15-B12	Total/NA	Soil	3051A	

Metals (Continued)

Prep Batch: 308615 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-4	S-5-B13	Total/NA	Soil	3051A	
490-94548-5	S-10-B13	Total/NA	Soil	3051A	
490-94548-6	S-15-B13	Total/NA	Soil	3051A	
490-94548-7	S-6-B14	Total/NA	Soil	3051A	
490-94548-8	S-10-B14	Total/NA	Soil	3051A	
490-94548-9	S-15-B14	Total/NA	Soil	3051A	
490-94548-10	S-5-B15	Total/NA	Soil	3051A	
490-94548-11	S-10-B15	Total/NA	Soil	3051A	
490-94548-12	S-15-B15	Total/NA	Soil	3051A	
490-94548-13	S-5-B16	Total/NA	Soil	3051A	
490-94548-14	S-5-B17	Total/NA	Soil	3051A	
490-94548-15	S-10-B17	Total/NA	Soil	3051A	
490-94548-16	S-15-B17	Total/NA	Soil	3051A	
490-94548-17	S-5-B18	Total/NA	Soil	3051A	
490-94548-18	S-5-B20	Total/NA	Soil	3051A	
490-94548-19	S-10-B20	Total/NA	Soil	3051A	
490-94548-20	S-15-B20	Total/NA	Soil	3051A	
LCS 490-308615/2-A	Lab Control Sample	Total/NA	Solid	3051A	
MB 490-308615/1-A	Method Blank	Total/NA	Solid	3051A	

Analysis Batch: 308945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-1	S-5.5-B12	Total/NA	Soil	6010C	308615
490-94548-1 MS	S-5.5-B12	Total/NA	Soil	6010C	308615
490-94548-1 MSD	S-5.5-B12	Total/NA	Soil	6010C	308615
490-94548-2	S-10-B12	Total/NA	Soil	6010C	308615
490-94548-3	S-15-B12	Total/NA	Soil	6010C	308615
490-94548-4	S-5-B13	Total/NA	Soil	6010C	308615
490-94548-5	S-10-B13	Total/NA	Soil	6010C	308615
490-94548-6	S-15-B13	Total/NA	Soil	6010C	308615
490-94548-7	S-6-B14	Total/NA	Soil	6010C	308615
490-94548-8	S-10-B14	Total/NA	Soil	6010C	308615
490-94548-9	S-15-B14	Total/NA	Soil	6010C	308615
490-94548-10	S-5-B15	Total/NA	Soil	6010C	308615
490-94548-11	S-10-B15	Total/NA	Soil	6010C	308615
490-94548-12	S-15-B15	Total/NA	Soil	6010C	308615
490-94548-13	S-5-B16	Total/NA	Soil	6010C	308615
490-94548-14	S-5-B17	Total/NA	Soil	6010C	308615
490-94548-15	S-10-B17	Total/NA	Soil	6010C	308615
490-94548-16	S-15-B17	Total/NA	Soil	6010C	308615
490-94548-17	S-5-B18	Total/NA	Soil	6010C	308615
490-94548-18	S-5-B20	Total/NA	Soil	6010C	308615
490-94548-19	S-10-B20	Total/NA	Soil	6010C	308615
490-94548-20	S-15-B20	Total/NA	Soil	6010C	308615
LCS 490-308615/2-A	Lab Control Sample	Total/NA	Solid	6010C	308615
MB 490-308615/1-A	Method Blank	Total/NA	Solid	6010C	308615

General Chemistry

Analysis Batch: 308542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94548-1	S-5.5-B12	Total/NA	Soil	Moisture	
490-94548-1 DU	S-5.5-B12	Total/NA	Soil	Moisture	
490-94548-1 MS	S-5.5-B12	Total/NA	Soil	Moisture	
490-94548-1 MSD	S-5.5-B12	Total/NA	Soil	Moisture	
490-94548-2	S-10-B12	Total/NA	Soil	Moisture	
490-94548-3	S-15-B12	Total/NA	Soil	Moisture	
490-94548-4	S-5-B13	Total/NA	Soil	Moisture	
490-94548-5	S-10-B13	Total/NA	Soil	Moisture	
490-94548-6	S-15-B13	Total/NA	Soil	Moisture	
490-94548-7	S-6-B14	Total/NA	Soil	Moisture	
490-94548-8	S-10-B14	Total/NA	Soil	Moisture	
490-94548-9	S-15-B14	Total/NA	Soil	Moisture	
490-94548-10	S-5-B15	Total/NA	Soil	Moisture	
490-94548-11	S-10-B15	Total/NA	Soil	Moisture	
490-94548-12	S-15-B15	Total/NA	Soil	Moisture	
490-94548-13	S-5-B16	Total/NA	Soil	Moisture	
490-94548-14	S-5-B17	Total/NA	Soil	Moisture	
490-94548-15	S-10-B17	Total/NA	Soil	Moisture	
490-94548-16	S-15-B17	Total/NA	Soil	Moisture	
490-94548-17	S-5-B18	Total/NA	Soil	Moisture	
490-94548-18	S-5-B20	Total/NA	Soil	Moisture	
490-94548-19	S-10-B20	Total/NA	Soil	Moisture	
490-94548-20	S-15-B20	Total/NA	Soil	Moisture	
490-94548-20 DU	S-15-B20	Total/NA	Soil	Moisture	

Client Sample ID: S-5.5-B12
Date Collected: 12/14/15 10:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-1
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-5.5-B12
Date Collected: 12/14/15 10:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-1
Matrix: Soil
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.793 g	5.0 mL	308527	12/14/15 10:35	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.793 g	5.0 mL	308992	12/24/15 13:28	SER	TAL NSH
Total/NA	Prep	5035			7.509 g	5.0 mL	308521	12/14/15 10:35	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	7.509 g	5.0 mL	308965	12/24/15 14:31	AMC	TAL NSH
Total/NA	Prep	3550B			25.70 g	1.00 mL	309326	12/28/15 11:32	MNM	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	25.70 g	1.00 mL	309428	12/29/15 14:44	TRF	TAL NSH
Total/NA	Prep	3051A			0.502 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.502 g	100 mL	308945	12/23/15 14:54	TSC	TAL NSH

Client Sample ID: S-10-B12
Date Collected: 12/16/15 16:00
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-2
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-10-B12
Date Collected: 12/16/15 16:00
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-2
Matrix: Soil
Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.83 g	5.0 mL	308527	12/16/15 16:00	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.83 g	5.0 mL	308992	12/24/15 16:34	SER	TAL NSH
Total/NA	Prep	5035			7.337 g	5.0 mL	308521	12/16/15 16:00	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	7.337 g	5.0 mL	308965	12/24/15 15:30	AMC	TAL NSH
Total/NA	Prep	3550B			28.93 g	1.00 mL	309672	12/29/15 17:02	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	28.93 g	1.00 mL	309756	12/30/15 20:04	TRF	TAL NSH
Total/NA	Prep	3051A			0.500 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.500 g	100 mL	308945	12/23/15 15:14	TSC	TAL NSH

Client Sample ID: S-15-B12
Date Collected: 12/16/15 16:20
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-3
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-15-B12
Date Collected: 12/16/15 16:20
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-3
Matrix: Soil
Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.1 g	5.0 mL	308527	12/16/15 16:20	JLP	TAL NSH
Total/NA	Analysis	8260B		1	8.1 g	5.0 mL	309772	12/30/15 21:37	EML	TAL NSH
Total/NA	Prep	5035			7.712 g	5.0 mL	308521	12/16/15 16:20	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	7.712 g	5.0 mL	308965	12/24/15 17:18	AMC	TAL NSH
Total/NA	Prep	3550B			28.31 g	1.00 mL	309672	12/29/15 17:02	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	28.31 g	1.00 mL	309756	12/30/15 21:25	TRF	TAL NSH
Total/NA	Prep	3051A			0.498 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.498 g	100 mL	308945	12/23/15 15:18	TSC	TAL NSH

Client Sample ID: S-5-B13
Date Collected: 12/14/15 11:50
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-4
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-5-B13
Date Collected: 12/14/15 11:50
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-4
Matrix: Soil
Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.794 g	5.0 mL	308527	12/14/15 11:50	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.794 g	5.0 mL	309345	12/28/15 16:46	SER	TAL NSH
Total/NA	Prep	5035			6.053 g	5.0 mL	308527	12/14/15 11:50	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.053 g	5.0 mL	308992	12/24/15 13:59	SER	TAL NSH
Total/NA	Prep	3550B			37.66 g	1.00 mL	308836	12/23/15 16:42	LOJ	TAL NSH
Total/NA	Analysis	8270C SIM		1	37.66 g	1.00 mL	310118	12/31/15 20:25	SNR	TAL NSH
Total/NA	Prep	5035			7.97 g	5.0 mL	308521	12/14/15 11:50	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	7.97 g	5.0 mL	308965	12/24/15 17:47	AMC	TAL NSH
Total/NA	Prep	3550C			36.81 g	10.00 mL	310375	01/02/16 15:05	LOJ	TAL NSH
Total/NA	Analysis	8082A		1	36.81 g	10.00 mL	310495	01/04/16 20:56	MGH	TAL NSH
Total/NA	Prep	3550B			25.24 g	1.00 mL	309326	12/28/15 11:32	MNM	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	25.24 g	1.00 mL	309428	12/29/15 15:34	TRF	TAL NSH
Total/NA	Prep	3051A			0.499 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.499 g	100 mL	308945	12/23/15 15:23	TSC	TAL NSH

Lab Chronicle

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-94548-1
SDG: 31379

Client Sample ID: S-10-B13
Date Collected: 12/16/15 13:45
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-5
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-10-B13
Date Collected: 12/16/15 13:45
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-5
Matrix: Soil
Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.113 g	5.0 mL	308527	12/16/15 13:45	JLP	TAL NSH
Total/NA	Analysis	8260B		1	8.113 g	5.0 mL	308992	12/24/15 19:41	SER	TAL NSH
Total/NA	Prep	5035			8.229 g	5.0 mL	308521	12/16/15 13:45	JLP	TAL NSH
Total/NA	Analysis	8260B		1	8.229 g	5.0 mL	309337	12/28/15 21:08	SER	TAL NSH
Total/NA	Prep	3550B			34.36 g	1.00 mL	308836	12/23/15 16:42	LOJ	TAL NSH
Total/NA	Analysis	8270C SIM		1	34.36 g	1.00 mL	310118	12/31/15 21:40	SNR	TAL NSH
Total/NA	Prep	5035			7.468 g	5.0 mL	308521	12/16/15 13:45	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	7.468 g	5.0 mL	308965	12/24/15 18:16	AMC	TAL NSH
Total/NA	Prep	3550C			35.44 g	10.00 mL	310375	01/02/16 15:05	LOJ	TAL NSH
Total/NA	Analysis	8082A		1	35.44 g	10.00 mL	310495	01/04/16 21:11	MGH	TAL NSH
Total/NA	Prep	3550B			28.83 g	1.00 mL	309672	12/29/15 17:02	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	28.83 g	1.00 mL	309756	12/30/15 21:41	TRF	TAL NSH
Total/NA	Prep	3051A			0.513 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.513 g	100 mL	308945	12/23/15 15:35	TSC	TAL NSH

Client Sample ID: S-15-B13
Date Collected: 12/16/15 14:15
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-6
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-15-B13
Date Collected: 12/16/15 14:15
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-6
Matrix: Soil
Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.362 g	5.0 mL	308527	12/16/15 14:15	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.362 g	5.0 mL	309345	12/28/15 17:45	SER	TAL NSH
Total/NA	Prep	5035			8.146 g	5.0 mL	308527	12/16/15 14:15	JLP	TAL NSH
Total/NA	Analysis	8260B		1	8.146 g	5.0 mL	308992	12/24/15 20:12	SER	TAL NSH
Total/NA	Prep	3550B			33.27 g	1.00 mL	308836	12/23/15 16:42	LOJ	TAL NSH
Total/NA	Analysis	8270C SIM		1	33.27 g	1.00 mL	310118	12/31/15 22:05	SNR	TAL NSH
Total/NA	Prep	5035			6.888 g	5.0 mL	308521	12/16/15 14:15	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.888 g	5.0 mL	308965	12/24/15 18:46	AMC	TAL NSH
Total/NA	Prep	3550C			32.90 g	10.00 mL	310375	01/02/16 15:05	LOJ	TAL NSH

Client Sample ID: S-15-B13
Date Collected: 12/16/15 14:15
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-6
Matrix: Soil
Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082A		1	32.90 g	10.00 mL	310495	01/04/16 21:27	MGH	TAL NSH
Total/NA	Prep	3550B			28.66 g	1.00 mL	309672	12/29/15 17:02	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	28.66 g	1.00 mL	309756	12/30/15 21:58	TRF	TAL NSH
Total/NA	Prep	3051A			0.522 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.522 g	100 mL	308945	12/23/15 15:39	TSC	TAL NSH

Client Sample ID: S-6-B14
Date Collected: 12/14/15 15:05
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-7
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-6-B14
Date Collected: 12/14/15 15:05
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-7
Matrix: Soil
Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.802 g	5.0 mL	308527	12/14/15 15:05	JLP	TAL NSH
Total/NA	Analysis	8260B		1	4.802 g	5.0 mL	308992	12/24/15 14:30	SER	TAL NSH
Total/NA	Prep	5035			6.159 g	5.0 mL	308521	12/14/15 15:05	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.159 g	5.0 mL	308965	12/24/15 19:15	AMC	TAL NSH
Total/NA	Prep	3550B			25.56 g	1.00 mL	309326	12/28/15 11:32	MNM	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	25.56 g	1.00 mL	309428	12/29/15 15:50	TRF	TAL NSH
Total/NA	Prep	3051A			0.507 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.507 g	100 mL	308945	12/23/15 15:44	TSC	TAL NSH

Client Sample ID: S-10-B14
Date Collected: 12/15/15 13:55
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-8
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-10-B14
Date Collected: 12/15/15 13:55
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-8
Matrix: Soil
Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.293 g	5.0 mL	308527	12/15/15 13:55	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.293 g	5.0 mL	308992	12/24/15 17:05	SER	TAL NSH
Total/NA	Prep	5035			5.561 g	5.0 mL	308521	12/15/15 13:55	JLP	TAL NSH
Total/NA	Analysis	8260B		1	5.561 g	5.0 mL	309337	12/28/15 20:37	SER	TAL NSH

Lab Chronicle

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-94548-1
SDG: 31379

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.356 g	5.0 mL	308521	12/15/15 13:55	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5.356 g	5.0 mL	308965	12/24/15 19:44	AMC	TAL NSH
Total/NA	Prep	3550B			29.65 g	1.00 mL	309672	12/29/15 17:02	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	29.65 g	1.00 mL	309756	12/30/15 22:14	TRF	TAL NSH
Total/NA	Prep	3051A			0.510 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.510 g	100 mL	308945	12/23/15 15:48	TSC	TAL NSH

Client Sample ID: S-15-B14

Lab Sample ID: 490-94548-9

Date Collected: 12/15/15 14:15

Matrix: Soil

Date Received: 12/22/15 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-15-B14

Lab Sample ID: 490-94548-9

Date Collected: 12/15/15 14:15

Matrix: Soil

Date Received: 12/22/15 10:02

Percent Solids: 84.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.641 g	5.0 mL	308527	12/15/15 14:15	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.641 g	5.0 mL	308992	12/24/15 17:36	SER	TAL NSH
Total/NA	Prep	5035			7.259 g	5.0 mL	308521	12/15/15 14:15	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	7.259 g	5.0 mL	308965	12/24/15 20:13	AMC	TAL NSH
Total/NA	Prep	3550B			29.82 g	1.00 mL	309672	12/29/15 17:02	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	29.82 g	1.00 mL	309756	12/30/15 22:30	TRF	TAL NSH
Total/NA	Prep	3051A			0.510 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.510 g	100 mL	308945	12/23/15 15:52	TSC	TAL NSH

Client Sample ID: S-5-B15

Lab Sample ID: 490-94548-10

Date Collected: 12/15/15 10:35

Matrix: Soil

Date Received: 12/22/15 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-5-B15

Lab Sample ID: 490-94548-10

Date Collected: 12/15/15 10:35

Matrix: Soil

Date Received: 12/22/15 10:02

Percent Solids: 77.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.802 g	5.0 mL	308527	12/15/15 10:35	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.802 g	5.0 mL	308992	12/24/15 18:07	SER	TAL NSH
Total/NA	Prep	5035			7.341 g	5.0 mL	308521	12/15/15 10:35	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	7.341 g	5.0 mL	308965	12/24/15 20:42	AMC	TAL NSH
Total/NA	Prep	3550B			32.18 g	1.00 mL	309672	12/29/15 17:02	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	32.18 g	1.00 mL	309756	12/30/15 22:46	TRF	TAL NSH
Total/NA	Prep	3051A			0.513 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH

Lab Chronicle

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-94548-1
SDG: 31379

Client Sample ID: S-5-B15
Date Collected: 12/15/15 10:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-10
Matrix: Soil
Percent Solids: 77.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		1	0.513 g	100 mL	308945	12/23/15 15:56	TSC	TAL NSH

Client Sample ID: S-10-B15
Date Collected: 12/17/15 11:05
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-11
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-10-B15
Date Collected: 12/17/15 11:05
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-11
Matrix: Soil
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.23 g	5.0 mL	308527	12/17/15 11:05	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.23 g	5.0 mL	308992	12/24/15 18:38	SER	TAL NSH
Total/NA	Prep	5035			6.966 g	5.0 mL	308521	12/17/15 11:05	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.966 g	5.0 mL	308965	12/24/15 21:12	AMC	TAL NSH
Total/NA	Prep	3550B			29.67 g	1.00 mL	309672	12/29/15 17:02	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	29.67 g	1.00 mL	309756	12/30/15 23:18	TRF	TAL NSH
Total/NA	Prep	3051A			0.512 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.512 g	100 mL	308945	12/23/15 16:00	TSC	TAL NSH

Client Sample ID: S-15-B15
Date Collected: 12/17/15 11:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-12
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-15-B15
Date Collected: 12/17/15 11:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-12
Matrix: Soil
Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.37 g	5.0 mL	308527	12/17/15 11:35	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.37 g	5.0 mL	308992	12/24/15 19:10	SER	TAL NSH
Total/NA	Prep	5035			6.891 g	5.0 mL	308521	12/17/15 11:35	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.891 g	5.0 mL	308965	12/24/15 21:41	AMC	TAL NSH
Total/NA	Prep	3550B			29.67 g	1.00 mL	309672	12/29/15 17:02	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	29.67 g	1.00 mL	309756	12/30/15 23:34	TRF	TAL NSH
Total/NA	Prep	3051A			0.509 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.509 g	100 mL	308945	12/23/15 16:04	TSC	TAL NSH

Client Sample ID: S-5-B16
Date Collected: 12/14/15 11:20
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-13
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-5-B16
Date Collected: 12/14/15 11:20
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-13
Matrix: Soil
Percent Solids: 83.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.179 g	5.0 mL	308527	12/14/15 11:20	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.179 g	5.0 mL	308992	12/24/15 15:01	SER	TAL NSH
Total/NA	Prep	5035			6.888 g	5.0 mL	308521	12/14/15 11:20	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.888 g	5.0 mL	308965	12/24/15 22:10	AMC	TAL NSH
Total/NA	Prep	3550B			25.53 g	1.00 mL	309326	12/28/15 11:32	MNM	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	25.53 g	1.00 mL	309428	12/29/15 16:07	TRF	TAL NSH
Total/NA	Prep	3051A			0.499 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.499 g	100 mL	308945	12/23/15 16:09	TSC	TAL NSH

Client Sample ID: S-5-B17
Date Collected: 12/14/15 16:45
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-14
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-5-B17
Date Collected: 12/14/15 16:45
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-14
Matrix: Soil
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.765 g	5.0 mL	308527	12/14/15 16:45	JLP	TAL NSH
Total/NA	Analysis	8260B		1	8.765 g	5.0 mL	309345	12/28/15 17:15	SER	TAL NSH
Total/NA	Prep	5035			8.153 g	5.0 mL	308527	12/14/15 16:45	JLP	TAL NSH
Total/NA	Analysis	8260B		1	8.153 g	5.0 mL	308992	12/24/15 15:32	SER	TAL NSH
Total/NA	Prep	3550B			35.26 g	1.00 mL	308836	12/23/15 16:42	LOJ	TAL NSH
Total/NA	Analysis	8270C SIM		1	35.26 g	1.00 mL	310118	12/31/15 22:30	SNR	TAL NSH
Total/NA	Prep	5035			7.48 g	5.0 mL	308521	12/14/15 16:45	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	7.48 g	5.0 mL	308965	12/24/15 22:39	AMC	TAL NSH
Total/NA	Prep	3550C			35.22 g	10.00 mL	310375	01/02/16 15:05	LOJ	TAL NSH
Total/NA	Analysis	8082A		1	35.22 g	10.00 mL	310495	01/04/16 21:42	MGH	TAL NSH
Total/NA	Prep	3550B			25.70 g	1.00 mL	309326	12/28/15 11:32	MNM	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	25.70 g	1.00 mL	309428	12/29/15 17:45	TRF	TAL NSH
Total/NA	Prep	3051A			0.507 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.507 g	100 mL	308945	12/23/15 16:13	TSC	TAL NSH

Client Sample ID: S-10-B17
Date Collected: 12/15/15 08:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-15
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-10-B17
Date Collected: 12/15/15 08:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-15
Matrix: Soil
Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.272 g	5.0 mL	308527	12/15/15 08:35	JLP	TAL NSH
Total/NA	Analysis	8260B		1	8.272 g	5.0 mL	308992	12/24/15 20:43	SER	TAL NSH
Total/NA	Prep	5035			7.85 g	5.0 mL	308521	12/15/15 08:35	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.85 g	5.0 mL	309337	12/28/15 23:43	SER	TAL NSH
Total/NA	Prep	5035			7.85 g	5.0 mL	308521	12/15/15 08:35	JLP	TAL NSH
Total/NA	Analysis	8260B		20	7.85 g	5.0 mL	309522	12/29/15 16:30	SER	TAL NSH
Total/NA	Prep	3550B			34.72 g	1.00 mL	308836	12/23/15 16:42	LOJ	TAL NSH
Total/NA	Analysis	8270C SIM		5	34.72 g	1.00 mL	310118	12/31/15 22:56	SNR	TAL NSH
Total/NA	Prep	5035			8.254 g	5.0 mL	308521	12/15/15 08:35	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	8.254 g	5.0 mL	308965	12/24/15 23:08	AMC	TAL NSH
Total/NA	Prep	3550C			33.33 g	10.00 mL	310375	01/02/16 15:05	LOJ	TAL NSH
Total/NA	Analysis	8082A		1	33.33 g	10.00 mL	310495	01/04/16 21:58	MGH	TAL NSH
Total/NA	Prep	3550B			27.70 g	1.00 mL	309672	12/29/15 17:02	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	27.70 g	1.00 mL	309756	12/31/15 01:43	TRF	TAL NSH
Total/NA	Prep	3051A			0.502 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.502 g	100 mL	308945	12/23/15 16:25	TSC	TAL NSH

Client Sample ID: S-15-B17
Date Collected: 12/15/15 09:15
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-16
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-15-B17
Date Collected: 12/15/15 09:15
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-16
Matrix: Soil
Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.139 g	5.0 mL	308527	12/15/15 09:15	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.139 g	5.0 mL	309345	12/28/15 18:14	SER	TAL NSH
Total/NA	Prep	5035			7.276 g	5.0 mL	308527	12/15/15 09:15	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.276 g	5.0 mL	308992	12/24/15 21:14	SER	TAL NSH
Total/NA	Prep	3550B			34.57 g	1.00 mL	308836	12/23/15 16:42	LOJ	TAL NSH
Total/NA	Analysis	8270C SIM		1	34.57 g	1.00 mL	310118	12/31/15 23:21	SNR	TAL NSH
Total/NA	Prep	5035			5.779 g	5.0 mL	308521	12/15/15 09:15	JLP	TAL NSH

Lab Chronicle

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-94548-1
SDG: 31379

Client Sample ID: S-15-B17
Date Collected: 12/15/15 09:15
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-16
Matrix: Soil
Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Gx		1	5.779 g	5.0 mL	308965	12/24/15 23:38	AMC	TAL NSH
Total/NA	Prep	3550C			34.51 g	10.00 mL	310375	01/02/16 15:05	LOJ	TAL NSH
Total/NA	Analysis	8082A		1	34.51 g	10.00 mL	310495	01/04/16 22:13	MGH	TAL NSH
Total/NA	Prep	3550B			29.23 g	1.00 mL	309672	12/29/15 17:02	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	29.23 g	1.00 mL	309756	12/31/15 00:22	TRF	TAL NSH
Total/NA	Prep	3051A			0.525 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.525 g	100 mL	308945	12/23/15 16:30	TSC	TAL NSH

Client Sample ID: S-5-B18
Date Collected: 12/17/15 09:00
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-17
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-5-B18
Date Collected: 12/17/15 09:00
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-17
Matrix: Soil
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.84 g	5.0 mL	308527	12/17/15 09:00	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.84 g	5.0 mL	309772	12/30/15 21:07	EML	TAL NSH
Total/NA	Prep	5035			7.603 g	5.0 mL	308521	12/17/15 09:00	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	7.603 g	5.0 mL	308965	12/25/15 00:07	AMC	TAL NSH
Total/NA	Prep	3550B			30.20 g	1.00 mL	309672	12/29/15 17:02	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	30.20 g	1.00 mL	309756	12/31/15 01:27	TRF	TAL NSH
Total/NA	Prep	3051A			0.503 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.503 g	100 mL	308945	12/23/15 16:34	TSC	TAL NSH

Client Sample ID: S-5-B20
Date Collected: 12/14/15 14:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-18
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-5-B20
Date Collected: 12/14/15 14:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-18
Matrix: Soil
Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.424 g	5.0 mL	308527	12/14/15 14:35	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.424 g	5.0 mL	308992	12/24/15 16:03	SER	TAL NSH

Lab Chronicle

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-94548-1
SDG: 31379

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.017 g	5.0 mL	308521	12/14/15 14:35	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	7.017 g	5.0 mL	308965	12/25/15 00:36	AMC	TAL NSH
Total/NA	Prep	3550B			25.55 g	1.00 mL	309326	12/28/15 11:32	MNM	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	25.55 g	1.00 mL	309428	12/29/15 16:39	TRF	TAL NSH
Total/NA	Prep	3051A			0.506 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.506 g	100 mL	308945	12/23/15 16:38	TSC	TAL NSH

Client Sample ID: S-10-B20
Lab Sample ID: 490-94548-19

Date Collected: 12/16/15 11:05
Matrix: Soil

Date Received: 12/22/15 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-10-B20
Lab Sample ID: 490-94548-19

Date Collected: 12/16/15 11:05
Matrix: Soil

Date Received: 12/22/15 10:02
Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.337 g	5.0 mL	308527	12/16/15 11:05	JLP	TAL NSH
Total/NA	Analysis	8260B		1	8.337 g	5.0 mL	309696	12/30/15 10:06	SER	TAL NSH
Total/NA	Prep	5035			7.787 g	5.0 mL	308521	12/16/15 11:05	JLP	TAL NSH
Total/NA	Analysis	8260B		1	7.787 g	5.0 mL	309961	12/31/15 01:54	SER	TAL NSH
Total/NA	Prep	5035			7.662 g	5.0 mL	308521	12/16/15 11:05	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	7.662 g	5.0 mL	308965	12/25/15 01:05	AMC	TAL NSH
Total/NA	Prep	3550B			28.65 g	1.00 mL	309672	12/29/15 17:02	LOJ	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	28.65 g	1.00 mL	309756	12/31/15 00:38	TRF	TAL NSH
Total/NA	Prep	3051A			0.500 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.500 g	100 mL	308945	12/23/15 16:42	TSC	TAL NSH

Client Sample ID: S-15-B20
Lab Sample ID: 490-94548-20

Date Collected: 12/16/15 11:35
Matrix: Soil

Date Received: 12/22/15 10:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			308542	12/22/15 16:47	MNM	TAL NSH

Client Sample ID: S-15-B20
Lab Sample ID: 490-94548-20

Date Collected: 12/16/15 11:35
Matrix: Soil

Date Received: 12/22/15 10:02
Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.552 g	5.0 mL	308527	12/16/15 11:35	JLP	TAL NSH
Total/NA	Analysis	8260B		1	6.552 g	5.0 mL	309772	12/30/15 22:08	EML	TAL NSH
Total/NA	Prep	5035			6.727 g	5.0 mL	308521	12/16/15 11:35	JLP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	6.727 g	5.0 mL	308965	12/25/15 01:35	AMC	TAL NSH
Total/NA	Prep	3550B			30.36 g	1.00 mL	309672	12/29/15 17:02	LOJ	TAL NSH

Lab Chronicle

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-94548-1
SDG: 31379

Client Sample ID: S-15-B20
Date Collected: 12/16/15 11:35
Date Received: 12/22/15 10:02

Lab Sample ID: 490-94548-20
Matrix: Soil
Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Dx		1	30.36 g	1.00 mL	309756	12/31/15 00:54	TRF	TAL NSH
Total/NA	Prep	3051A			0.501 g	100 mL	308615	12/23/15 07:37	KMS	TAL NSH
Total/NA	Analysis	6010C		1	0.501 g	100 mL	308945	12/23/15 16:46	TSC	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-94548-1
SDG: 31379

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-94548-1
SDG: 31379

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oregon	NELAP	10	TN200001	04-27-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Soil	Percent Solids

Washington	State Program	10	C789	07-19-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B	5035	Soil	Hexane
8270C SIM	3550B	Soil	1-Methylnaphthalene
8270C SIM	3550B	Soil	2-Methylnaphthalene
8270C SIM	3550B	Soil	Acenaphthene
8270C SIM	3550B	Soil	Acenaphthylene
8270C SIM	3550B	Soil	Anthracene
8270C SIM	3550B	Soil	Benzo[a]anthracene
8270C SIM	3550B	Soil	Benzo[a]pyrene
8270C SIM	3550B	Soil	Benzo[b]fluoranthene
8270C SIM	3550B	Soil	Benzo[g,h,i]perylene
8270C SIM	3550B	Soil	Benzo[k]fluoranthene
8270C SIM	3550B	Soil	Chrysene
8270C SIM	3550B	Soil	Dibenz(a,h)anthracene
8270C SIM	3550B	Soil	Fluoranthene
8270C SIM	3550B	Soil	Fluorene
8270C SIM	3550B	Soil	Indeno[1,2,3-cd]pyrene
8270C SIM	3550B	Soil	Naphthalene
8270C SIM	3550B	Soil	Phenanthrene
8270C SIM	3550B	Soil	Pyrene
Moisture		Soil	Percent Solids

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-94548 Chain of Custody

Cooler Received/Opened On 12/19/2015 @ 1035

Time Samples Removed From Cooler 12/22/15 0950 Time Samples Placed In Storage 11:20 (2 Hour Window)

1. Tracking # 7827 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID 18290455 pH Strip Lot HC554612 Chlorine Strip Lot 072815A

2. Temperature of rep. sample or temp blank when opened: 0.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: (2)Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) MSM

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) ADH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) ADH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) ADH

I certify that I attached a label with the unique LIMS number to each container (intial) ADH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 490
94548

COOLER RECEIPT FORM

Cooler Received/Opened On 12/19/2015 @ 1035

Time Samples Removed From Cooler 12/20/15 9:50 Time Samples Placed In Storage 11:20 (2 Hour Window)

1. Tracking # 7584 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID 12080142 pH Strip Lot HC554612 Chlorine Strip Lot 072815A

2. Temperature of rep. sample or temp blank when opened: 2.7 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: Two front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) AOH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) AOH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) AOH

I certify that I attached a label with the unique LIMS number to each container (intial) AOH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 490
94548

COOLER RECEIPT FORM

Cooler Received/Opened On 12/19/2015 @ 1035

Time Samples Removed From Cooler 12/28/15 09:50 Time Samples Placed In Storage 1120 (2 Hour Window)

1. Tracking # 7345 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID 12080142 pH Strip Lot HC554612 Chlorine Strip Lot 072815A

2. Temperature of rep. sample or temp blank when opened: 1.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: Two front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) ADH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) ADH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) ADH

I certify that I attached a label with the unique LIMS number to each container (intial) ADH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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Loc: 490
94548

ExxonMobil

Consultant Name: Cardno
Consultant Address: 801 Second Avenue Suite 700
Consultant City/State/Zip: Seattle, WA 98104
ExxonMobil Project Mgr: Aaron Thom
Consultant Project Mgr: Ryan Pozzuto
Consultant Telephone Number: 206 269 0104 **Fax No.:** (206) 269-0098
Sampler Name (Print): Robert Thompson
Sampler Signature:

Account #: Contact PM
Invoice To: Ryan Pozzuto
Report To: Ryan Pozzuto
ct #/Activity #: 31379
ExxonMobil Site #: 99CHT
Site Address: 7323 Aurora Avenue North
Site City, State, Zip: Seattle, Washington
Oversight Agency: Washington Department of Ecology

	SAMPLE ID	Field Point Name/ Location ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl	NaOH	H_2SO_4 Plastic	H_2SO_4 Glass	HNO_3	Ice	Other	None	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify):	Analyze For: BTEX by 8260C	TPHg by NWTPH-Gx	TPHd by NWTPH-Dx	TPHmo by NWTPH-Dx	Total Lead by 6010C	EDB by 8260B	1,2-DCA by 8260B	Naphthalenes by 8260	HVOCs by 8260B	PCBs by 8082	PAHs by 8270C	Standard 10-day TAT	Due Date of Report
1	S-5.5-B12	MW4	12/14/15	10:35	7	X			3	3								1								X	X	X	X	X	X						10	
2	S-10-B12	MW4	12/16/15	16:00	7	X			3	3								1								X	X	X	X	X	X						10	
3	S-15-B12	MW4	12/16/15	16:20	7	X			3	3								1								X	X	X	X	X	X						10	
4	S-5-B13	MW3	12/14/15	11:50	14	X			6	6								2								X	X	X	X	X	X	X	X	X	X	X	10	
5	S-10-B13	MW3	12/16/15	13:45	14	X			6	6								2								X	X	X	X	X	X	X	X	X	X	X	10	
6	S-15-B13	MW3	12/16/15	14:15	14	X			6	6								2								X	X	X	X	X	X	X	X	X	X	X	10	
7	S-6-B14	MW2	12/14/15	15:05	7	X			3	3								1								X	X	X	X	X	X						10	
8	S-10-B14	MW2	12/15/15	13:55	7	X			3	3								1								X	X	X	X	X	X						10	
9	S-15-B14	MW2	12/15/15	14:15	7	X			3	3								1								X	X	X	X	X	X						10	

Comments/Special Instructions:

Please include silica gel cleanup.

Relinquished by:		Date	Time	Received by	Date	Time
Robert Thompson		12/17/15	18:00		12/19/15	1035
Relinquished by:		Date	Time	Received by (Lab personnel):	Date	Time

Laboratory Comments:
Temperature Upon Receipt: 0.6
Sample Containers Intact? N
VOA Vials Free of Headspace? N
QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please attach pre-schedule w/ TestAmerica Project Manager or attach specific instructions

1/28/2016

Loc: 490
94548

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Nashville Division
2960 Foster Creighton
Nashville, TN 37204
Phone: 615-726-0177
Toll Free: 800-765-0980
Fax: 615-726-3404

ExxonMobil

Consultant Name: Cardno
Consultant Address: 801 Second Avenue Suite 700
Consultant City/State/Zip: Seattle, WA 98104
ExxonMobil Project Mgr: Aaron Thom
Consultant Project Mgr: Ryan Pozzuto
Consultant Telephone Number: 206 269 0104 **Fax No.:** (206) 269-0098
Sampler Name (Print): Robert Thompson
Sampler Signature:

Account #: Contact PM
Invoice To: Ryan Pozzuto
Report To: Ryan Pozzuto
ct #/Activity #: 31379
ExxonMobil Site #: 99CHT
Site Address: 7323 Aurora Avenue North
Site City, State, Zip: Seattle, Washington
Oversight Agency: Washington Department of Ecology

	SAMPLE ID	Field Point Name/ Location ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl	NaOH	H_2SO_4 Plastic	H_2SO_4 Glass	HNO_3	Ice	Other	None	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify):	Analyze For: BTEX by 8260C	TPHg by NWTPH-Gx	TPHd by NWTPH-Dx	TPHmo by NWTPH-Dx	Total Lead by 6010C	EDB by 8260B	1,2-DCA by 8260B	Napthalenes by 8260	HVOCs by 8260B	PCBs by 8082	PAHs by 8270C	Standard 10-day TAT	Due Date of Report
10	S-5-B15	MW5	12/15/15	10:35	7	X			3	3								1								X	X	X	X	X	X						10	
11	S-10-B15	MW5	12/17/15	11:05	7	X			3	3								1								X	X	X	X	X	X						10	
12	S-15-B15	MW5	12/17/15	11:35	7	X			3	3								1								X	X	X	X	X	X						10	
13	S-5-B16	MW6	12/14/15	11:20	7	X			3	3								1								X	X	X	X	X	X						10	
14	S-5-B17	MW1	12/14/15	16:45	14	X			6	6								2								X	X	X	X	X	X	X	X	X	X	X	10	
15	S-10-B17	MW1	12/15/15	08:35	14	X			6	6								2								X	X	X	X	X	X	X	X	X	X	X	10	
16	S-15-B17	MW1	12/15/15	09:15	14	X			6	6								2								X	X	X	X	X	X	X	X	X	X	X	10	
17	S-5-B18	SVS3	12/17/15	09:00	7	X			3	3								1								X	X	X	X	X	X						10	

Comments/Special Instructions:

Please include silica gel cleanup.

Laboratory Comments:
Temperature Upon Receipt: 0.6
Sample Containers Intact? N
VOA Vials Free of Headspace? N

QC Deliverables (please circle one)
Level 2
Level 3
Level 4

Site Specific - if yes, please attach pre-schedule w/ TestAmerica Project Manager or attach specific instructions

Relinquished by:		Date	Time	Received by:	Date	Time
Robert Thompson		12/17/15	18:00		12/19/15	1035
Relinquished by:		Date	Time	Received by (Lab personnel):	Date	Time

1/28/2016

TestAmerica
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Nashville Division
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94548

ExxonMobil

Consultant Name: Cardno
Consultant Address: 801 Second Avenue Suite 700
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ExxonMobil Project Mgr: Aaron Thom
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Consultant Telephone Number: 206 269 0104 **Fax No.:** (206) 269-0098
Sampler Name (Print): Robert Thompson
Sampler Signature:

Account #: Contact PM
Invoice To: Ryan Pozzuto
Report To: Ryan Pozzuto
ct #/Activity #: 31379
ExxonMobil Site #: 99CHT
Site Address: 7323 Aurora Avenue North
Site City, State, Zip: Seattle, Washington
Oversight Agency: Washington Department of Ecology

SAMPLE ID	Field Point Name/ Location ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl	NaOH	H_2SO_4 Plastic	H_2SO_4 Glass	HNO_3	Ice	Other	None	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify):	Analyze For: BTEX by 8260C	TPHg by NWTPH-Gx	TPHd by NWTPH-Dx	TPHmo by NWTPH-Dx	Total Lead by 6010C	EDB by 8260B	1,2-DCA by 8260B	Naphthalenes by 8260	HVOCs by 8260B	PCBs by 8082	PAHs by 8270C	Standard 10-day TAT	Due Date of Report
S-5-B20	SVS1	12/14/15	14:35	7	X			3	3								1								X	X	X	X	X	X						10	
S-10-B20	SVS1	12/16/15	11:05	7	X			3	3								1								X	X	X	X	X	X						10	
S-15-B20	SVS1	12/16/15	11:35	7	X			3	3								1								X	X	X	X	X	X						10	

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18
19
20

Comments/Special Instructions:

Please include silica gel cleanup.

Laboratory Comments:
Temperature Upon Receipt: 0.6
Sample Containers Intact? N
VOA Vials Free of Headspace? N

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please attach pre-schedule w/ TestAmerica Project Manager or attach specific instructions

Relinquished by:		Date	Time	Received by:	Date	Time
Robert Thompson		12/17/15	18:00		12/18/15	1035
Relinquished by:		Date	Time	Received by (Lab personnel):	Date	Time

1/28/2016

Login Sample Receipt Checklist

Client: Cardno, Inc

Job Number: 490-94548-1
SDG Number: 31379

Login Number: 94548
List Number: 1
Creator: Huskey, Adam

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Cardno
Ryan Pozzuto
801 Second Avenue, Suite 700
Seattle, WA 98104

RE: 99CHT
Lab ID: 1602087

February 17, 2016

Attention Ryan Pozzuto:

Fremont Analytical, Inc. received 4 sample(s) on 2/10/2016 for the analyses presented in the following report.

Helium by GC/TCD
Major Gases by EPA Method 3C
Petroleum Fractionation by EPA Method TO-15
Volatile Organic Compounds by EPA Method TO-15

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward
Project Manager

Date: *02/17/2016*

CLIENT: Cardno
Project: 99CHT
Lab Order: 1602087

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1602087-001	SVS 1	02/09/2016 11:40 AM	02/10/2016 8:30 AM
1602087-002	SVS 2	02/09/2016 2:00 PM	02/10/2016 8:30 AM
1602087-003	DUP	02/09/2016 12:00 AM	02/10/2016 8:30 AM
1602087-004	SVS 3	02/09/2016 9:55 AM	02/10/2016 8:30 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **1602087**
Date: **2/17/2016**

CLIENT: Cardno
Project: 99CHT

WorkOrder Narrative:
I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Air samples are reported in ppbv, ppmv, ug/m3 and/or %.

The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Standard temperature and pressure assumes 24.45 = (25C and 1 atm).

Note: Gasoline reported in ug/m3 should be considered an estimate. The estimated molecular weight of gasoline used in the equation = 72.5

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Analytical Report

WO#: **1602087**
Date Reported: **2/17/2016**

CLIENT: Cardno
Project: 99CHT

Lab ID: 1602087-001 **Collection Date:** 2/9/2016 11:40:00 AM
Client Sample ID: **SVS 1** **Matrix:** Air

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Helium by GC/TCD				Batch ID: R27616		Analyst: JY
Helium	ND	264		ppmv	1	2/16/2016 3:12:00 PM
Major Gases by EPA Method 3C				Batch ID: R27624		Analyst: JY
Carbon Dioxide	3.18	0.0500		%	1	2/10/2016 1:20:00 PM
Methane	ND	0.0500		%	1	2/10/2016 1:20:00 PM
Oxygen	20.5	0.0500		%	1	2/10/2016 1:20:00 PM
Petroleum Fractionation by EPA Method TO-15				Batch ID: R27635		Analyst: JY
1-methyl-3-ethylbenzene	3.14	1.29		µg/m³	1	2/12/2016 3:25:00 AM
2,3-Dimethylheptane	ND	1.04		µg/m³	1	2/12/2016 3:25:00 AM
2,3-Dimethylpentane	ND	0.970		µg/m³	1	2/12/2016 3:25:00 AM
Aliphatic Hydrocarbon (EC5-8)	208	147		µg/m³	1	2/12/2016 3:25:00 AM
Aliphatic Hydrocarbon (EC9-12)	445	94.2		µg/m³	1	2/12/2016 3:25:00 AM
Aromatic Hydrocarbon (EC9-10)	26.0	4.54		µg/m³	1	2/12/2016 3:25:00 AM
Decane	3.95	1.26		µg/m³	1	2/12/2016 3:25:00 AM
Dodecane	ND	8.35		µg/m³	1	2/12/2016 3:25:00 AM
Octane	1.26	1.13		µg/m³	1	2/12/2016 3:25:00 AM
p-isopropyltoluene	ND	1.83		µg/m³	1	2/12/2016 3:25:00 AM
Undecane	ND	2.69		µg/m³	1	2/12/2016 3:25:00 AM
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	2/12/2016 3:25:00 AM

Analytical Report

WO#: **1602087**
Date Reported: **2/17/2016**

CLIENT: Cardno
Project: 99CHT

Lab ID: 1602087-002 **Collection Date:** 2/9/2016 2:00:00 PM
Client Sample ID: **SVS 2** **Matrix:** Air

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Helium by GC/TCD				Batch ID: R27616		Analyst: JY
Helium	ND	230		ppmv	1	2/16/2016 3:18:00 PM
Major Gases by EPA Method 3C				Batch ID: R27624		Analyst: JY
Carbon Dioxide	3.60	0.0500		%	1	2/10/2016 1:54:00 PM
Methane	ND	0.0500		%	1	2/10/2016 1:54:00 PM
Oxygen	20.6	0.0500		%	1	2/10/2016 1:54:00 PM
Petroleum Fractionation by EPA Method TO-15				Batch ID: R27635		Analyst: JY
1-methyl-3-ethylbenzene	2.80	1.29		µg/m³	1	2/12/2016 4:50:00 AM
2,3-Dimethylheptane	ND	1.04		µg/m³	1	2/12/2016 4:50:00 AM
2,3-Dimethylpentane	ND	0.970		µg/m³	1	2/12/2016 4:50:00 AM
Aliphatic Hydrocarbon (EC5-8)	220	147		µg/m³	1	2/12/2016 4:50:00 AM
Aliphatic Hydrocarbon (EC9-12)	404	94.2		µg/m³	1	2/12/2016 4:50:00 AM
Aromatic Hydrocarbon (EC9-10)	27.1	4.54		µg/m³	1	2/12/2016 4:50:00 AM
Decane	3.60	1.26		µg/m³	1	2/12/2016 4:50:00 AM
Dodecane	ND	8.35		µg/m³	1	2/12/2016 4:50:00 AM
Octane	1.17	1.13		µg/m³	1	2/12/2016 4:50:00 AM
p-isopropyltoluene	ND	1.83		µg/m³	1	2/12/2016 4:50:00 AM
Undecane	ND	2.69		µg/m³	1	2/12/2016 4:50:00 AM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	2/12/2016 4:50:00 AM

Analytical Report

WO#: **1602087**
Date Reported: **2/17/2016**

CLIENT: Cardno
Project: 99CHT

Lab ID: 1602087-003 **Collection Date:** 2/9/2016
Client Sample ID: **DUP** **Matrix:** Air

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Helium by GC/TCD				Batch ID: R27616		Analyst: JY
Helium	ND	230		ppmv	1	2/16/2016 3:24:00 PM
Major Gases by EPA Method 3C				Batch ID: R27624		Analyst: JY
Carbon Dioxide	3.67	0.0500		%	1	2/10/2016 2:12:00 PM
Methane	ND	0.0500		%	1	2/10/2016 2:12:00 PM
Oxygen	20.6	0.0500		%	1	2/10/2016 2:12:00 PM
Petroleum Fractionation by EPA Method TO-15				Batch ID: R27635		Analyst: JY
1-methyl-3-ethylbenzene	1.91	1.29		µg/m³	1	2/12/2016 11:59:00 AM
2,3-Dimethylheptane	ND	1.04		µg/m³	1	2/12/2016 11:59:00 AM
2,3-Dimethylpentane	ND	0.970		µg/m³	1	2/12/2016 11:59:00 AM
Aliphatic Hydrocarbon (EC5-8)	190	147		µg/m³	1	2/12/2016 11:59:00 AM
Aliphatic Hydrocarbon (EC9-12)	920	94.2		µg/m³	1	2/12/2016 11:59:00 AM
Aromatic Hydrocarbon (EC9-10)	15.4	4.54		µg/m³	1	2/12/2016 11:59:00 AM
Decane	6.62	1.26		µg/m³	1	2/12/2016 11:59:00 AM
Dodecane	ND	8.35		µg/m³	1	2/12/2016 11:59:00 AM
Octane	ND	1.13		µg/m³	1	2/12/2016 11:59:00 AM
p-isopropyltoluene	ND	1.83		µg/m³	1	2/12/2016 11:59:00 AM
Undecane	ND	2.69		µg/m³	1	2/12/2016 11:59:00 AM
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	2/12/2016 11:59:00 AM

Analytical Report

WO#: **1602087**
Date Reported: **2/17/2016**

CLIENT: Cardno
Project: 99CHT

Lab ID: 1602087-004 **Collection Date:** 2/9/2016 9:55:00 AM
Client Sample ID: **SVS 3** **Matrix:** Air

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Helium by GC/TCD				Batch ID: R27616		Analyst: JY
Helium	ND	165		ppmv	1	2/16/2016 3:30:00 PM
Major Gases by EPA Method 3C				Batch ID: R27624		Analyst: JY
Carbon Dioxide	5.21	0.0500		%	1	2/10/2016 2:32:00 PM
Methane	ND	0.0500		%	1	2/10/2016 2:32:00 PM
Oxygen	18.7	0.0500		%	1	2/10/2016 2:32:00 PM
Petroleum Fractionation by EPA Method TO-15				Batch ID: R27635		Analyst: JY
1-methyl-3-ethylbenzene	3.98	1.29		µg/m³	1	2/12/2016 12:41:00 PM
2,3-Dimethylheptane	ND	1.04		µg/m³	1	2/12/2016 12:41:00 PM
2,3-Dimethylpentane	ND	0.970		µg/m³	1	2/12/2016 12:41:00 PM
Aliphatic Hydrocarbon (EC5-8)	249	147		µg/m³	1	2/12/2016 12:41:00 PM
Aliphatic Hydrocarbon (EC9-12)	466	94.2		µg/m³	1	2/12/2016 12:41:00 PM
Aromatic Hydrocarbon (EC9-10)	32.5	4.54		µg/m³	1	2/12/2016 12:41:00 PM
Decane	4.07	1.26		µg/m³	1	2/12/2016 12:41:00 PM
Dodecane	ND	8.35		µg/m³	1	2/12/2016 12:41:00 PM
Octane	ND	1.13		µg/m³	1	2/12/2016 12:41:00 PM
p-isopropyltoluene	ND	1.83		µg/m³	1	2/12/2016 12:41:00 PM
Undecane	ND	2.69		µg/m³	1	2/12/2016 12:41:00 PM
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	2/12/2016 12:41:00 PM

Client: Cardno
WorkOrder: 1602087
Project: 99CHT

Client Sample ID: SVS 1
Lab ID: 1602087-001A
Sample Type: Summa Canister

Date Sampled: 2/9/2016
Date Received: 2/10/2016

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,1,1-Trichloroethane	<0.200	<1.09	0.200	1.09		EPA-TO-15	02/12/2016	JY
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	02/12/2016	JY
CFC-113	<0.500	<3.83	0.500	3.83		EPA-TO-15	02/12/2016	JY
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	02/12/2016	JY
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	02/12/2016	JY
1,1-Dichloroethene (DCE)	<0.200	<0.793	0.200	0.793		EPA-TO-15	02/12/2016	JY
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	02/12/2016	JY
1,2,4-Trimethylbenzene	1.51	7.42	0.300	1.47		EPA-TO-15	02/12/2016	JY
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	02/12/2016	JY
1,2-Dichlorobenzene	<0.500	<3.01	0.500	3.01		EPA-TO-15	02/12/2016	JY
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	02/12/2016	JY
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	02/12/2016	JY
1,3,5-Trimethylbenzene	0.440	2.16	0.300	1.47		EPA-TO-15	02/12/2016	JY
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	02/12/2016	JY
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	02/12/2016	JY
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	02/12/2016	JY
1,4-Dioxane	<1.00	<3.60	1.00	3.60		EPA-TO-15	02/12/2016	JY
(MEK) 2-Butanone	<0.500	<1.47	0.500	1.47		EPA-TO-15	02/12/2016	JY
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	02/12/2016	JY
Isopropyl Alcohol	<1.00	<2.46	1.00	2.46		EPA-TO-15	02/12/2016	JY
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	02/12/2016	JY
Acetone	1.18	2.80	1.00	2.38		EPA-TO-15	02/12/2016	JY
Acrolein	<0.500	<1.15	0.500	1.15		EPA-TO-15	02/12/2016	JY
Benzene	<0.200	<0.639	0.200	0.639		EPA-TO-15	02/12/2016	JY
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	02/12/2016	JY
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	02/12/2016	JY
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	02/12/2016	JY
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	02/12/2016	JY
Carbon disulfide	4.42	13.8	1.50	4.67		EPA-TO-15	02/12/2016	JY
Carbon tetrachloride	<0.200	<1.26	0.200	1.26		EPA-TO-15	02/12/2016	JY

Client: Cardno
WorkOrder: 1602087
Project: 99CHT

Client Sample ID: SVS 1
Lab ID: 1602087-001A
Sample Type: Summa Canister

Date Sampled: 2/9/2016
Date Received: 2/10/2016

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	02/12/2016	JY
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	02/12/2016	JY
Chloroethane	<0.500	<1.32	0.500	1.32		EPA-TO-15	02/12/2016	JY
Chloroform	0.390	1.90	0.200	0.977		EPA-TO-15	02/12/2016	JY
Chloromethane	<0.500	<1.03	0.500	1.03		EPA-TO-15	02/12/2016	JY
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	02/12/2016	JY
cis-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	02/12/2016	JY
Cyclohexane	<0.200	<0.688	0.200	0.688		EPA-TO-15	02/12/2016	JY
Dichlorodifluoromethane (CFC-12)	<0.300	<1.48	0.300	1.48		EPA-TO-15	02/12/2016	JY
Dichlorotetrafluoroethane (CFC-114)	<0.500	<3.50	0.500	3.50		EPA-TO-15	02/12/2016	JY
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	02/12/2016	JY
Ethylbenzene	0.540	2.34	0.300	1.30		EPA-TO-15	02/12/2016	JY
Gasoline Range Organics	83.4	247	1.00	2.97		EPA-TO-15	02/12/2016	JY
Heptane	<0.500	<2.01	0.500	2.01		EPA-TO-15	02/12/2016	JY
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	02/12/2016	JY
m,p-Xylene	2.40	10.4	0.200	0.868		EPA-TO-15	02/12/2016	JY
Methyl methacrylate	<0.300	<1.23	0.300	1.23		EPA-TO-15	02/12/2016	JY
Methylene chloride	<1.50	<5.21	1.50	5.21		EPA-TO-15	02/12/2016	JY
Naphthalene	<0.300	<1.57	0.300	1.57		EPA-TO-15	02/12/2016	JY
Hexane	<0.200	<0.705	0.200	0.705		EPA-TO-15	02/12/2016	JY
o-Xylene	1.26	5.47	0.200	0.868		EPA-TO-15	02/12/2016	JY
4-Ethyltoluene	0.350	1.72	0.300	1.47		EPA-TO-15	02/12/2016	JY
Propylene	<0.500	<0.861	0.500	0.861		EPA-TO-15	02/12/2016	JY
Styrene	<0.300	<1.28	0.300	1.28		EPA-TO-15	02/12/2016	JY
Methyl tert-butyl ether (MTBE)	<0.200	<0.721	0.200	0.721		EPA-TO-15	02/12/2016	JY
Tetrachloroethene (PCE)	5.47	37.1	0.300	2.03		EPA-TO-15	02/12/2016	JY
Tetrahydrofuran	<0.500	<1.47	0.500	1.47		EPA-TO-15	02/12/2016	JY
Toluene	1.57	5.92	0.200	0.754		EPA-TO-15	02/12/2016	JY
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	02/12/2016	JY
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	02/12/2016	JY

Client: **Cardno**
WorkOrder: 1602087
Project: 99CHT

Client Sample ID: SVS 1
Lab ID: 1602087-001A
Sample Type: Summa Canister

Date Sampled: 2/9/2016
Date Received: 2/10/2016

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Volatile Organic Compounds by EPA Method TO-15								
	(ppbv)	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
Trichloroethene (TCE)	<0.200	<1.07	0.200	1.07		EPA-TO-15	02/12/2016	JY
Trichlorofluoromethane (CFC-11)	<0.300	<1.69	0.300	1.69		EPA-TO-15	02/12/2016	JY
Vinyl acetate	<1.00	<3.52	1.00	3.52		EPA-TO-15	02/12/2016	JY
Vinyl chloride	<0.200	<0.511	0.200	0.511		EPA-TO-15	02/12/2016	JY
Surr: 4-Bromofluorobenzene	102 %Rec	--	70-130	--		EPA-TO-15	02/12/2016	JY

Client: Cardno
WorkOrder: 1602087
Project: 99CHT

Client Sample ID: SVS 2
Lab ID: 1602087-002A
Sample Type: Summa Canister

Date Sampled: 2/9/2016
Date Received: 2/10/2016

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,1,1-Trichloroethane	<0.200	<1.09	0.200	1.09		EPA-TO-15	02/12/2016	JY
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	02/12/2016	JY
CFC-113	<0.500	<3.83	0.500	3.83		EPA-TO-15	02/12/2016	JY
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	02/12/2016	JY
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	02/12/2016	JY
1,1-Dichloroethene (DCE)	<0.200	<0.793	0.200	0.793		EPA-TO-15	02/12/2016	JY
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	02/12/2016	JY
1,2,4-Trimethylbenzene	1.39	6.83	0.300	1.47		EPA-TO-15	02/12/2016	JY
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	02/12/2016	JY
1,2-Dichlorobenzene	<0.500	<3.01	0.500	3.01		EPA-TO-15	02/12/2016	JY
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	02/12/2016	JY
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	02/12/2016	JY
1,3,5-Trimethylbenzene	0.390	1.92	0.300	1.47		EPA-TO-15	02/12/2016	JY
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	02/12/2016	JY
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	02/12/2016	JY
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	02/12/2016	JY
1,4-Dioxane	<1.00	<3.60	1.00	3.60		EPA-TO-15	02/12/2016	JY
(MEK) 2-Butanone	0.510	1.50	0.500	1.47		EPA-TO-15	02/12/2016	JY
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	02/12/2016	JY
Isopropyl Alcohol	<1.00	<2.46	1.00	2.46		EPA-TO-15	02/12/2016	JY
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	02/12/2016	JY
Acetone	1.24	2.95	1.00	2.38		EPA-TO-15	02/12/2016	JY
Acrolein	<0.500	<1.15	0.500	1.15		EPA-TO-15	02/12/2016	JY
Benzene	<0.200	<0.639	0.200	0.639		EPA-TO-15	02/12/2016	JY
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	02/12/2016	JY
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	02/12/2016	JY
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	02/12/2016	JY
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	02/12/2016	JY
Carbon disulfide	<1.50	<4.67	1.50	4.67		EPA-TO-15	02/12/2016	JY
Carbon tetrachloride	<0.200	<1.26	0.200	1.26		EPA-TO-15	02/12/2016	JY

Client: Cardno
WorkOrder: 1602087
Project: 99CHT

Client Sample ID: SVS 2
Lab ID: 1602087-002A
Sample Type: Summa Canister

Date Sampled: 2/9/2016
Date Received: 2/10/2016

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	02/12/2016	JY
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	02/12/2016	JY
Chloroethane	<0.500	<1.32	0.500	1.32		EPA-TO-15	02/12/2016	JY
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	02/12/2016	JY
Chloromethane	<0.500	<1.03	0.500	1.03		EPA-TO-15	02/12/2016	JY
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	02/12/2016	JY
cis-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	02/12/2016	JY
Cyclohexane	<0.200	<0.688	0.200	0.688		EPA-TO-15	02/12/2016	JY
Dichlorodifluoromethane (CFC-12)	<0.300	<1.48	0.300	1.48		EPA-TO-15	02/12/2016	JY
Dichlorotetrafluoroethane (CFC-114)	<0.500	<3.50	0.500	3.50		EPA-TO-15	02/12/2016	JY
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	02/12/2016	JY
Ethylbenzene	0.500	2.17	0.300	1.30		EPA-TO-15	02/12/2016	JY
Gasoline Range Organics	84.1	249	1.00	2.97		EPA-TO-15	02/12/2016	JY
Heptane	<0.500	<2.01	0.500	2.01		EPA-TO-15	02/12/2016	JY
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	02/12/2016	JY
m,p-Xylene	2.29	9.94	0.200	0.868		EPA-TO-15	02/12/2016	JY
Methyl methacrylate	<0.300	<1.23	0.300	1.23		EPA-TO-15	02/12/2016	JY
Methylene chloride	<1.50	<5.21	1.50	5.21		EPA-TO-15	02/12/2016	JY
Naphthalene	<0.300	<1.57	0.300	1.57		EPA-TO-15	02/12/2016	JY
Hexane	<0.200	<0.705	0.200	0.705		EPA-TO-15	02/12/2016	JY
o-Xylene	1.19	5.17	0.200	0.868		EPA-TO-15	02/12/2016	JY
4-Ethyltoluene	0.320	1.57	0.300	1.47		EPA-TO-15	02/12/2016	JY
Propylene	<0.500	<0.861	0.500	0.861		EPA-TO-15	02/12/2016	JY
Styrene	<0.300	<1.28	0.300	1.28		EPA-TO-15	02/12/2016	JY
Methyl tert-butyl ether (MTBE)	<0.200	<0.721	0.200	0.721		EPA-TO-15	02/12/2016	JY
Tetrachloroethene (PCE)	9.37	63.6	0.300	2.03		EPA-TO-15	02/12/2016	JY
Tetrahydrofuran	<0.500	<1.47	0.500	1.47		EPA-TO-15	02/12/2016	JY
Toluene	1.37	5.16	0.200	0.754		EPA-TO-15	02/12/2016	JY
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	02/12/2016	JY
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	02/12/2016	JY

Client: **Cardno**
WorkOrder: 1602087
Project: 99CHT

Client Sample ID: SVS 2
Lab ID: 1602087-002A
Sample Type: Summa Canister

Date Sampled: 2/9/2016
Date Received: 2/10/2016

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Volatile Organic Compounds by EPA Method TO-15								
	(ppbv)	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
Trichloroethene (TCE)	<0.200	<1.07	0.200	1.07		EPA-TO-15	02/12/2016	JY
Trichlorofluoromethane (CFC-11)	<0.300	<1.69	0.300	1.69		EPA-TO-15	02/12/2016	JY
Vinyl acetate	<1.00	<3.52	1.00	3.52		EPA-TO-15	02/12/2016	JY
Vinyl chloride	<0.200	<0.511	0.200	0.511		EPA-TO-15	02/12/2016	JY
Surr: 4-Bromofluorobenzene	101 %Rec	--	70-130	--		EPA-TO-15	02/12/2016	JY

Client: Cardno
WorkOrder: 1602087
Project: 99CHT

Client Sample ID: DUP
Lab ID: 1602087-003A
Sample Type: Summa Canister

Date Sampled: 2/9/2016
Date Received: 2/10/2016

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,1,1-Trichloroethane	<0.200	<1.09	0.200	1.09		EPA-TO-15	02/12/2016	JY
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	02/12/2016	JY
CFC-113	<0.500	<3.83	0.500	3.83		EPA-TO-15	02/12/2016	JY
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	02/12/2016	JY
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	02/12/2016	JY
1,1-Dichloroethene (DCE)	<0.200	<0.793	0.200	0.793		EPA-TO-15	02/12/2016	JY
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	02/12/2016	JY
1,2,4-Trimethylbenzene	0.880	4.33	0.300	1.47		EPA-TO-15	02/12/2016	JY
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	02/12/2016	JY
1,2-Dichlorobenzene	<0.500	<3.01	0.500	3.01		EPA-TO-15	02/12/2016	JY
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	02/12/2016	JY
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	02/12/2016	JY
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	02/12/2016	JY
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	02/12/2016	JY
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	02/12/2016	JY
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	02/12/2016	JY
1,4-Dioxane	<1.00	<3.60	1.00	3.60		EPA-TO-15	02/12/2016	JY
(MEK) 2-Butanone	<0.500	<1.47	0.500	1.47		EPA-TO-15	02/12/2016	JY
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	02/12/2016	JY
Isopropyl Alcohol	<1.00	<2.46	1.00	2.46		EPA-TO-15	02/12/2016	JY
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	02/12/2016	JY
Acetone	1.17	2.78	1.00	2.38		EPA-TO-15	02/12/2016	JY
Acrolein	<0.500	<1.15	0.500	1.15		EPA-TO-15	02/12/2016	JY
Benzene	<0.200	<0.639	0.200	0.639		EPA-TO-15	02/12/2016	JY
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	02/12/2016	JY
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	02/12/2016	JY
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	02/12/2016	JY
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	02/12/2016	JY
Carbon disulfide	<1.50	<4.67	1.50	4.67		EPA-TO-15	02/12/2016	JY
Carbon tetrachloride	<0.200	<1.26	0.200	1.26		EPA-TO-15	02/12/2016	JY

Client: Cardno
WorkOrder: 1602087
Project: 99CHT

Client Sample ID: DUP
Lab ID: 1602087-003A
Sample Type: Summa Canister

Date Sampled: 2/9/2016
Date Received: 2/10/2016

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	02/12/2016	JY
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	02/12/2016	JY
Chloroethane	<0.500	<1.32	0.500	1.32		EPA-TO-15	02/12/2016	JY
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	02/12/2016	JY
Chloromethane	<0.500	<1.03	0.500	1.03		EPA-TO-15	02/12/2016	JY
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	02/12/2016	JY
cis-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	02/12/2016	JY
Cyclohexane	<0.200	<0.688	0.200	0.688		EPA-TO-15	02/12/2016	JY
Dichlorodifluoromethane (CFC-12)	<0.300	<1.48	0.300	1.48		EPA-TO-15	02/12/2016	JY
Dichlorotetrafluoroethane (CFC-114)	<0.500	<3.50	0.500	3.50		EPA-TO-15	02/12/2016	JY
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	02/12/2016	JY
Ethylbenzene	0.340	1.48	0.300	1.30		EPA-TO-15	02/12/2016	JY
Gasoline Range Organics	148	440	1.00	2.97		EPA-TO-15	02/12/2016	JY
Heptane	<0.500	<2.01	0.500	2.01		EPA-TO-15	02/12/2016	JY
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	02/12/2016	JY
m,p-Xylene	1.61	6.99	0.200	0.868		EPA-TO-15	02/12/2016	JY
Methyl methacrylate	<0.300	<1.23	0.300	1.23		EPA-TO-15	02/12/2016	JY
Methylene chloride	<1.50	<5.21	1.50	5.21		EPA-TO-15	02/12/2016	JY
Naphthalene	0.320	1.68	0.300	1.57		EPA-TO-15	02/12/2016	JY
Hexane	<0.200	<0.705	0.200	0.705		EPA-TO-15	02/12/2016	JY
o-Xylene	0.730	3.17	0.200	0.868		EPA-TO-15	02/12/2016	JY
4-Ethyltoluene	<0.300	<1.47	0.300	1.47		EPA-TO-15	02/12/2016	JY
Propylene	<0.500	<0.861	0.500	0.861		EPA-TO-15	02/12/2016	JY
Styrene	<0.300	<1.28	0.300	1.28		EPA-TO-15	02/12/2016	JY
Methyl tert-butyl ether (MTBE)	<0.200	<0.721	0.200	0.721		EPA-TO-15	02/12/2016	JY
Tetrachloroethene (PCE)	9.57	64.9	0.300	2.03		EPA-TO-15	02/12/2016	JY
Tetrahydrofuran	<0.500	<1.47	0.500	1.47		EPA-TO-15	02/12/2016	JY
Toluene	1.03	3.88	0.200	0.754		EPA-TO-15	02/12/2016	JY
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	02/12/2016	JY
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	02/12/2016	JY

Client: **Cardno**
WorkOrder: 1602087
Project: 99CHT

Client Sample ID:	DUP	**Date Sampled:**	2/9/2016
Lab ID:	1602087-003A	**Date Received:**	2/10/2016
Sample Type:	Summa Canister		

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Trichloroethene (TCE)	<0.200	<1.07	0.200	1.07		EPA-TO-15	02/12/2016	JY
Trichlorofluoromethane (CFC-11)	<0.300	<1.69	0.300	1.69		EPA-TO-15	02/12/2016	JY
Vinyl acetate	<1.00	<3.52	1.00	3.52		EPA-TO-15	02/12/2016	JY
Vinyl chloride	<0.200	<0.511	0.200	0.511		EPA-TO-15	02/12/2016	JY
Surr: 4-Bromofluorobenzene	93.4 %Rec	--	70-130	--		EPA-TO-15	02/12/2016	JY

Client: Cardno
WorkOrder: 1602087
Project: 99CHT

Client Sample ID: SVS 3
Lab ID: 1602087-004A
Sample Type: Summa Canister

Date Sampled: 2/9/2016
Date Received: 2/10/2016

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,1,1-Trichloroethane	<0.200	<1.09	0.200	1.09		EPA-TO-15	02/12/2016	JY
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	02/12/2016	JY
CFC-113	<0.500	<3.83	0.500	3.83		EPA-TO-15	02/12/2016	JY
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	02/12/2016	JY
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	02/12/2016	JY
1,1-Dichloroethene (DCE)	<0.200	<0.793	0.200	0.793		EPA-TO-15	02/12/2016	JY
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	02/12/2016	JY
1,2,4-Trimethylbenzene	1.90	9.34	0.300	1.47		EPA-TO-15	02/12/2016	JY
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	02/12/2016	JY
1,2-Dichlorobenzene	<0.500	<3.01	0.500	3.01		EPA-TO-15	02/12/2016	JY
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	02/12/2016	JY
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	02/12/2016	JY
1,3,5-Trimethylbenzene	0.530	2.61	0.300	1.47		EPA-TO-15	02/12/2016	JY
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	02/12/2016	JY
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	02/12/2016	JY
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	02/12/2016	JY
1,4-Dioxane	<1.00	<3.60	1.00	3.60		EPA-TO-15	02/12/2016	JY
(MEK) 2-Butanone	0.580	1.71	0.500	1.47		EPA-TO-15	02/12/2016	JY
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	02/12/2016	JY
Isopropyl Alcohol	<1.00	<2.46	1.00	2.46		EPA-TO-15	02/12/2016	JY
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	02/12/2016	JY
Acetone	1.27	3.02	1.00	2.38		EPA-TO-15	02/12/2016	JY
Acrolein	<0.500	<1.15	0.500	1.15		EPA-TO-15	02/12/2016	JY
Benzene	<0.200	<0.639	0.200	0.639		EPA-TO-15	02/12/2016	JY
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	02/12/2016	JY
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	02/12/2016	JY
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	02/12/2016	JY
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	02/12/2016	JY
Carbon disulfide	4.27	13.3	1.50	4.67		EPA-TO-15	02/12/2016	JY
Carbon tetrachloride	<0.200	<1.26	0.200	1.26		EPA-TO-15	02/12/2016	JY

Client: Cardno
WorkOrder: 1602087
Project: 99CHT

Client Sample ID: SVS 3
Lab ID: 1602087-004A
Sample Type: Summa Canister

Date Sampled: 2/9/2016
Date Received: 2/10/2016

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	02/12/2016	JY
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	02/12/2016	JY
Chloroethane	<0.500	<1.32	0.500	1.32		EPA-TO-15	02/12/2016	JY
Chloroform	4.13	20.2	0.200	0.977		EPA-TO-15	02/12/2016	JY
Chloromethane	<0.500	<1.03	0.500	1.03		EPA-TO-15	02/12/2016	JY
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	02/12/2016	JY
cis-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	02/12/2016	JY
Cyclohexane	<0.200	<0.688	0.200	0.688		EPA-TO-15	02/12/2016	JY
Dichlorodifluoromethane (CFC-12)	<0.300	<1.48	0.300	1.48		EPA-TO-15	02/12/2016	JY
Dichlorotetrafluoroethane (CFC-114)	<0.500	<3.50	0.500	3.50		EPA-TO-15	02/12/2016	JY
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	02/12/2016	JY
Ethylbenzene	0.560	2.43	0.300	1.30		EPA-TO-15	02/12/2016	JY
Gasoline Range Organics	89.1	264	1.00	2.97		EPA-TO-15	02/12/2016	JY
Heptane	<0.500	<2.01	0.500	2.01		EPA-TO-15	02/12/2016	JY
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	02/12/2016	JY
m,p-Xylene	2.56	11.1	0.200	0.868		EPA-TO-15	02/12/2016	JY
Methyl methacrylate	<0.300	<1.23	0.300	1.23		EPA-TO-15	02/12/2016	JY
Methylene chloride	<1.50	<5.21	1.50	5.21		EPA-TO-15	02/12/2016	JY
Naphthalene	<0.300	<1.57	0.300	1.57		EPA-TO-15	02/12/2016	JY
Hexane	<0.200	<0.705	0.200	0.705		EPA-TO-15	02/12/2016	JY
o-Xylene	1.52	6.60	0.200	0.868		EPA-TO-15	02/12/2016	JY
4-Ethyltoluene	0.400	1.97	0.300	1.47		EPA-TO-15	02/12/2016	JY
Propylene	<0.500	<0.861	0.500	0.861		EPA-TO-15	02/12/2016	JY
Styrene	<0.300	<1.28	0.300	1.28		EPA-TO-15	02/12/2016	JY
Methyl tert-butyl ether (MTBE)	<0.200	<0.721	0.200	0.721		EPA-TO-15	02/12/2016	JY
Tetrachloroethene (PCE)	4.87	33.0	0.300	2.03		EPA-TO-15	02/12/2016	JY
Tetrahydrofuran	<0.500	<1.47	0.500	1.47		EPA-TO-15	02/12/2016	JY
Toluene	1.00	3.77	0.200	0.754		EPA-TO-15	02/12/2016	JY
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	02/12/2016	JY
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	02/12/2016	JY

Client: **Cardno**
WorkOrder: 1602087
Project: 99CHT

Client Sample ID: SVS 3
Lab ID: 1602087-004A
Sample Type: Summa Canister

Date Sampled: 2/9/2016
Date Received: 2/10/2016

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Volatile Organic Compounds by EPA Method TO-15								
	(ppbv)	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
Trichloroethene (TCE)	<0.200	<1.07	0.200	1.07		EPA-TO-15	02/12/2016	JY
Trichlorofluoromethane (CFC-11)	<0.300	<1.69	0.300	1.69		EPA-TO-15	02/12/2016	JY
Vinyl acetate	<1.00	<3.52	1.00	3.52		EPA-TO-15	02/12/2016	JY
Vinyl chloride	<0.200	<0.511	0.200	0.511		EPA-TO-15	02/12/2016	JY
Surr: 4-Bromofluorobenzene	95.6 %Rec	--	70-130	--		EPA-TO-15	02/12/2016	JY

Work Order: 1602087
CLIENT: Cardno
Project: 99CHT

QC SUMMARY REPORT

Petroleum Fractionation by EPA Method TO-15

Sample ID **LCS-R27635** SampType: **LCS** Units: **µg/m³** Prep Date: **2/11/2016** RunNo: **27635**
Client ID: **LCSW** Batch ID: **R27635** Analysis Date: **2/11/2016** SeqNo: **521541**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-methyl-3-ethylbenzene	21.7	1.29	24.58	0	88.5	70	130				
2,3-Dimethylheptane	23.2	1.04	26.23	0	88.4	70	130				
2,3-Dimethylpentane	17.8	0.970	20.49	0	86.8	70	130				
Aliphatic Hydrocarbon (EC5-8)	94.8	147	113.9	0	83.2	70	130				
Aliphatic Hydrocarbon (EC9-12)	158	94.2	177.0	0	89.3	70	130				
Aromatic Hydrocarbon (EC9-10)	112	4.54	125.8	0	88.8	70	130				
Decane	26.4	1.26	29.10	0	90.6	70	130				
Dodecane	31.6	8.35	34.83	0	90.6	70	130				
Octane	20.6	1.13	23.36	0	88.0	70	130				
p-isopropyltoluene	24.3	1.83	27.45	0	88.6	70	130				
Undecane	29.9	2.69	31.97	0	93.6	70	130				
Surr: 4-Bromofluorobenzene	9.53		10.00		95.3	70	130				

Sample ID **MB-R27635** SampType: **MBLK** Units: **µg/m³** Prep Date: **2/12/2016** RunNo: **27635**
Client ID: **MBLKW** Batch ID: **R27635** Analysis Date: **2/12/2016** SeqNo: **521542**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-methyl-3-ethylbenzene	ND	1.29									
2,3-Dimethylheptane	ND	1.04									
2,3-Dimethylpentane	ND	0.970									
Aliphatic Hydrocarbon (EC5-8)	ND	147									
Aliphatic Hydrocarbon (EC9-12)	ND	94.2									
Aromatic Hydrocarbon (EC9-10)	ND	4.54									
Decane	ND	1.26									
Dodecane	ND	8.35									
Octane	ND	1.13									
p-isopropyltoluene	ND	1.83									
Undecane	ND	2.69									
Surr: 4-Bromofluorobenzene	9.24		10.00		92.4	70	130				

Work Order: 1602087
CLIENT: Cardno
Project: 99CHT

QC SUMMARY REPORT

Petroleum Fractionation by EPA Method TO-15

Sample ID **1602087-001AREP** SampType: **REP** Units: **µg/m³** Prep Date: **2/12/2016** RunNo: **27635**
Client ID: **SVS 1** Batch ID: **R27635** Analysis Date: **2/12/2016** SeqNo: **521537**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-methyl-3-ethylbenzene	3.24	1.29						3.141	3.08	30	
2,3-Dimethylheptane	ND	1.04						0		30	
2,3-Dimethylpentane	ND	0.970						0		30	
Aliphatic Hydrocarbon (EC5-8)	194	147						207.6	6.68	30	
Aliphatic Hydrocarbon (EC9-12)	454	94.2						444.9	1.94	30	
Aromatic Hydrocarbon (EC9-10)	25.5	4.54						25.98	1.87	30	
Decane	3.72	1.26						3.949	6.06	30	
Dodecane	ND	8.35						0		30	
Octane	1.26	1.13						1.259	0	30	
p-isopropyltoluene	ND	1.83						0		30	
Undecane	ND	2.69						0		30	
Surr: 4-Bromofluorobenzene	10.3		10.00		103	70	130		0	30	

Date: *2/17/2016*

Work Order: 1602087
CLIENT: Cardno
Project: 99CHT

QC SUMMARY REPORT

Helium by GC/TCD

Sample ID	**LCS-R27616**	SampType: **LCS**			Units: **ppmv**		Prep Date: **2/16/2016**		RunNo: **27616**	
Client ID:	**LCSW**	Batch ID: **R27616**					Analysis Date: **2/16/2016**		SeqNo: **521200**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Helium	102,000	100	100,000	0	102	80	120				

Sample ID	**1602087-001AREP**	SampType: **REP**			Units: **ppmv**		Prep Date: **2/16/2016**		RunNo: **27616**	
Client ID:	**SVS 1**	Batch ID: **R27616**					Analysis Date: **2/16/2016**		SeqNo: **521196**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Helium	ND	264						0		30	

Date: *2/17/2016*

Work Order: 1602087
CLIENT: Cardno
Project: 99CHT

QC SUMMARY REPORT

Major Gases by EPA Method 3C

Sample ID **LCS-B-R27624** SampType: **LCS** Units: **%** Prep Date: **2/10/2016** RunNo: **27624**
Client ID: **LCSW** Batch ID: **R27624** Analysis Date: **2/10/2016** SeqNo: **521366**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon Dioxide	101	0.0500	100.0	0	101	70	130				
Methane	101	0.0500	100.0	0	101	70	130				
Oxygen	101	0.0500	100.0	0	101	70	130				

Sample ID **1602087-001BREP** SampType: **REP** Units: **%** Prep Date: **2/10/2016** RunNo: **27624**
Client ID: **SVS 1** Batch ID: **R27624** Analysis Date: **2/10/2016** SeqNo: **521361**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon Dioxide	3.12	0.0500						3.180	1.90	30	
Methane	ND	0.0500						0		30	
Oxygen	20.7	0.0500						20.50	0.971	30	

Work Order: 1602087
CLIENT: Cardno
Project: 99CHT

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID **LCS-R27610** SampType: **LCS** Units: **ppbv** Prep Date: **2/12/2016** RunNo: **27610**
Client ID: **LCSW** Batch ID: **R27610** Analysis Date: **2/12/2016** SeqNo: **521125**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	198	1.00	180.0	0	110	70	130				
Propylene	5.64	0.500	5.000	0	113	70	130				
Dichlorodifluoromethane (CFC-12)	4.85	0.300	5.000	0	97.0	70	130				
Chloromethane	5.08	0.500	5.000	0	102	70	130				
Dichlorotetrafluoroethane (CFC-114)	5.09	0.500	5.000	0	102	70	130				
Vinyl chloride	4.91	0.200	5.000	0	98.2	70	130				
1,3-Butadiene	4.79	0.500	5.000	0	95.8	70	130				
Bromomethane	5.01	0.500	5.000	0	100	70	130				
Trichlorofluoromethane (CFC-11)	5.11	0.300	5.000	0	102	70	130				
Chloroethane	5.10	0.500	5.000	0	102	70	130				
Acrolein	5.39	0.500	5.000	0	108	70	130				
1,1-Dichloroethene (DCE)	5.22	0.200	5.000	0	104	70	130				
Acetone	4.89	1.00	5.000	0	97.8	70	130				
Isopropyl Alcohol	5.25	1.00	5.000	0	105	70	130				
Methylene chloride	4.92	1.50	5.000	0	98.4	70	130				
Carbon disulfide	4.96	1.50	5.000	0	99.2	70	130				
trans-1,2-Dichloroethene	4.92	0.200	5.000	0	98.4	70	130				
Methyl tert-butyl ether (MTBE)	5.11	0.200	5.000	0	102	70	130				
Hexane	5.34	0.200	5.000	0	107	70	130				
1,1-Dichloroethane	4.88	0.200	5.000	0	97.6	70	130				
Vinyl acetate	5.15	1.00	5.000	0	103	70	130				
cis-1,2-Dichloroethene	5.00	0.200	5.000	0	100	70	130				
(MEK) 2-Butanone	5.17	0.500	5.000	0	103	70	130				
Ethyl acetate	5.08	1.00	5.000	0	102	70	130				
Chloroform	4.96	0.200	5.000	0	99.2	70	130				
Tetrahydrofuran	5.14	0.500	5.000	0	103	70	130				
1,1,1-Trichloroethane	4.99	0.200	5.000	0	99.8	70	130				
Carbon tetrachloride	4.94	0.200	5.000	0	98.8	70	130				
1,2-Dichloroethane	5.22	0.200	5.000	0	104	70	130				
Benzene	4.61	0.200	5.000	0	92.2	70	130				
Cyclohexane	5.03	0.200	5.000	0	101	70	130				

Work Order: 1602087
CLIENT: Cardno
Project: 99CHT

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID **LCS-R27610** SampType: **LCS** Units: **ppbv** Prep Date: **2/12/2016** RunNo: **27610**
Client ID: **LCSW** Batch ID: **R27610** Analysis Date: **2/12/2016** SeqNo: **521125**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	5.31	0.200	5.000	0	106	70	130				
1,2-Dichloropropane	5.26	0.500	5.000	0	105	70	130				
Methyl methacrylate	5.45	0.300	5.000	0	109	70	130				
Dichlorobromomethane	5.35	0.300	5.000	0	107	70	130				
1,4-Dioxane	5.57	1.00	5.000	0	111	70	130				
cis-1,3-dichloropropene	5.22	0.500	5.000	0	104	70	130				
Toluene	5.03	0.200	5.000	0	101	70	130				
trans-1,3-dichloropropene	5.32	0.500	5.000	0	106	70	130				
1,1,2-Trichloroethane (TCA)	5.29	0.500	5.000	0	106	70	130				
Tetrachloroethene (PCE)	5.45	0.300	5.000	0	109	70	130				
Dibromochloromethane	5.54	0.500	5.000	0	111	70	130				
1,2-Dibromoethane (EDB)	5.26	0.200	5.000	0	105	70	130				
Chlorobenzene	5.17	0.200	5.000	0	103	70	130				
Ethylbenzene	5.25	0.300	5.000	0	105	70	130				
m,p-Xylene	10.3	0.200	10.00	0	103	70	130				
o-Xylene	5.48	0.200	5.000	0	110	70	130				
Styrene	5.40	0.300	5.000	0	108	70	130				
Bromoform	5.45	0.200	5.000	0	109	70	130				
1,1,2,2-Tetrachloroethane	5.39	0.300	5.000	0	108	70	130				
1,3,5-Trimethylbenzene	5.47	0.300	5.000	0	109	70	130				
1,2,4-Trimethylbenzene	5.56	0.300	5.000	0	111	70	130				
Benzyl chloride	5.64	0.500	5.000	0	113	70	130				
4-Ethyltoluene	5.53	0.300	5.000	0	111	70	130				
1,3-Dichlorobenzene	5.78	0.300	5.000	0	116	70	130				
1,4-Dichlorobenzene	5.64	0.300	5.000	0	113	70	130				
1,2-Dichlorobenzene	5.78	0.500	5.000	0	116	70	130				
1,2,4-Trichlorobenzene	5.75	0.300	5.000	0	115	70	130				
Hexachlorobutadiene	5.81	1.00	5.000	0	116	70	130				
Naphthalene	5.49	0.300	5.000	0	110	70	130				
2-Hexanone	5.11	1.00	5.000	0	102	70	130				
4-Methyl-2-pentanone (MIBK)	5.36	1.00	5.000	0	107	70	130				

Work Order: 1602087
CLIENT: Cardno
Project: 99CHT

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID **LCS-R27610**	SampType: **LCS**	Units: **ppbv**	Prep Date: **2/12/2016**	RunNo: **27610**
Client ID: **LCSW**	Batch ID: **R27610**		Analysis Date: **2/12/2016**	SeqNo: **521125**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
CFC-113	5.19	0.500	5.000	0	104	70	130				
Heptane	5.28	0.500	5.000	0	106	70	130				
Surr: 4-Bromofluorobenzene	10.3		10.00		103	70	130				

Sample ID **MB-R27610**	SampType: **MBLK**	Units: **ppbv**	Prep Date: **2/12/2016**	RunNo: **27610**
Client ID: **MBLKW**	Batch ID: **R27610**		Analysis Date: **2/12/2016**	SeqNo: **521126**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	ND	1.00									
Propylene	ND	0.500									
Dichlorodifluoromethane (CFC-12)	ND	0.300									
Chloromethane	ND	0.500									
Dichlorotetrafluoroethane (CFC-114)	ND	0.500									
Vinyl chloride	ND	0.200									
1,3-Butadiene	ND	0.500									
Bromomethane	ND	0.500									
Trichlorofluoromethane (CFC-11)	ND	0.300									
Chloroethane	ND	0.500									
Acrolein	ND	0.500									
1,1-Dichloroethene (DCE)	ND	0.200									
Acetone	ND	1.00									
Isopropyl Alcohol	ND	1.00									
Methylene chloride	ND	1.50									
Carbon disulfide	ND	1.50									
trans-1,2-Dichloroethene	ND	0.200									
Methyl tert-butyl ether (MTBE)	ND	0.200									
Hexane	ND	0.200									
1,1-Dichloroethane	ND	0.200									
Vinyl acetate	ND	1.00									
cis-1,2-Dichloroethene	ND	0.200									
(MEK) 2-Butanone	ND	0.500									

Work Order: 1602087
CLIENT: Cardno
Project: 99CHT

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID **MB-R27610** SampType: **MBLK** Units: **ppbv** Prep Date: **2/12/2016** RunNo: **27610**
Client ID: **MBLKW** Batch ID: **R27610** Analysis Date: **2/12/2016** SeqNo: **521126**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethyl acetate	ND	1.00									
Chloroform	ND	0.200									
Tetrahydrofuran	ND	0.500									
1,1,1-Trichloroethane	ND	0.200									
Carbon tetrachloride	ND	0.200									
1,2-Dichloroethane	ND	0.200									
Benzene	ND	0.200									
Cyclohexane	ND	0.200									
Trichloroethene (TCE)	ND	0.200									
1,2-Dichloropropane	ND	0.500									
Methyl methacrylate	ND	0.300									
Dichlorobromomethane	ND	0.300									
1,4-Dioxane	ND	1.00									
cis-1,3-dichloropropene	ND	0.500									
Toluene	ND	0.200									
trans-1,3-dichloropropene	ND	0.500									
1,1,2-Trichloroethane (TCA)	ND	0.500									
Tetrachloroethene (PCE)	ND	0.300									
Dibromochloromethane	ND	0.500									
1,2-Dibromoethane (EDB)	ND	0.200									
Chlorobenzene	ND	0.200									
Ethylbenzene	ND	0.300									
m,p-Xylene	ND	0.200									
o-Xylene	ND	0.200									
Styrene	ND	0.300									
Bromoform	ND	0.200									
1,1,2,2-Tetrachloroethane	ND	0.300									
1,3,5-Trimethylbenzene	ND	0.300									
1,2,4-Trimethylbenzene	ND	0.300									
Benzyl chloride	ND	0.500									
4-Ethyltoluene	ND	0.300									

Work Order: 1602087
CLIENT: Cardno
Project: 99CHT

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID **MB-R27610**	SampType: **MBLK**	Units: **ppbv**	Prep Date: **2/12/2016**	RunNo: **27610**
Client ID: **MBLKW**	Batch ID: **R27610**		Analysis Date: **2/12/2016**	SeqNo: **521126**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	ND	0.300									
1,4-Dichlorobenzene	ND	0.300									
1,2-Dichlorobenzene	ND	0.500									
1,2,4-Trichlorobenzene	ND	0.300									
Hexachlorobutadiene	ND	1.00									
Naphthalene	ND	0.300									
2-Hexanone	ND	1.00									
4-Methyl-2-pentanone (MIBK)	ND	1.00									
CFC-113	ND	0.500									
Heptane	ND	0.500									
Surr: 4-Bromofluorobenzene	9.45		10.00		94.5	70	130				

Sample ID **1602087-001AREP**	SampType: **REP**	Units: **ppbv**	Prep Date: **2/12/2016**	RunNo: **27610**
Client ID: **SVS 1**	Batch ID: **R27610**		Analysis Date: **2/12/2016**	SeqNo: **521121**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics	85.2	1.00						83.42	2.08	30	
Propylene	ND	0.500						0		30	
Dichlorodifluoromethane (CFC-12)	ND	0.300						0		30	
Chloromethane	ND	0.500						0		30	
Dichlorotetrafluoroethane (CFC-114)	ND	0.500						0		30	
Vinyl chloride	ND	0.200						0		30	
1,3-Butadiene	ND	0.500						0		30	
Bromomethane	ND	0.500						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.300						0		30	
Chloroethane	ND	0.500						0		30	
Acrolein	ND	0.500						0		30	
1,1-Dichloroethene (DCE)	ND	0.200						0		30	
Acetone	1.14	1.00						1.180	3.45	30	
Isopropyl Alcohol	ND	1.00						0		30	
Methylene chloride	ND	1.50						0		30	

Work Order: 1602087
CLIENT: Cardno
Project: 99CHT

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID **1602087-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **2/12/2016** RunNo: **27610**
Client ID: **SVS 1** Batch ID: **R27610** Analysis Date: **2/12/2016** SeqNo: **521121**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon disulfide	4.09	1.50						4.420	7.76	30	
trans-1,2-Dichloroethene	ND	0.200						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.200						0		30	
Hexane	ND	0.200						0		30	
1,1-Dichloroethane	ND	0.200						0		30	
Vinyl acetate	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	0.200						0		30	
(MEK) 2-Butanone	ND	0.500						0		30	
Ethyl acetate	ND	1.00						0		30	
Chloroform	0.380	0.200						0.3900	2.60	30	
Tetrahydrofuran	ND	0.500						0		30	
1,1,1-Trichloroethane	ND	0.200						0		30	
Carbon tetrachloride	ND	0.200						0		30	
1,2-Dichloroethane	ND	0.200						0		30	
Benzene	ND	0.200						0		30	
Cyclohexane	ND	0.200						0		30	
Trichloroethene (TCE)	ND	0.200						0		30	
1,2-Dichloropropane	ND	0.500						0		30	
Methyl methacrylate	ND	0.300						0		30	
Dichlorobromomethane	ND	0.300						0		30	
1,4-Dioxane	ND	1.00						0		30	
cis-1,3-dichloropropene	ND	0.500						0		30	
Toluene	1.55	0.200						1.570	1.28	30	
trans-1,3-dichloropropene	ND	0.500						0		30	
1,1,2-Trichloroethane (TCA)	ND	0.500						0		30	
Tetrachloroethene (PCE)	5.25	0.300						5.470	4.10	30	
Dibromochloromethane	ND	0.500						0		30	
1,2-Dibromoethane (EDB)	ND	0.200						0		30	
Chlorobenzene	ND	0.200						0		30	
Ethylbenzene	0.540	0.300						0.5400	0	30	
m,p-Xylene	2.39	0.200						2.400	0.418	30	

Work Order: 1602087
CLIENT: Cardno
Project: 99CHT

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID **1602087-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **2/12/2016** RunNo: **27610**
Client ID: **SVS 1** Batch ID: **R27610** Analysis Date: **2/12/2016** SeqNo: **521121**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
o-Xylene	1.33	0.200						1.260	5.41	30	
Styrene	ND	0.300						0		30	
Bromoform	ND	0.200						0		30	
1,1,2,2-Tetrachloroethane	ND	0.300						0		30	
1,3,5-Trimethylbenzene	0.420	0.300						0.4400	4.65	30	
1,2,4-Trimethylbenzene	1.46	0.300						1.510	3.37	30	
Benzyl chloride	ND	0.500						0		30	
4-Ethyltoluene	0.350	0.300						0.3500	0	30	
1,3-Dichlorobenzene	ND	0.300						0		30	
1,4-Dichlorobenzene	ND	0.300						0		30	
1,2-Dichlorobenzene	ND	0.500						0		30	
1,2,4-Trichlorobenzene	ND	0.300						0		30	
Hexachlorobutadiene	ND	1.00						0		30	
Naphthalene	ND	0.300						0		30	
2-Hexanone	ND	1.00						0		30	
4-Methyl-2-pentanone (MIBK)	ND	1.00						0		30	
CFC-113	ND	0.500						0		30	
Heptane	ND	0.500						0		30	
Surr: 4-Bromofluorobenzene	10.3		10.00		103	70	130		0		

Sample Log-In Check List

Client Name:	**CARDNO**	Work Order Number:	**1602087**
Logged by:	**Clare Griggs**	Date Received:	**2/10/2016 8:30:00 AM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Coolers are present?	Yes ☐	No ☑	NA ☐
		Air Samples		
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Required ☑
6.	Was an attempt made to cool the samples?	Yes ☐	No ☐	NA ☑
7.	Were all items received at a temperature of >0°C to 10.0°C *	Yes ☐	No ☐	NA ☑
8.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
10.	Are samples properly preserved?	Yes ☑	No ☐	
11.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
14.	Does paperwork match bottle labels?	Yes ☑	No ☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
16.	Is it clear what analyses were requested?	Yes ☑	No ☐	
17.	Were all holding times able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes ☑	No ☐	NA ☐

Person Notified:	Robert Thompson	Date	2/10/2016
By Whom:	Erica Silva	Via:	☑ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	Analyses confirmation		
Client Instructions:	VOCs, APH, Major Gases, Helium. See email.		

19. Additional remarks:

Item Information

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical

Air Chain of Custody Record - Whole Air Sample

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (Internal): 1602087

Date: 2/9/16

Page: 1 of: 1

Client: Cardno
Address: 851 228th Ave, Suite 200
City, State, Zip: Sammamish, WA 98074
Telephone: 425-295-0104 Fax:

Project Name: 99CHT
Project No: 03179 Collected by: RT & AM
Location: 7323 Aurora Ave N. Seattle, WA
Reports To (PM): Ryan Pozzuto
Email (PM): ryan.pozzuto@cardno.com

* Gas Matrix Codes: I = Indoor SS = Subslab L = Landfill SG = Soil Gas M = Plume Mapping G = Fuel Gas Quality L = LEED (Consult Client Services)

** Container Codes: 6L = Six Liter Canister (Summa) TB = Tedlar Bag 1V = 1 Liter Bottle Vac MC = 1 Liter MiniCan HP = High Pressure Cylinder H = Glass Headspace Jar

	Sample Name	Canister / Flow Reg Serial #	Sample Date & Time	Gas Matrix Code *	Anticipated Kill Time	Sample Volume	Container Type **	Internal: Evacuation Pressure (mtorr)	Internal: Pressure at Time of Pick-up (" Hg)	Internal: Equipment Certification Code	Field Initial Sample Pressure (" Hg)	Field Final Sample Pressure (" Hg)	Analysis Requested	Internal: Receip Date	Internal: Final Pressure ("Hg)
1	SVS 1	12670	2/9/16	SG	70min	6L	Summa	10 mtorr			-30	-5		2/10/16	-4
		FR70-05	1140					2/3/16 16:00			1140	1255			
2	SVS2	13965	2/9/16	SG	70min	6L	Summa	10 mtorr			-30	-5		2/10/16	-6
		FR70-09	1400					2/3/16 16:00			1400	1405			
3	DUP	15895	2/9/16	SG	70min	6L	Summa	10 mtorr			-30	-5		2/10/16	-6
		FR70-14						2/3/16 16:00							
4	SVS3	15895	2/9/16	SG	70min	6L	Summa	10 mtorr			-30	-5		2/10/16	-6
		FR70-15	1105					2/3/16 16:00			0955	1105			
5		15898						10 mtorr							
								2/3/16 16:00							

Rental Equipment (Circle all that apply): Manifold Mini-Pump Fittings Tedlar Bags Canisters Flow Controllers Helium Cylinder Flourinated Tubing Wrench

Condition:

Seals Intact: Y N N/A

Turn-around times for samples received after 4:00pm will begin on the following business day

Special Remarks: Tedlar bags included with all samples.

Relinquished: [signature] Date/Time: 2/10/16 0830 Received: [signature] Date/Time: 2/10/16 0830

Relinquished: Date/Time: Received: Date/Time:

TAT → STD Rush (specify)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-97507-1
TestAmerica Sample Delivery Group: 31379
Client Project/Site: 99CHT
Revision: 1

For:
Cardno, Inc
801 Second Ave
Suite 700
Seattle, Washington 98104

Attn: Ryan Pozzuto

Authorized for release by:
4/12/2016 12:02:54 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Table of Contents

Sample Summary

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-97507-1	W-5-MW1	Water	02/10/16 13:20	02/12/16 09:35
490-97507-2	W-4-MW2	Water	02/10/16 15:00	02/12/16 09:35
490-97507-3	W-6-MW3	Water	02/10/16 11:30	02/12/16 09:35
490-97507-4	W-8-MW4	Water	02/10/16 10:00	02/12/16 09:35
490-97507-5	W-6-MW5	Water	02/10/16 16:00	02/12/16 09:35
490-97507-6	W-7-MW6	Water	02/11/16 09:45	02/12/16 09:35

Job ID: 490-97507-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-97507-1

Comments
Revised Report
Report revised to add 1-methylnaphthalene results.
Supersedes report dated 3-2-16.

Receipt
The samples were received on 2/12/2016 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.2º C, 1.1º C and 1.8º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 590-5508 recovered above the upper control limit for Bromomethane, Methylene Chloride and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: W-5-MW1 (490-97507-1) and W-6-MW3 (490-97507-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA
Method(s) NWTPH-Gx: The following sample was unable to be have it associated matrix spike / matrix spike duplicate (MS/MSD) prepared and/or analyzed due to instrumentation issues : (LCS 490-318621/26).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) NWTPH-Dx: The following samples contained a hydrocarbon pattern for analyte C10-C24 that most closely resembles a Gasoline product used by the laboratory for quantitative purposes: W-4-MW2 (490-97507-2) and W-6-MW3 (490-97507-3).

Method(s) 8082A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-319337 and analytical batch 490-320027.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Client Sample ID: W-5-MW1
Date Collected: 02/10/16 13:20
Date Received: 02/12/16 09:35

Lab Sample ID: 490-97507-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.200		ug/L			02/23/16 20:07	1
Toluene	ND		1.00		ug/L			02/23/16 20:07	1
Ethylbenzene	**1.59**		1.00		ug/L			02/23/16 20:07	1
Xylenes, Total	**10.9**		3.00		ug/L			02/23/16 20:07	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/23/16 20:07	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			02/23/16 20:07	1
1,2-Dichloroethane	ND		1.00		ug/L			02/23/16 20:07	1
Hexane	ND		1.00		ug/L			02/23/16 20:07	1
Naphthalene	ND		2.00		ug/L			02/23/16 20:07	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			02/23/16 20:07	1
1,1,1-Trichloroethane	ND		1.00		ug/L			02/23/16 20:07	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			02/23/16 20:07	1
1,1,2-Trichloroethane	ND		1.00		ug/L			02/23/16 20:07	1
1,1-Dichloroethane	ND		1.00		ug/L			02/23/16 20:07	1
1,1-Dichloroethene	ND		1.00		ug/L			02/23/16 20:07	1
1,1-Dichloropropene	ND		1.00		ug/L			02/23/16 20:07	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			02/23/16 20:07	1
1,2,3-Trichloropropane	ND		1.00		ug/L			02/23/16 20:07	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			02/23/16 20:07	1
1,2-Dibromo-3-Chloropropane	ND		5.00		ug/L			02/23/16 20:07	1
1,2-Dichlorobenzene	ND		1.00		ug/L			02/23/16 20:07	1
1,2-Dichloropropane	ND		1.00		ug/L			02/23/16 20:07	1
2,2-Dichloropropane	ND		1.00		ug/L			02/23/16 20:07	1
2-Chlorotoluene	ND		1.00		ug/L			02/23/16 20:07	1
4-Chlorotoluene	ND		1.00		ug/L			02/23/16 20:07	1
Bromobenzene	ND		1.00		ug/L			02/23/16 20:07	1
Bromochloromethane	ND		1.00		ug/L			02/23/16 20:07	1
Bromodichloromethane	ND		1.00		ug/L			02/23/16 20:07	1
Bromoform	ND		1.00		ug/L			02/23/16 20:07	1
Bromomethane	ND		5.00		ug/L			02/23/16 20:07	1
Carbon tetrachloride	ND		1.00		ug/L			02/23/16 20:07	1
Chlorobenzene	ND		1.00		ug/L			02/23/16 20:07	1
Chloroform	ND		1.00		ug/L			02/23/16 20:07	1
Chloromethane	ND		3.00		ug/L			02/23/16 20:07	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			02/23/16 20:07	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			02/23/16 20:07	1
Chlorodibromomethane	ND		1.00		ug/L			02/23/16 20:07	1
Dibromomethane	ND		1.00		ug/L			02/23/16 20:07	1
Methylene Chloride	ND		5.00		ug/L			02/23/16 20:07	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			02/23/16 20:07	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			02/23/16 20:07	1
Trichloroethene	ND		1.00		ug/L			02/23/16 20:07	1
Trichlorofluoromethane	ND		1.00		ug/L			02/23/16 20:07	1
Vinyl chloride	ND		0.200		ug/L			02/23/16 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 140*		*02/23/16 20:07*	*1*
4-Bromofluorobenzene (Surr)	*100*		*68.7 - 141*		*02/23/16 20:07*	*1*
Dibromofluoromethane (Surr)	*113*		*71.2 - 143*		*02/23/16 20:07*	*1*

Client Sample ID: W-5-MW1

Date Collected: 02/10/16 13:20
Date Received: 02/12/16 09:35

Lab Sample ID: 490-97507-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*74.1 - 135*		*02/23/16 20:07*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:02	1
Benzo[a]anthracene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:02	1
Benzo[a]pyrene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:02	1
Benzo[b]fluoranthene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:02	1
Benzo[k]fluoranthene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:02	1
Chrysene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:02	1
Dibenz(a,h)anthracene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:02	1
Indeno[1,2,3-cd]pyrene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:02	1
1-Methylnaphthalene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*29 - 120*	*02/17/16 09:26*	*02/22/16 21:02*	*1*
Nitrobenzene-d5	*67*		*27 - 120*	*02/17/16 09:26*	*02/22/16 21:02*	*1*
Terphenyl-d14	*70*		*13 - 120*	*02/17/16 09:26*	*02/22/16 21:02*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**138**		100		ug/L			02/22/16 04:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*89*		*50 - 150*		*02/22/16 04:50*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.500		ug/L		02/23/16 20:04	02/26/16 14:25	1
PCB-1221	ND		0.500		ug/L		02/23/16 20:04	02/26/16 14:25	1
PCB-1232	ND		0.500		ug/L		02/23/16 20:04	02/26/16 14:25	1
PCB-1242	ND		0.500		ug/L		02/23/16 20:04	02/26/16 14:25	1
PCB-1248	ND		0.500		ug/L		02/23/16 20:04	02/26/16 14:25	1
PCB-1254	ND		0.500		ug/L		02/23/16 20:04	02/26/16 14:25	1
PCB-1260	ND		0.500		ug/L		02/23/16 20:04	02/26/16 14:25	1
Polychlorinated biphenyls, Total	ND		0.500		ug/L		02/23/16 20:04	02/26/16 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*51*		*10 - 150*	*02/23/16 20:04*	*02/26/16 14:25*	*1*
Tetrachloro-m-xylene	*80*		*10 - 150*	*02/23/16 20:04*	*02/26/16 14:25*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		95.2		ug/L		02/18/16 11:59	02/27/16 17:31	1
C24-C40	ND		95.2		ug/L		02/18/16 11:59	02/27/16 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*58*		*50 - 150*	*02/18/16 11:59*	*02/27/16 17:31*	*1*

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Client Sample ID: W-5-MW1
Date Collected: 02/10/16 13:20
Date Received: 02/12/16 09:35

Lab Sample ID: 490-97507-1
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**5.30**		5.00		ug/L		02/17/16 09:52	02/18/16 18:16	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		02/18/16 14:59	02/19/16 20:06	1

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Client Sample ID: W-4-MW2

Date Collected: 02/10/16 15:00
Date Received: 02/12/16 09:35

Lab Sample ID: 490-97507-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.844		0.200		ug/L			02/23/16 20:28	1
Toluene	6.73		1.00		ug/L			02/23/16 20:28	1
Ethylbenzene	26.1		1.00		ug/L			02/23/16 20:28	1
Xylenes, Total	346		3.00		ug/L			02/23/16 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 140*		*02/23/16 20:28*	*1*
4-Bromofluorobenzene (Surr)	*92*		*68.7 - 141*		*02/23/16 20:28*	*1*
Dibromofluoromethane (Surr)	*110*		*71.2 - 143*		*02/23/16 20:28*	*1*
Toluene-d8 (Surr)	*100*		*74.1 - 135*		*02/23/16 20:28*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	2900		100		ug/L			02/22/16 06:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*		*02/22/16 06:32*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	589		95.2		ug/L		02/18/16 11:59	02/27/16 17:48	1
C24-C40	ND		95.2		ug/L		02/18/16 11:59	02/27/16 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*52*		*50 - 150*	*02/18/16 11:59*	*02/27/16 17:48*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		02/17/16 09:52	02/18/16 18:28	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		02/18/16 14:59	02/19/16 20:10	1

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Client Sample ID: W-6-MW3
Date Collected: 02/10/16 11:30
Date Received: 02/12/16 09:35

Lab Sample ID: 490-97507-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.200		ug/L			02/23/16 20:48	1
Toluene	**1.05**		1.00		ug/L			02/23/16 20:48	1
Ethylbenzene	**99.4**		1.00		ug/L			02/23/16 20:48	1
Xylenes, Total	**919**		3.00		ug/L			02/23/16 20:48	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/23/16 20:48	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			02/23/16 20:48	1
1,2-Dichloroethane	ND		1.00		ug/L			02/23/16 20:48	1
Hexane	**3.31**		1.00		ug/L			02/23/16 20:48	1
Naphthalene	**89.0**		40.0		ug/L			02/24/16 15:22	20
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			02/23/16 20:48	1
1,1,1-Trichloroethane	ND		1.00		ug/L			02/23/16 20:48	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			02/23/16 20:48	1
1,1,2-Trichloroethane	ND		1.00		ug/L			02/23/16 20:48	1
1,1-Dichloroethane	ND		1.00		ug/L			02/23/16 20:48	1
1,1-Dichloroethene	ND		1.00		ug/L			02/23/16 20:48	1
1,1-Dichloropropene	ND		1.00		ug/L			02/23/16 20:48	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			02/23/16 20:48	1
1,2,3-Trichloropropane	**13.0**		1.00		ug/L			02/23/16 20:48	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			02/23/16 20:48	1
1,2-Dibromo-3-Chloropropane	**9.34**		5.00		ug/L			02/23/16 20:48	1
1,2-Dichlorobenzene	ND		1.00		ug/L			02/23/16 20:48	1
1,2-Dichloropropane	ND		1.00		ug/L			02/23/16 20:48	1
2,2-Dichloropropane	ND		1.00		ug/L			02/23/16 20:48	1
2-Chlorotoluene	ND		1.00		ug/L			02/23/16 20:48	1
4-Chlorotoluene	ND		1.00		ug/L			02/23/16 20:48	1
Bromobenzene	ND		1.00		ug/L			02/23/16 20:48	1
Bromochloromethane	ND		1.00		ug/L			02/23/16 20:48	1
Bromodichloromethane	ND		1.00		ug/L			02/23/16 20:48	1
Bromoform	ND		1.00		ug/L			02/23/16 20:48	1
Bromomethane	ND		5.00		ug/L			02/23/16 20:48	1
Carbon tetrachloride	ND		1.00		ug/L			02/23/16 20:48	1
Chlorobenzene	ND		1.00		ug/L			02/23/16 20:48	1
Chloroform	**6.09**		1.00		ug/L			02/23/16 20:48	1
Chloromethane	ND		3.00		ug/L			02/23/16 20:48	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			02/23/16 20:48	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			02/23/16 20:48	1
Chlorodibromomethane	ND		1.00		ug/L			02/23/16 20:48	1
Dibromomethane	ND		1.00		ug/L			02/23/16 20:48	1
Methylene Chloride	ND		5.00		ug/L			02/23/16 20:48	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			02/23/16 20:48	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			02/23/16 20:48	1
Trichloroethene	ND		1.00		ug/L			02/23/16 20:48	1
Trichlorofluoromethane	ND		1.00		ug/L			02/23/16 20:48	1
Vinyl chloride	ND		0.200		ug/L			02/23/16 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 140*		*02/23/16 20:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 140*		*02/24/16 15:22*	*20*
4-Bromofluorobenzene (Surr)	*85*		*68.7 - 141*		*02/23/16 20:48*	*1*

Client Sample ID: W-6-MW3

Date Collected: 02/10/16 11:30
Date Received: 02/12/16 09:35

Lab Sample ID: 490-97507-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*94*		*68.7 - 141*		*02/24/16 15:22*	*20*
Dibromofluoromethane (Surr)	*104*		*71.2 - 143*		*02/23/16 20:48*	*1*
Dibromofluoromethane (Surr)	*110*		*71.2 - 143*		*02/24/16 15:22*	*20*
Toluene-d8 (Surr)	*99*		*74.1 - 135*		*02/23/16 20:48*	*1*
Toluene-d8 (Surr)	*103*		*74.1 - 135*		*02/24/16 15:22*	*20*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**65.2**		0.495		ug/L		02/17/16 09:26	02/24/16 14:42	5
Benzo[a]anthracene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:26	1
Benzo[a]pyrene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:26	1
Benzo[b]fluoranthene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:26	1
Benzo[k]fluoranthene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:26	1
Chrysene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:26	1
Dibenz(a,h)anthracene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:26	1
Indeno[1,2,3-cd]pyrene	ND		0.0990		ug/L		02/17/16 09:26	02/22/16 21:26	1
1-Methylnaphthalene	**44.6**		0.495		ug/L		02/17/16 09:26	02/24/16 14:42	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	*68*		*29 - 120*	*02/17/16 09:26*	*02/22/16 21:26*	*1*
Nitrobenzene-d5	*63*		*27 - 120*	*02/17/16 09:26*	*02/22/16 21:26*	*1*
Terphenyl-d14	*76*		*13 - 120*	*02/17/16 09:26*	*02/22/16 21:26*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**8540**		100		ug/L			02/22/16 07:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	*84*		*50 - 150*		*02/22/16 07:23*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.481		ug/L		02/23/16 20:04	02/26/16 14:41	1
PCB-1221	ND		0.481		ug/L		02/23/16 20:04	02/26/16 14:41	1
PCB-1232	ND		0.481		ug/L		02/23/16 20:04	02/26/16 14:41	1
PCB-1242	ND		0.481		ug/L		02/23/16 20:04	02/26/16 14:41	1
PCB-1248	ND		0.481		ug/L		02/23/16 20:04	02/26/16 14:41	1
PCB-1254	ND		0.481		ug/L		02/23/16 20:04	02/26/16 14:41	1
PCB-1260	ND		0.481		ug/L		02/23/16 20:04	02/26/16 14:41	1
Polychlorinated biphenyls, Total	ND		0.481		ug/L		02/23/16 20:04	02/26/16 14:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*62*		*10 - 150*	*02/23/16 20:04*	*02/26/16 14:41*	*1*
Tetrachloro-m-xylene	*72*		*10 - 150*	*02/23/16 20:04*	*02/26/16 14:41*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**1780**		95.2		ug/L		02/18/16 11:59	02/27/16 18:04	1
C24-C40	ND		95.2		ug/L		02/18/16 11:59	02/27/16 18:04	1

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Client Sample ID: W-6-MW3
Date Collected: 02/10/16 11:30
Date Received: 02/12/16 09:35

Lab Sample ID: 490-97507-3
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*69*		*50 - 150*	*02/18/16 11:59*	*02/27/16 18:04*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**6.10**		5.00		ug/L		02/17/16 09:52	02/18/16 18:33	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		02/18/16 14:59	02/19/16 20:14	1

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Client Sample ID: W-8-MW4
Date Collected: 02/10/16 10:00
Date Received: 02/12/16 09:35

Lab Sample ID: 490-97507-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.200		ug/L			02/23/16 21:09	1
Toluene	ND		1.00		ug/L			02/23/16 21:09	1
Ethylbenzene	ND		1.00		ug/L			02/23/16 21:09	1
Xylenes, Total	ND		3.00		ug/L			02/23/16 21:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 140*		*02/23/16 21:09*	*1*
4-Bromofluorobenzene (Surr)	*103*		*68.7 - 141*		*02/23/16 21:09*	*1*
Dibromofluoromethane (Surr)	*105*		*71.2 - 143*		*02/23/16 21:09*	*1*
Toluene-d8 (Surr)	*99*		*74.1 - 135*		*02/23/16 21:09*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			02/22/16 08:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*50 - 150*		*02/22/16 08:13*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		95.2		ug/L		02/18/16 11:59	02/27/16 18:21	1
C24-C40	ND		95.2		ug/L		02/18/16 11:59	02/27/16 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*68*		*50 - 150*	*02/18/16 11:59*	*02/27/16 18:21*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		02/17/16 09:52	02/18/16 18:37	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		02/18/16 14:59	02/19/16 20:19	1

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Client Sample ID: W-6-MW5
Date Collected: 02/10/16 16:00
Date Received: 02/12/16 09:35

Lab Sample ID: 490-97507-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.200		ug/L			02/23/16 21:30	1
Toluene	ND		1.00		ug/L			02/23/16 21:30	1
Ethylbenzene	ND		1.00		ug/L			02/23/16 21:30	1
Xylenes, Total	ND		3.00		ug/L			02/23/16 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 140*		*02/23/16 21:30*	*1*
4-Bromofluorobenzene (Surr)	*105*		*68.7 - 141*		*02/23/16 21:30*	*1*
Dibromofluoromethane (Surr)	*104*		*71.2 - 143*		*02/23/16 21:30*	*1*
Toluene-d8 (Surr)	*98*		*74.1 - 135*		*02/23/16 21:30*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			02/22/16 09:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*89*		*50 - 150*		*02/22/16 09:04*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		95.2		ug/L		02/18/16 11:59	02/27/16 18:37	1
C24-C40	ND		95.2		ug/L		02/18/16 11:59	02/27/16 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*56*		*50 - 150*	*02/18/16 11:59*	*02/27/16 18:37*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		02/17/16 09:52	02/18/16 18:41	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		02/19/16 09:52	02/22/16 18:10	1

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Client Sample ID: W-7-MW6
Date Collected: 02/11/16 09:45
Date Received: 02/12/16 09:35

Lab Sample ID: 490-97507-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.200		ug/L			02/23/16 21:51	1
Toluene	ND		1.00		ug/L			02/23/16 21:51	1
Ethylbenzene	ND		1.00		ug/L			02/23/16 21:51	1
Xylenes, Total	ND		3.00		ug/L			02/23/16 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 140*		*02/23/16 21:51*	*1*
4-Bromofluorobenzene (Surr)	*99*		*68.7 - 141*		*02/23/16 21:51*	*1*
Dibromofluoromethane (Surr)	*109*		*71.2 - 143*		*02/23/16 21:51*	*1*
Toluene-d8 (Surr)	*92*		*74.1 - 135*		*02/23/16 21:51*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			02/22/16 09:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*50 - 150*		*02/22/16 09:55*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 590-5508/27
Matrix: Water
Analysis Batch: 5508

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.200		ug/L			02/23/16 19:46	1
Toluene	ND		1.00		ug/L			02/23/16 19:46	1
Ethylbenzene	ND		1.00		ug/L			02/23/16 19:46	1
Xylenes, Total	ND		3.00		ug/L			02/23/16 19:46	1
Methyl tert-butyl ether	ND		1.00		ug/L			02/23/16 19:46	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			02/23/16 19:46	1
1,2-Dichloroethane	ND		1.00		ug/L			02/23/16 19:46	1
Hexane	ND		1.00		ug/L			02/23/16 19:46	1
Naphthalene	ND		2.00		ug/L			02/23/16 19:46	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			02/23/16 19:46	1
1,1,1-Trichloroethane	ND		1.00		ug/L			02/23/16 19:46	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			02/23/16 19:46	1
1,1,2-Trichloroethane	ND		1.00		ug/L			02/23/16 19:46	1
1,1-Dichloroethane	ND		1.00		ug/L			02/23/16 19:46	1
1,1-Dichloroethene	ND		1.00		ug/L			02/23/16 19:46	1
1,1-Dichloropropene	ND		1.00		ug/L			02/23/16 19:46	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			02/23/16 19:46	1
1,2,3-Trichloropropane	ND		1.00		ug/L			02/23/16 19:46	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			02/23/16 19:46	1
1,2-Dibromo-3-Chloropropane	ND		5.00		ug/L			02/23/16 19:46	1
1,2-Dichlorobenzene	ND		1.00		ug/L			02/23/16 19:46	1
1,2-Dichloropropane	ND		1.00		ug/L			02/23/16 19:46	1
2,2-Dichloropropane	ND		1.00		ug/L			02/23/16 19:46	1
2-Chlorotoluene	ND		1.00		ug/L			02/23/16 19:46	1
4-Chlorotoluene	ND		1.00		ug/L			02/23/16 19:46	1
Bromobenzene	ND		1.00		ug/L			02/23/16 19:46	1
Bromochloromethane	ND		1.00		ug/L			02/23/16 19:46	1
Bromodichloromethane	ND		1.00		ug/L			02/23/16 19:46	1
Bromoform	ND		1.00		ug/L			02/23/16 19:46	1
Bromomethane	ND		5.00		ug/L			02/23/16 19:46	1
Carbon tetrachloride	ND		1.00		ug/L			02/23/16 19:46	1
Chlorobenzene	ND		1.00		ug/L			02/23/16 19:46	1
Chloroform	ND		1.00		ug/L			02/23/16 19:46	1
Chloromethane	ND		3.00		ug/L			02/23/16 19:46	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			02/23/16 19:46	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			02/23/16 19:46	1
Chlorodibromomethane	ND		1.00		ug/L			02/23/16 19:46	1
Dibromomethane	ND		1.00		ug/L			02/23/16 19:46	1
Methylene Chloride	ND		5.00		ug/L			02/23/16 19:46	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			02/23/16 19:46	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			02/23/16 19:46	1
Trichloroethene	ND		1.00		ug/L			02/23/16 19:46	1
Trichlorofluoromethane	ND		1.00		ug/L			02/23/16 19:46	1
Vinyl chloride	ND		0.200		ug/L			02/23/16 19:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 140*		*02/23/16 19:46*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 590-5508/27
Matrix: Water
Analysis Batch: 5508

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		68.7 - 141		02/23/16 19:46	1
Dibromofluoromethane (Surr)	116		71.2 - 143		02/23/16 19:46	1
Toluene-d8 (Surr)	97		74.1 - 135		02/23/16 19:46	1

Lab Sample ID: LCS 590-5508/1026
Matrix: Water
Analysis Batch: 5508

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	10.51		ug/L		105	80 - 140
Toluene	10.0	9.926		ug/L		99	80 - 123
Ethylbenzene	10.0	9.709		ug/L		97	80 - 120
Methyl tert-butyl ether	10.0	9.823		ug/L		98	80.1 - 128
1,2-Dibromoethane (EDB)	10.0	9.731		ug/L		97	70 - 130
1,2-Dichloroethane	10.0	10.77		ug/L		108	63.9 - 144
Hexane	10.0	9.566		ug/L		96	60 - 140
Naphthalene	10.0	8.786		ug/L		88	62.8 - 132
1,1,1,2-Tetrachloroethane	10.0	10.15		ug/L		101	60 - 140
1,1,1-Trichloroethane	10.0	11.58		ug/L		116	60 - 140
1,1,2,2-Tetrachloroethane	10.0	9.295		ug/L		93	60 - 140
1,1,2-Trichloroethane	10.0	10.10		ug/L		101	60 - 140
1,1-Dichloroethane	10.0	10.93		ug/L		109	60 - 140
1,1-Dichloroethene	10.0	11.44		ug/L		114	78.1 - 155
1,1-Dichloropropene	10.1	10.27		ug/L		102	60 - 140
1,2,3-Trichlorobenzene	10.0	8.672		ug/L		87	60 - 140
1,2,3-Trichloropropane	10.0	9.961		ug/L		100	60 - 140
1,2,4-Trichlorobenzene	10.0	9.649		ug/L		96	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.889		ug/L		89	60 - 140
1,2-Dichlorobenzene	10.0	9.842		ug/L		98	60 - 140
1,2-Dichloropropane	10.0	11.03		ug/L		110	60 - 140
2,2-Dichloropropane	10.0	11.63		ug/L		116	60 - 140
2-Chlorotoluene	10.0	9.850		ug/L		98	60 - 140
4-Chlorotoluene	10.0	9.049		ug/L		90	60 - 140
Bromobenzene	10.0	9.341		ug/L		93	60 - 140
Bromochloromethane	10.0	10.90		ug/L		109	60 - 140
Bromodichloromethane	10.0	10.89		ug/L		109	60 - 140
Bromoform	10.0	8.075		ug/L		81	60 - 140
Bromomethane	10.0	13.81		ug/L		138	60 - 140
Carbon tetrachloride	10.0	11.21		ug/L		112	60 - 140
Chlorobenzene	10.0	9.777		ug/L		98	79.2 - 125
Chloroform	10.0	11.43		ug/L		114	60 - 140
Chloromethane	10.0	9.863		ug/L		99	60 - 140
cis-1,2-Dichloroethene	10.0	10.58		ug/L		106	60 - 140
cis-1,3-Dichloropropene	10.0	9.927		ug/L		99	60 - 140
Chlorodibromomethane	10.0	9.808		ug/L		98	60 - 140
Dibromomethane	10.0	10.95		ug/L		109	60 - 140
Methylene Chloride	10.0	12.64		ug/L		126	60 - 140
trans-1,2-Dichloroethene	10.0	10.53		ug/L		105	60 - 140

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 590-5508/1026
Matrix: Water
Analysis Batch: 5508

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	10.0	9.716		ug/L		97	60 - 140
Trichloroethene	10.0	10.20		ug/L		102	74.8 - 123
Trichlorofluoromethane	10.0	12.19		ug/L		122	60 - 140
Vinyl chloride	9.97	11.29		ug/L		113	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 140*
4-Bromofluorobenzene (Surr)	*94*		*68.7 - 141*
Dibromofluoromethane (Surr)	*107*		*71.2 - 143*
Toluene-d8 (Surr)	*98*		*74.1 - 135*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 490-318014/1-A
Matrix: Water
Analysis Batch: 318799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 318014

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.100		ug/L		02/17/16 09:26	02/22/16 17:11	1
Benzo[a]anthracene	ND		0.100		ug/L		02/17/16 09:26	02/22/16 17:11	1
Benzo[a]pyrene	ND		0.100		ug/L		02/17/16 09:26	02/22/16 17:11	1
Benzo[b]fluoranthene	ND		0.100		ug/L		02/17/16 09:26	02/22/16 17:11	1
Benzo[k]fluoranthene	ND		0.100		ug/L		02/17/16 09:26	02/22/16 17:11	1
Chrysene	ND		0.100		ug/L		02/17/16 09:26	02/22/16 17:11	1
Dibenz(a,h)anthracene	ND		0.100		ug/L		02/17/16 09:26	02/22/16 17:11	1
Indeno[1,2,3-cd]pyrene	ND		0.100		ug/L		02/17/16 09:26	02/22/16 17:11	1
1-Methylnaphthalene	ND		0.100		ug/L		02/17/16 09:26	02/22/16 17:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*65*		*29 - 120*	*02/17/16 09:26*	*02/22/16 17:11*	*1*
Nitrobenzene-d5	*58*		*27 - 120*	*02/17/16 09:26*	*02/22/16 17:11*	*1*
Terphenyl-d14	*86*		*13 - 120*	*02/17/16 09:26*	*02/22/16 17:11*	*1*

Lab Sample ID: LCS 490-318014/2-A
Matrix: Water
Analysis Batch: 318799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 318014

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	1.00	0.6951		ug/L		70	31 - 120
Benzo[a]anthracene	1.00	0.7308		ug/L		73	57 - 120
Benzo[a]pyrene	1.00	0.7405		ug/L		74	57 - 124
Benzo[b]fluoranthene	1.00	0.6533		ug/L		65	51 - 125
Benzo[k]fluoranthene	1.00	0.9361		ug/L		94	51 - 120
Chrysene	1.00	0.7893		ug/L		79	55 - 120
Dibenz(a,h)anthracene	1.00	0.7660		ug/L		77	50 - 125
Indeno[1,2,3-cd]pyrene	1.00	0.7627		ug/L		76	54 - 125
1-Methylnaphthalene	1.00	0.7408		ug/L		74	36 - 120

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 490-318014/2-A
Matrix: Water
Analysis Batch: 318799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 318014

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*65*		*29 - 120*
Nitrobenzene-d5	*64*		*27 - 120*
Terphenyl-d14	*79*		*13 - 120*

Lab Sample ID: LCSD 490-318014/3-A
Matrix: Water
Analysis Batch: 318799

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 318014

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene			1.00	0.6756		ug/L		68	31 - 120	3	35
Benzo[a]anthracene			1.00	0.6596		ug/L		66	57 - 120	10	27
Benzo[a]pyrene			1.00	0.6357		ug/L		64	57 - 124	15	27
Benzo[b]fluoranthene			1.00	0.5946		ug/L		59	51 - 125	9	39
Benzo[k]fluoranthene			1.00	0.7506		ug/L		75	51 - 120	22	32
Chrysene			1.00	0.6845		ug/L		68	55 - 120	14	27
Dibenz(a,h)anthracene			1.00	0.6708		ug/L		67	50 - 125	13	28
Indeno[1,2,3-cd]pyrene			1.00	0.6600		ug/L		66	54 - 125	14	27
1-Methylnaphthalene			1.00	0.7208		ug/L		72	36 - 120	3	36

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*62*		*29 - 120*
Nitrobenzene-d5	*61*		*27 - 120*
Terphenyl-d14	*72*		*13 - 120*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 490-318621/11
Matrix: Water
Analysis Batch: 318621

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			02/20/16 22:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*50 - 150*		*02/20/16 22:42*	*1*

Lab Sample ID: LCS 490-318621/26
Matrix: Water
Analysis Batch: 318621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12			1000	867.6		ug/L		87	39 - 143		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*78*		*50 - 150*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 490-97507-1 DU
Matrix: Water
Analysis Batch: 318621

Client Sample ID: W-5-MW1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C6-C12	138			147.5		ug/L				7	18

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*87*		*50 - 150*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 490-319337/1-A
Matrix: Water
Analysis Batch: 320027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 319337

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.500		ug/L		02/23/16 20:04	02/26/16 13:54	1
PCB-1221	ND		0.500		ug/L		02/23/16 20:04	02/26/16 13:54	1
PCB-1232	ND		0.500		ug/L		02/23/16 20:04	02/26/16 13:54	1
PCB-1242	ND		0.500		ug/L		02/23/16 20:04	02/26/16 13:54	1
PCB-1248	ND		0.500		ug/L		02/23/16 20:04	02/26/16 13:54	1
PCB-1254	ND		0.500		ug/L		02/23/16 20:04	02/26/16 13:54	1
PCB-1260	ND		0.500		ug/L		02/23/16 20:04	02/26/16 13:54	1
Polychlorinated biphenyls, Total	ND		0.500		ug/L		02/23/16 20:04	02/26/16 13:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*61*		*10 - 150*	*02/23/16 20:04*	*02/26/16 13:54*	*1*
Tetrachloro-m-xylene	*73*		*10 - 150*	*02/23/16 20:04*	*02/26/16 13:54*	*1*

Lab Sample ID: LCS 490-319337/2-A
Matrix: Water
Analysis Batch: 320027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 319337

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			5.00	4.886		ug/L		98	23 - 139		
PCB-1260			5.00	4.817		ug/L		96	36 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*53*		*10 - 150*
Tetrachloro-m-xylene	*70*		*10 - 150*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 490-318215/1-A
Matrix: Water
Analysis Batch: 320358

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 318215

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		100		ug/L		02/18/16 11:59	02/27/16 16:58	1
C24-C40	ND		100		ug/L		02/18/16 11:59	02/27/16 16:58	1

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: MB 490-318215/1-A
Matrix: Water
Analysis Batch: 320358

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 318215

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	62		50 - 150	02/18/16 11:59	02/27/16 16:58	1

Lab Sample ID: LCS 490-318215/2-A
Matrix: Water
Analysis Batch: 320358

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 318215

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C24			1000	611.8		ug/L		61	51 - 132		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	59		50 - 150

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-318024/1-A
Matrix: Water
Analysis Batch: 318327

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 318024

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		02/17/16 09:52	02/18/16 16:34	1

Lab Sample ID: LCS 490-318024/2-A
Matrix: Water
Analysis Batch: 318327

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 318024

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			50.0	51.00		ug/L		102	80 - 120		

Lab Sample ID: LCSD 490-318024/3-A
Matrix: Water
Analysis Batch: 318327

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 318024

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			50.0	51.80		ug/L		104	80 - 120	2	20

Lab Sample ID: 490-97502-D-2-C MS
Matrix: Water
Analysis Batch: 318327

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 318024

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	11.5		50.0	61.10		ug/L		99	75 - 125		

Lab Sample ID: 490-97502-D-2-D MSD
Matrix: Water
Analysis Batch: 318327

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 318024

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	11.5		50.0	60.90		ug/L		99	75 - 125	0	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 490-318249/1-A
Matrix: Water
Analysis Batch: 318762

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 318249

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		02/18/16 14:59	02/19/16 18:13	1

Lab Sample ID: LCS 490-318249/2-A
Matrix: Water
Analysis Batch: 318762

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 318249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	150	159.0		ug/L		106	80 - 120

Lab Sample ID: MB 490-318350/1-A
Matrix: Water
Analysis Batch: 319022

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 318350

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.00		ug/L		02/19/16 09:52	02/22/16 15:45	1

Lab Sample ID: LCS 490-318350/2-A
Matrix: Water
Analysis Batch: 319022

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 318350

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	49.80		ug/L		100	80 - 120

Lab Sample ID: LCSD 490-318350/3-A
Matrix: Water
Analysis Batch: 319022

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 318350

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	50.0	50.40		ug/L		101	80 - 120	1	20

Lab Sample ID: 490-97587-F-13-E MS
Matrix: Water
Analysis Batch: 318762

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 318249

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	ND		150	152.3		ug/L		100	75 - 125

Lab Sample ID: 490-97587-F-13-F MSD
Matrix: Water
Analysis Batch: 318762

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 318249

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	ND		150	152.5		ug/L		100	75 - 125	0	20

Lab Sample ID: 490-97595-M-10-E MS
Matrix: Water
Analysis Batch: 319022

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 318350

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	ND		50.0	50.20		ug/L		96	75 - 125

QC Sample Results

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Lab Sample ID: 490-97595-M-10-F MSD
Matrix: Water
Analysis Batch: 319022

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 318350

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	ND		50.0	50.70		ug/L		97	75 - 125	1	20

GC/MS VOA

Analysis Batch: 5508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-1	W-5-MW1	Total/NA	Water	8260C	
490-97507-2	W-4-MW2	Total/NA	Water	8260C	
490-97507-3	W-6-MW3	Total/NA	Water	8260C	
490-97507-3	W-6-MW3	Total/NA	Water	8260C	
490-97507-4	W-8-MW4	Total/NA	Water	8260C	
490-97507-5	W-6-MW5	Total/NA	Water	8260C	
490-97507-6	W-7-MW6	Total/NA	Water	8260C	
LCS 590-5508/1026	Lab Control Sample	Total/NA	Water	8260C	
MB 590-5508/27	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 318014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-1	W-5-MW1	Total/NA	Water	3510C	
490-97507-3	W-6-MW3	Total/NA	Water	3510C	
LCS 490-318014/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-318014/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 490-318014/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 318799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-1	W-5-MW1	Total/NA	Water	8270D SIM	318014
490-97507-3	W-6-MW3	Total/NA	Water	8270D SIM	318014
LCS 490-318014/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	318014
LCSD 490-318014/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	318014
MB 490-318014/1-A	Method Blank	Total/NA	Water	8270D SIM	318014

Analysis Batch: 319498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-3	W-6-MW3	Total/NA	Water	8270D SIM	318014

GC VOA

Analysis Batch: 318621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-1	W-5-MW1	Total/NA	Water	NWTPH-Gx	
490-97507-1 DU	W-5-MW1	Total/NA	Water	NWTPH-Gx	
490-97507-2	W-4-MW2	Total/NA	Water	NWTPH-Gx	
490-97507-3	W-6-MW3	Total/NA	Water	NWTPH-Gx	
490-97507-4	W-8-MW4	Total/NA	Water	NWTPH-Gx	
490-97507-5	W-6-MW5	Total/NA	Water	NWTPH-Gx	
490-97507-6	W-7-MW6	Total/NA	Water	NWTPH-Gx	
LCS 490-318621/26	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
MB 490-318621/11	Method Blank	Total/NA	Water	NWTPH-Gx	

GC Semi VOA

Prep Batch: 318215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-1	W-5-MW1	Total/NA	Water	3510C	
490-97507-2	W-4-MW2	Total/NA	Water	3510C	
490-97507-3	W-6-MW3	Total/NA	Water	3510C	
490-97507-4	W-8-MW4	Total/NA	Water	3510C	
490-97507-5	W-6-MW5	Total/NA	Water	3510C	
LCS 490-318215/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-318215/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 319337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-1	W-5-MW1	Total/NA	Water	3510C	
490-97507-3	W-6-MW3	Total/NA	Water	3510C	
LCS 490-319337/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-319337/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 320027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-1	W-5-MW1	Total/NA	Water	8082A	319337
490-97507-3	W-6-MW3	Total/NA	Water	8082A	319337
LCS 490-319337/2-A	Lab Control Sample	Total/NA	Water	8082A	319337
MB 490-319337/1-A	Method Blank	Total/NA	Water	8082A	319337

Analysis Batch: 320358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-1	W-5-MW1	Total/NA	Water	NWTPH-Dx	318215
490-97507-2	W-4-MW2	Total/NA	Water	NWTPH-Dx	318215
490-97507-3	W-6-MW3	Total/NA	Water	NWTPH-Dx	318215
490-97507-4	W-8-MW4	Total/NA	Water	NWTPH-Dx	318215
490-97507-5	W-6-MW5	Total/NA	Water	NWTPH-Dx	318215
LCS 490-318215/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	318215
MB 490-318215/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	318215

Metals

Filtration Batch: 317999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-1	W-5-MW1	Dissolved	Water	Filtration	
490-97507-2	W-4-MW2	Dissolved	Water	Filtration	
490-97507-3	W-6-MW3	Dissolved	Water	Filtration	
490-97507-4	W-8-MW4	Dissolved	Water	Filtration	
490-97507-5	W-6-MW5	Dissolved	Water	Filtration	

Prep Batch: 318024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97502-D-2-C MS	Matrix Spike	Total/NA	Water	3010A	
490-97502-D-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
490-97507-1	W-5-MW1	Total/NA	Water	3010A	
490-97507-2	W-4-MW2	Total/NA	Water	3010A	
490-97507-3	W-6-MW3	Total/NA	Water	3010A	
490-97507-4	W-8-MW4	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 318024 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-5	W-6-MW5	Total/NA	Water	3010A	
LCS 490-318024/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-318024/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 490-318024/1-A	Method Blank	Total/NA	Water	3010A	

Filtration Batch: 318083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97587-F-13-E MS	Matrix Spike	Dissolved	Water	Filtration	
490-97587-F-13-F MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	

Filtration Batch: 318170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97595-M-10-E MS	Matrix Spike	Dissolved	Water	Filtration	
490-97595-M-10-F MSD	Matrix Spike Duplicate	Dissolved	Water	Filtration	

Prep Batch: 318249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-1	W-5-MW1	Dissolved	Water	3005A	317999
490-97507-2	W-4-MW2	Dissolved	Water	3005A	317999
490-97507-3	W-6-MW3	Dissolved	Water	3005A	317999
490-97507-4	W-8-MW4	Dissolved	Water	3005A	317999
490-97587-F-13-E MS	Matrix Spike	Dissolved	Water	3005A	318083
490-97587-F-13-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	318083
LCS 490-318249/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 490-318249/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 318327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97502-D-2-C MS	Matrix Spike	Total/NA	Water	6010C	318024
490-97502-D-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	6010C	318024
490-97507-1	W-5-MW1	Total/NA	Water	6010C	318024
490-97507-2	W-4-MW2	Total/NA	Water	6010C	318024
490-97507-3	W-6-MW3	Total/NA	Water	6010C	318024
490-97507-4	W-8-MW4	Total/NA	Water	6010C	318024
490-97507-5	W-6-MW5	Total/NA	Water	6010C	318024
LCS 490-318024/2-A	Lab Control Sample	Total/NA	Water	6010C	318024
LCSD 490-318024/3-A	Lab Control Sample Dup	Total/NA	Water	6010C	318024
MB 490-318024/1-A	Method Blank	Total/NA	Water	6010C	318024

Prep Batch: 318350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-5	W-6-MW5	Dissolved	Water	3005A	317999
490-97595-M-10-E MS	Matrix Spike	Dissolved	Water	3005A	318170
490-97595-M-10-F MSD	Matrix Spike Duplicate	Dissolved	Water	3005A	318170
LCS 490-318350/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 490-318350/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 490-318350/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 318762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-1	W-5-MW1	Dissolved	Water	6010C	318249

Metals (Continued)

Analysis Batch: 318762 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-2	W-4-MW2	Dissolved	Water	6010C	318249
490-97507-3	W-6-MW3	Dissolved	Water	6010C	318249
490-97507-4	W-8-MW4	Dissolved	Water	6010C	318249
490-97587-F-13-E MS	Matrix Spike	Dissolved	Water	6010C	318249
490-97587-F-13-F MSD	Matrix Spike Duplicate	Dissolved	Water	6010C	318249
LCS 490-318249/2-A	Lab Control Sample	Total Recoverable	Water	6010C	318249
MB 490-318249/1-A	Method Blank	Total Recoverable	Water	6010C	318249

Analysis Batch: 319022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-97507-5	W-6-MW5	Dissolved	Water	6010C	318350
490-97595-M-10-E MS	Matrix Spike	Dissolved	Water	6010C	318350
490-97595-M-10-F MSD	Matrix Spike Duplicate	Dissolved	Water	6010C	318350
LCS 490-318350/2-A	Lab Control Sample	Total Recoverable	Water	6010C	318350
LCSD 490-318350/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010C	318350
MB 490-318350/1-A	Method Blank	Total Recoverable	Water	6010C	318350

Lab Chronicle

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Client Sample ID: W-5-MW1

Lab Sample ID: 490-97507-1

Date Collected: 02/10/16 13:20

Matrix: Water

Date Received: 02/12/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	43 mL	43 mL	5508	02/23/16 20:07	MRS	TAL SPK
Total/NA	Prep	3510C			1010 mL	1 mL	318014	02/17/16 09:26	MRM	TAL NSH
Total/NA	Analysis	8270D SIM		1	1010 mL	1 mL	318799	02/22/16 21:02	WDS	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	318621	02/22/16 04:50	AMC	TAL NSH
Total/NA	Prep	3510C			1000 mL	5 mL	319337	02/23/16 20:04	DHC	TAL NSH
Total/NA	Analysis	8082A		1	1000 mL	5 mL	320027	02/26/16 14:25	MGH	TAL NSH
Total/NA	Prep	3510C			1050 mL	1 mL	318215	02/18/16 11:59	MDW	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1050 mL	1 mL	320358	02/27/16 17:31	GMH	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	317999	02/17/16 07:43	KMS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	318249	02/18/16 14:59	RDF	TAL NSH
Dissolved	Analysis	6010C		1	50 mL	50 mL	318762	02/19/16 20:06	NJB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	318024	02/17/16 09:52	KMS	TAL NSH
Total/NA	Analysis	6010C		1	50 mL	50 mL	318327	02/18/16 18:16	TSC	TAL NSH

Client Sample ID: W-4-MW2

Lab Sample ID: 490-97507-2

Date Collected: 02/10/16 15:00

Matrix: Water

Date Received: 02/12/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	43 mL	43 mL	5508	02/23/16 20:28	MRS	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	318621	02/22/16 06:32	AMC	TAL NSH
Total/NA	Prep	3510C			1050 mL	1 mL	318215	02/18/16 11:59	MDW	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1050 mL	1 mL	320358	02/27/16 17:48	GMH	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	317999	02/17/16 07:43	KMS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	318249	02/18/16 14:59	RDF	TAL NSH
Dissolved	Analysis	6010C		1	50 mL	50 mL	318762	02/19/16 20:10	NJB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	318024	02/17/16 09:52	KMS	TAL NSH
Total/NA	Analysis	6010C		1	50 mL	50 mL	318327	02/18/16 18:28	TSC	TAL NSH

Client Sample ID: W-6-MW3

Lab Sample ID: 490-97507-3

Date Collected: 02/10/16 11:30

Matrix: Water

Date Received: 02/12/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	43 mL	43 mL	5508	02/23/16 20:48	MRS	TAL SPK
Total/NA	Analysis	8260C		20	43 mL	43 mL	5508	02/24/16 15:22	MRS	TAL SPK
Total/NA	Prep	3510C			1010 mL	1 mL	318014	02/17/16 09:26	MRM	TAL NSH
Total/NA	Analysis	8270D SIM		1	1010 mL	1 mL	318799	02/22/16 21:26	WDS	TAL NSH
Total/NA	Prep	3510C			1010 mL	1 mL	318014	02/17/16 09:26	MRM	TAL NSH
Total/NA	Analysis	8270D SIM		5	1010 mL	1 mL	319498	02/24/16 14:42	LEG	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	318621	02/22/16 07:23	AMC	TAL NSH
Total/NA	Prep	3510C			1040 mL	5 mL	319337	02/23/16 20:04	DHC	TAL NSH
Total/NA	Analysis	8082A		1	1040 mL	5 mL	320027	02/26/16 14:41	MGH	TAL NSH

Lab Chronicle

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1050 mL	1 mL	318215	02/18/16 11:59	MDW	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1050 mL	1 mL	320358	02/27/16 18:04	GMH	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	317999	02/17/16 07:43	KMS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	318249	02/18/16 14:59	RDF	TAL NSH
Dissolved	Analysis	6010C		1	50 mL	50 mL	318762	02/19/16 20:14	NJB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	318024	02/17/16 09:52	KMS	TAL NSH
Total/NA	Analysis	6010C		1	50 mL	50 mL	318327	02/18/16 18:33	TSC	TAL NSH

Client Sample ID: W-8-MW4

Lab Sample ID: 490-97507-4

Date Collected: 02/10/16 10:00

Matrix: Water

Date Received: 02/12/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	43 mL	43 mL	5508	02/23/16 21:09	MRS	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	318621	02/22/16 08:13	AMC	TAL NSH
Total/NA	Prep	3510C			1050 mL	1 mL	318215	02/18/16 11:59	MDW	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1050 mL	1 mL	320358	02/27/16 18:21	GMH	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	317999	02/17/16 07:43	KMS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	318249	02/18/16 14:59	RDF	TAL NSH
Dissolved	Analysis	6010C		1	50 mL	50 mL	318762	02/19/16 20:19	NJB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	318024	02/17/16 09:52	KMS	TAL NSH
Total/NA	Analysis	6010C		1	50 mL	50 mL	318327	02/18/16 18:37	TSC	TAL NSH

Client Sample ID: W-6-MW5

Lab Sample ID: 490-97507-5

Date Collected: 02/10/16 16:00

Matrix: Water

Date Received: 02/12/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	43 mL	43 mL	5508	02/23/16 21:30	MRS	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	318621	02/22/16 09:04	AMC	TAL NSH
Total/NA	Prep	3510C			1050 mL	1 mL	318215	02/18/16 11:59	MDW	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1050 mL	1 mL	320358	02/27/16 18:37	GMH	TAL NSH
Dissolved	Filtration	Filtration			50 mL	50 mL	317999	02/17/16 07:43	KMS	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	318350	02/19/16 09:52	ZLN	TAL NSH
Dissolved	Analysis	6010C		1	50 mL	50 mL	319022	02/22/16 18:10	TSC	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	318024	02/17/16 09:52	KMS	TAL NSH
Total/NA	Analysis	6010C		1	50 mL	50 mL	318327	02/18/16 18:41	TSC	TAL NSH

Client Sample ID: W-7-MW6

Lab Sample ID: 490-97507-6

Date Collected: 02/11/16 09:45

Matrix: Water

Date Received: 02/12/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	43 mL	43 mL	5508	02/23/16 21:51	MRS	TAL SPK
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	318621	02/22/16 09:55	AMC	TAL NSH

Lab Chronicle

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL SPK = TestAmerica Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Method Summary

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL SPK
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH

Protocol References:

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL SPK = TestAmerica Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Certification Summary

Client: Cardno, Inc
Project/Site: 99CHT

TestAmerica Job ID: 490-97507-1
SDG: 31379

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Oregon	NELAP	10	TN200001	04-27-16 *

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total

Washington	State Program	10	C789	07-19-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8082A	3510C	Water	Polychlorinated biphenyls, Total

Laboratory: TestAmerica Spokane

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-071	10-31-16
Washington	State Program	10	C569	01-06-17

* Certification renewal pending - certification considered valid.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

490-97507 Chain of Custody

COOLER RECEIPT FORM

Cooler Received/Opened On 2-12-16 @ 0935

Time Samples Removed From Cooler 0915 Time Samples Placed In Storage 1121 (2 Hour Window)

1. Tracking # 3633 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID ~~18290455~~ 12080142 pH Strip Lot ~~HC554812~~ HC559158 Chlorine Strip Lot 072815A

2. Temperature of rep. sample or temp blank when opened: 0.2 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (intial) JAJ

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (intial) AES

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) AES

17. Were custody papers properly filled out (ink, signed, etc)? YES NO NA

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) AES

I certify that I attached a label with the unique LIMS number to each container (intial) AES

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO #

BIS = Broken in shipment
Cooler Receipt Form.doc

Loc: 490
97507

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 2-12-16 @ 0935

Time Samples Removed From Cooler 1120 Time Samples Placed In Storage 1121 (2 Hour Window)

1. Tracking # 3872 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID ~~18290455~~ 97310166 pH Strip Lot ~~HC554012~~ HC559158 Chlorine Strip Lot 072815A
mm 2.11.16 mm 2.11.16

2. Temperature of rep. sample or temp blank when opened: 1.1 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1) Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) JH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (intial) AES

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) AES

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) AES

I certify that I attached a label with the unique LIMS number to each container (intial) AES

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#

BIS = Broken in shipment
Cooler Receipt Form.doc

End of Form

Revised 12/15/2016

Loc: 490
97507

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 2-12-16 @ 0935

Time Samples Removed From Cooler 0945 Time Samples Placed In Storage 1121 (2 Hour Window)

1. Tracking # 4114 (last 4 digits, FedEx) Courier: FedEx
   IR Gun ID ~~18298455~~ 97310166 pH Strip Lot ~~HC554612~~ HC559158 mm 2-11-16 Chlorine Strip Lot 072815A mm 2-11-16
2. Temperature of rep. sample or temp blank when opened: 1.8 Degrees Celsius
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA
4. Were custody seals on outside of cooler? YES...NO...NA
   If yes, how many and where: 1) back
5. Were the seals intact, signed, and dated correctly? YES...NO...NA
6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) PA

7. Were custody seals on containers: YES NO and Intact YES..,NO...NA
   Were these signed and dated correctly? YES...NO...NA
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None
9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None
10. Did all containers arrive in good condition (unbroken)? YES...NO...NA
11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA
12. Did all container labels and tags agree with custody papers? YES...NO...NA
13a. Were VOA vials received? YES...NO...NA
   b. Was there any observable headspace present in any VOA vial? YES...NO...NA
14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 3 AES 2/16/16

I certify that I unloaded the cooler and answered questions 7-14 (intial) AES

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO...NA
   b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA
16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) AES

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA
18. Did you sign the custody papers in the appropriate place? YES...NO...NA
19. Were correct containers used for the analysis requested? YES...NO...NA
20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) AES

I certify that I attached a label with the unique LIMS number to each container (intial) AES

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LE1
End of Form
Revised 12/15/15
4/12/2016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Nashville Division
2960 Foster Creighton
Nashville, TN 37204
Phone: 615-726-0177
Toll Free: 800-765-0980
Fax: 615-726-3404

ExxonMobil

Consultant Name: Cardno
Consultant Address: 801 Second Avenue Suite 700
Consultant City/State/Zip: Seattle, WA 98104
ExxonMobil Project Mgr: Aaron Thom
Consultant Project Mgr: Ryan Pozzuto
Consultant Telephone Number: 206 269 0104 Fax No.: (206) 269-0098
Sampler Name (Print): Robert Thompson, Bridget Cook, & Andrew Yonkofski
Sampler Signature:

Account #: Contact PM
Invoice To: Ryan Pozzuto
Report To: Ryan Pozzuto
ERI Project #/Activity #: 31379
ExxonMobil Site #: 99CHT
Site Address: 7323 Aurora Avenue North
Site City, State, Zip: Seattle, Washington
Oversight Agency: Washington Department of Ecology

Loc: 490
97507
#1
M

SAMPLE ID	Field Point Name/ Location ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl	NaOH	H_2SO_4 Plastic	H_2SO_4 Glass	HNO_3	Ice	Other	None	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify):	Analyze For: BTEX by 8260B	TPHg by NWTPH-Gx	TPHd by NWTPH-Dx	TPHmo by NWTPH-Dx	Total & Dissolved Lead by 6010C	EDB by 8260B	1,2-DCA by 8260B	Naphthalenes by 8260B	HVOCs by 8260B	PCBs by 8082	PAHs by 8270C	Standard 10-day TAT	Due Date of Report
W-5-MW1	MW1	02/10/16	13:20	14	X					8				1			5	X							X	X	X	X	X	X	X	X	X	X	X	X	
W-4-MW2	MW2	02/10/16	15:00	10	X					8				1			1	X							X	X	X	X	X								
W-6-MW3	MW3	02/10/16	11:30	14	X					8				1			5	X							X	X	X	X	X	X	X	X	X	X	X	X	
W-8-MW4	MW4	02/10/16	10:00	10	X					8				1			1	X							X	X	X	X	X								
W-6-MW5	MW5	02/10/16	16:00	10	X					8				1			1	X							X	X	X	X	X								
W-7-MW6	MW6	02/11/16	9:45	5	X					5								X							X	X											

Comments/Special Instructions:

Please include silica gel cleanup.

Laboratory Comments:
Temperature Upon Receipt: 1.8°C, 1.1°C, 0.2°C
Sample Containers Intact? N
VOA Vials Free of Headspace? N

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please attach pre-schedule w/ TestAmerica Project Manager or attach specific instructions

Relinquished by:		Date	Time	Received by:	Date	Time
Robert Thompson		02/11/16	17:00			
Relinquished by:		Date	Time	Received by (Lab personnel):	Date	Time
					2/12/16	0935

4/12/2016

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler	Lab PM: Klingensmith, Leah	Carrier Tracking No(s)	COC No: 490-41757 1
Client Contact: Shipping/Receiving	Phone	E-Mail: leah.klingensmith@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc				Job #: 490-97507-1
Address: 11922 East 1st Ave, ,	Due Date Requested: 2/24/2016			
City: Spokane	TAT Requested (days):			
State, Zip: WA, 99206				
Phone: 509-924-9200(Tel) 509-924-9290(Fax)	PO #:			
Email:	WO #:			
Project Name: 99CHT	Project #: 49001230			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C/5030C (MOD) BTEX/MIN/hex/VOH's	8260C/5030C (MOD) BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
W-5-MW1 (490-97507-1)	2/10/16	13:20 Pacific		Water			X		3	
W-4-MW2 (490-97507-2)	2/10/16	15:00 Pacific		Water				X	2	
W-6-MW3 (490-97507-3)	2/10/16	11:30 Pacific		Water			X		3	
W-8-MW4 (490-97507-4)	2/10/16	10 00 Pacific		Water				X	3	
W-6-MW5 (490-97507-5)	2/10/16	16 00 Pacific		Water				X	3	
W-7-MW6 (490-97507-6)	2/11/16	09:45 Pacific		Water				X	3	

Possible Hazard Identification
Unconfirmed
Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			Shawna Frost	2/23/16 10:15	TA Spok
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.: 216906	Cooler Temperature(s) °C and Other Remarks: 2.8°C IR001

4/12/2016

Login Sample Receipt Checklist

Client: Cardno, Inc

Job Number: 490-97507-1
SDG Number: 31379

Login Number: 97507
List Number: 1
Creator: Stvartak, Anthony Q

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: Cardno, Inc

Job Number: 490-97507-1
SDG Number: 31379

Login Number: 97507
List Number: 2
Creator: Kratz, Sheila J

List Source: TestAmerica Spokane
List Creation: 02/23/16 10:28 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX D
WASTE DOCUMENTATION

Cardno
Shaping the Future

CERTIFICATE OF DISPOSAL

On February 11th, 2016 the Emerald Recycling facility located at 1500 Airport Way S., Seattle WA 98134, received a shipment from:

Former Exxon Mobil - Aurora
7323 Aurora Ave N
Seattle, WA 98103

On Manifest Number: 31727

Manifest Line	11A
Profile Number	G00707
Process	Waste Water
Date of Process:	2/12/2016

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above described waste or material was managed in compliance with all applicable laws, regulations, permits, and licenses on the date listed above.

		3/23/16
Facility Representative		Date of Issue

APPENDIX E
WELLHEAD ELEVATION SURVEY

Cardno
Shaping the Future

WELLHEAD ELEVATION SURVEY
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington
February 10, 2016

MW1 Elevation Survey Using MW6 Elevation (100.00 feet)				
MW1 Station 1 Elevation Survey	MW6 Measurement (H1) Feet 7.515	MW1 (H2) Feet 5.387	ΔH Feet 2.128	ΔH + MW6 Elevation Feet 102.128
MW1 Station 2 Elevation Survey	MW6 Measurement (H1) Feet 7.657	MW1 (H2) Feet 5.528	ΔH Feet 2.129	ΔH + MW6 Elevation Feet 102.129
MW1 Station 3 Elevation Survey	MW6 Measurement (H1) Feet 7.542	MW1 (H2) Feet 5.417	ΔH Feet 2.125	ΔH + MW6 Elevation Feet 102.125
Station 1 through Station 3 Average Elevation (Calculated MW1 Elevation):				**102.127**

Final MW1 Elevation **102.13 feet**

MW2 Elevation Survey Using MW1 Elevation (102.13 feet)				
MW2 Station 1 Elevation Survey	MW1 Measurement (H1) Feet 4.661	MW2 (H2) Feet 5.156	ΔH Feet -0.495	ΔH + MW1 Elevation Feet 101.632
MW2 Station 2 Elevation Survey	MW1 Measurement (H1) Feet 4.386	MW2 (H2) Feet 4.880	ΔH Feet -0.494	ΔH + MW1 Elevation Feet 101.633
MW2 Station 3 Elevation Survey	MW1 Measurement (H1) Feet 5.001	MW2 (H2) Feet 5.495	ΔH Feet -0.494	ΔH + MW1 Elevation Feet 101.633
Station 1 through Station 3 Average Elevation (Calculated MW2 Elevation):				**101.633**

Final MW2 Elevation **101.63 feet**

MW3 Elevation Survey Using MW4 Elevation (104.10 feet)				
MW3 Station 1 Elevation Survey	MW4 Measurement (H1) Feet 4.413	MW3 (H2) Feet 5.136	ΔH Feet -0.723	ΔH + MW4 Elevation Feet 103.377
MW3 Station 2 Elevation Survey	MW4 Measurement (H1) Feet 7.488	MW3 (H2) Feet 8.214	ΔH Feet -0.726	ΔH + MW4 Elevation Feet 103.374
MW3 Station 3 Elevation Survey	MW4 Measurement (H1) Feet 4.357	MW3 (H2) Feet 5.079	ΔH Feet -0.722	ΔH + MW4 Elevation Feet 103.378
Station 1 through Station 3 Average Elevation (Calculated MW3 Elevation):				**103.376**

Final MW3 Elevation **103.38 feet**

WELLHEAD ELEVATION SURVEY
Former Mobil Station 99CHT
7323 Aurora Avenue North
Seattle, Washington
February 10, 2016

MW4 Elevation Survey Using MW6 Elevation (100.00 feet)				
MW4 Station 1 Elevation Survey	MW6 Measurement (H1) Feet 7.515	MW4 (H2) Feet 3.418	ΔH Feet 4.097	ΔH + MW6 Elevation Feet 104.097
MW4 Station 2 Elevation Survey	MW6 Measurement (H1) Feet 7.657	MW4 (H2) Feet 3.554	ΔH Feet 4.103	ΔH + MW6 Elevation Feet 104.103
MW4 Station 3 Elevation Survey	MW6 Measurement (H1) Feet 7.542	MW4 (H2) Feet 3.448	ΔH Feet 4.094	ΔH + MW6 Elevation Feet 104.094
Station 1 through Station 3 Average Elevation (Calculated MW4 Elevation):				**104.098**

Final MW4 Elevation **104.10 feet**

MW5 Elevation Survey Using Curb Elevation (103.48 feet)				
MW5 Station 1 Elevation Survey	Curb Measurement (H1) Feet 5.778	MW5 (H2) Feet 8.329	ΔH Feet -2.551	ΔH + Curb Elevation Feet 100.929
MW5 Station 2 Elevation Survey	Curb Measurement (H1) Feet 5.968	MW5 (H2) Feet 8.522	ΔH Feet -2.554	ΔH + Curb Elevation Feet 100.926
MW5 Station 3 Elevation Survey	Curb Measurement (H1) Feet 6.461	MW5 (H2) Feet 9.007	ΔH Feet -2.546	ΔH + Curb Elevation Feet 100.934
Station 1 through Station 3 Average Elevation (Calculated MW5 Elevation):				**100.930**

Final MW5 Elevation **100.93 feet**

Curb Elevation Survey Using MW6 Elevation (100.00 feet)				
Curb Station 1 Elevation Survey	MW6 Measurement (H1) Feet 4.411	Curb (H2) Feet 0.935	ΔH Feet 3.476	ΔH + MW6 Elevation Feet 103.476
Curb Station 2 Elevation Survey	MW6 Measurement (H1) Feet 4.563	Curb (H2) Feet 1.088	ΔH Feet 3.475	ΔH + MW6 Elevation Feet 103.475
Curb Station 3 Elevation Survey	MW6 Measurement (H1) Feet 4.516	Curb (H2) Feet 1.035	ΔH Feet 3.481	ΔH + MW6 Elevation Feet 103.481
Station 1 through Station 3 Average Elevation (Calculated Curb Elevation):				**103.477**

Final Curb Elevation **103.48 feet**

EXPLANATION:
Wellhead elevations are relative to the top of casing of MW6, which was assigned an arbitrarily established datum of 100 feet

APPENDIX F
GROUNDWATER FIELD NOTES

Cardno
Shaping the Future

FIELD LOG
DEPTH TO WATER RECORD

CLIENT NAME: ExxonMobil 99CHT
CARDNO #: 031379
SITE LOCATION: 7323 Aurora Avenue North, Seattle, WA
FIELD CREW: RRT, BTC, AJRY
DATE: 02/10/16

Well #	Time	DTW (ft)	DOW (ft)	Comments/Repairs
MW1	09:19	**4.64**	12.6	Gauged and sampled 02/10/16
MW2	09:17	**4.37**	12.3	Gauged and sampled 02/10/16
MW3	09:20	**6.13**	15.1	Gauged and sampled 02/10/16
MW4	09:11	**7.52**	14.6	Gauged and sampled 02/10/16
MW5	09:15	**6.49**	13.7	Gauged and sampled 02/10/16
MW6	09:12	**7.48**	7.9	Gauged 02/10/16. Sampled 02/11/16.

FIELD LOG
PURGING & SAMPLING RECORD AND WELL EQUIPMENT STATUS

SITE: ExxonMobil 99CHT **CARDNO#:** 031379
LOCATION: 7323 Aurora Avenue North, Seattle WA
FIELD CREW: RRT, BTC, AJRY **DATE**: 02/10/16 Low-Flow Sampling

WELL # **MW1**

TIME	DTW	PURGE VOLUME	Pump Rate (Q)	Temp	COND	pH	DO
hr:min	ft	mL	mL/min	deg C	µS/cm	unit	mg/L
				1 deg	3%	0.1	0.3
13:00	**4.78**						
13:03	4.84	500	125	12.2	0.361	6.31	7.86
13:06	4.87	875	100	12.3	0.362	6.18	7.65
13:09	4.91	1,175	100	12.3	0.361	6.14	7.54
13:12	4.93	1,475	100	12.3	0.361	6.11	7.53
13:15	4.94	1,775	100	12.3	0.361	6.10	7.52
Comments:							
SW	13:20	1 gal = 3.79L					
Total Purge Volume		1,775 mL		0.47 gal			

WELL # **MW2**

TIME	DTW	PURGE VOLUME	Pump Rate (Q)	Temp	COND	pH	DO
hr:min	ft	mL	mL/min	deg C	µS/cm	unit	mg/L
				1 deg	3%	0.1	0.3
14:40	**4.48**						
14:43	4.49	300	100	12.67	0.524	5.95	9.05
14:46	4.50	600	100	12.70	0.525	5.93	8.93
14:49	4.52	900	100	12.74	0.523	5.92	8.79
14:52	4.54	1,200	100	12.76	0.526	5.91	8.68
14:55	4.56	1,500	100	12.78	0.527	5.90	8.57
Comments:							
SW	15:00	1 gal = 3.79L					
Total Purge Volume		1,500 mL		0.40 gal			

FIELD LOG
PURGING & SAMPLING RECORD AND WELL EQUIPMENT STATUS

SITE: ExxonMobil 99CHT **CARDNO#:** 031379
LOCATION: 7323 Aurora Avenue North, Seattle WA
FIELD CREW: RRT, BTC, AJRY **DATE**: 02/10/16 Low-Flow Sampling

WELL # **MW3**

TIME	DTW	PURGE VOLUME	Pump Rate (Q)	Temp	COND	pH	DO
hr:min	ft	mL	mL/min	deg C	µS/cm	unit	mg/L
				1 deg	3%	0.1	0.3
11:00	**6.45**						
11:03	6.51	450	150	12.37	0.256	6.55	8.00
11:06	6.53	900	150	12.38	0.255	6.54	7.90
11:09	6.57	1,350	150	12.43	0.256	6.53	7.77
11:12	6.61	1,800	150	12.47	0.256	6.52	7.69
11:15	6.61	2,250	150	12.48	0.257	6.52	7.57
Comments:							
SW	11:30	1 gal = 3.79L					
Total Purge Volume		2,250 mL		0.59 gal			

WELL # **MW4**

TIME	DTW	PURGE VOLUME	Pump Rate (Q)	Temp	COND	pH	DO
hr:min	ft	mL	mL/min	deg C	µS/cm	unit	mg/L
				1 deg	3%	0.1	0.3
09:35	**7.62**						
09:40	7.65	300	100	11.50	0.278	6.69	9.31
09:43	7.67	600	100	11.71	0.278	6.70	9.24
09:46	7.68	900	100	11.78	0.273	6.53	9.06
09:49	7.69	1,200	100	11.82	0.272	6.47	8.96
09:52	7.69	1,500	100	11.89	0.271	6.42	8.85
Comments:							
SW	10:00	1 gal = 3.79L					
Total Purge Volume		1,500 mL		0.40 gal			

FIELD LOG
PURGING & SAMPLING RECORD AND WELL EQUIPMENT STATUS

SITE: ExxonMobil 99CHT **CARDNO#:** 031379
LOCATION: 7323 Aurora Avenue North, Seattle WA
FIELD CREW: RRT, BTC, AJRY **DATE**: 02/10/16 Low-Flow Sampling

WELL # **MW5**

TIME	DTW	PURGE VOLUME	Pump Rate (Q)	Temp	COND	pH	DO
hr:min	ft	mL	mL/min	deg C	µS/cm	unit	mg/L
				1 deg	3%	0.1	0.3
14:03	**6.51**						
14:06	6.53	375	125	13.16	0.298	6.47	9.31
14:09	6.54	750	125	13.89	0.293	6.23	9.36
14:12	6.55	1,125	125	13.89	0.293	6.20	9.08
14:15	6.56	1,500	125	13.90	0.292	6.17	9.03
14:18	6.56	1,875	125	13.91	0.292	6.16	8.98
Comments:							
SW	16:00	1 gal = 3.79L					
Total Purge Volume		1,875 mL		0.49 gal			