ANDERSEN ENVIRONMENTAL
5261 W. Imperial Highway, Los Angeles, CA 90045
Toll Free: (888) 705-6300 Tel: (310) 854-6300 Fax: (310) 854-0199

PHASE II ENVIRONMENTAL SITE INVESTIGATION REPORT

Performed at:

COGIC Property
9201 Pacific Avenue, South
Tacoma, Washington 98444

Prepared for:

WELLES RINNING
10900 Northeast 4th Street, Suite 2300,
Bellevue, Washington 98004

Andersen Environmental Project No. 1412-2091

May 12, 2015

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

1.0 INTRODUCTION

Andersen Environmental has conducted a Phase II Environmental Site Investigation at 9201 Pacific Avenue South in Tacoma, Washington (the Site or the "subject property"; Figures 1, 2 and 3). The Site investigation activities detailed herein were conducted in accordance with the following guidance documents:

- Model Toxics Control Act Cleanup Regulation, Chapter 173-340 WAC (October 2007 update);
- Model Toxics Control Act, Chapter 70.105D RCW (Publication 9406; revised 2013); and
- Uniform Environmental Covenants Act, Chapter 64.70 RCW (November 2007).

Previous investigations conducted at the Site by The Riley Group (January 2005), Environmental Associates, Inc., (April 2013), and Andersen Environmental (September 2014) indicated that a hazardous chemical release originating from previous Site activities has occurred. Previous Site uses have included commercial dry-cleaning operations. The contamination from the dry-cleaning operations was identified as several chlorinated volatile organic compounds (CVOCs) at concentrations slightly above the MTCA Method A cleanup levels for both soil and groundwater.

Analytical results presented in the Environmental Associates April 2014 report demonstrated that the contamination had not been fully characterized. The results were insufficient to determine if the CVOCs released at the Site had impacted soil and/or groundwater to the extent that a risk to human health and/or the environment was present.

As a result, in September 2014, Andersen Environmental proposed a Phase II Environmental Site Assessment (ESA) by soil and groundwater sampling to further evaluate the presence of CVOCs in soil and groundwater at the Site.

This report details activities and results of the soil and groundwater sampling, and groundwater monitoring well installation.

1.1 OBJECTIVES

The primary objectives of the soil and groundwater sampling, and groundwater monitoring well installation were to further characterize CVOCs in soil and groundwater at the Site, specifically:

1. Provide a current assessment of areas of concern (AOCs);
2. Evaluate for the presence of CVOCs in soil;
3. Evaluate for the presence of CVOCs in groundwater and general groundwater conditions; and
4. Install and develop groundwater monitoring wells to initiate a groundwater monitoring program.

2.0 SITE INFORMATION

This section provides pertinent Site information, including location, description and geologic and hydrogeologic setting.

2.1 SITE LOCATION AND DESCRIPTION

According to the Pierce County Assessor's Office, the Site is located in the City of Tacoma, and is described by the Assessor's Parcel Number: 0320333304; Township 20N, Range 03 East, Section 33.

The Site address is listed as 9201 Pacific Avenue, Tacoma Washington (Figure 1). It is located on the east side of Pacific Avenue and the west side of "A" Street, approximately 600 feet north of 96th Street, and encompassing approximately three city blocks within the City of Tacoma. The Site is listed as approximately 386,100 square feet (8.86 acres) in size and is developed with a large one story building reported as approximately 61,230 square feet in size (Figure 2).

The Site is unoccupied and has been vacant for over one year. The building is roughly separated into three major units, 9201A (north end), 9201B (middle) and 9201C (south end). The middle unit is further divided into two sections, and the north end divided into one main section and several smaller sections with distinct entrances for each. Originally built as a strip shopping mall, the building was most recently used as a church and its associated activity center. These operations continued into 2013 when the property transferred into receivership.

The remaining portion of the Site consists of a fenced-in playground attached to the north end of the building, large surrounding parking areas, a designated wetlands located in the northeast corner, an overgrown storm-water detention area located in the southeast corner and various landscaped areas located along the perimeters. The eastern half of the subject property is presently enclosed with a chain-link fence. The surrounding area is mostly used for residential and light commercial purposes. Groundwater is estimated to vary between 9 and 14 feet below ground surface in the area of the Site.

Previous investigations indicate the northeast portion of the property building was historically developed for commercial dry-cleaning operations. These business operations included the Pacific Launder Center, operating onsite from approximately 1969 to 1979, and the Tacoma Dry-Cleaning and Laundry Center operating onsite from approximately 1979 to 1984. It is not known which of these operations may have contributed to the CVOC release or releases; however due to industry standard practices used during this period, the potential for either or both of these operations to have released dry-cleaning chemicals to the environment exists. The Site is listed on Ecology's Confirmed and Suspected Contaminated Sites List (CSCSL) in 2013.

2.2 GEOLOGIC AND HYDROGEOLOGIC SETTING

The elevation of the Site is approximately 385 feet above sea level (USGS Tacoma South 7.5 minute topographic quadrangle). The underlying soils in the vicinity of the Site are classified as Quaternary Vashon Till (Qdvt) consisting of grey, unsorted, un-stratified, highly compact mixture of clay, silt, sand, gravel and with possible erratics (large boulders) directly deposited by recessional glaciers (Geological Map of the South Half of the Tacoma Quadrangle, 1987). Soils overlaying un-weathered till consist of outwash gravel, sand and surficial loam.

These lithologic classifications are consistent with Site conditions identified by Andersen Environmental during field investigation activities where un-weathered till was encountered to maximum depths of 25 feet below ground surface (bgs).

Recent field investigations performed by Andersen Environmental indicate groundwater depth beneath the Site varies from approximately 9 to 14 feet bgs with general gradient direction to the north.

3.0 PREVIOUS INVESTIGATIONS

This section provides a summary of former known investigations at the Site. Soil and groundwater analytical results from former investigations by Environmental Associates, Inc., (2013) and by Andersen Environmental (2014 and 2015) are compiled and incorporated into Tables 1 and 2.

3.1 PHASE I ENVIRONMENTAL SITE ASSESSMENT, THE RILEY GROUP, JANUARY, 2005

A Phase I Environmental Site Assessment (ESA) was conducted by The Riley Group, Bothell Washington (report dated January 28, 2005). The report indicated that dry-cleaning operations occupied the Site from roughly 1974 into the 1980s. It further recommended that a Phase II subsurface investigation be performed at the Site to determine if soil or groundwater had been adversely affected by VOCs originating from the historical dry-cleaning operations.

3.2 LIMITED SOIL AND GROUNDWATER SAMPLING AND TESTING, ENVIRONMENTAL ASSOCIATES, INC., APRIL, 2013

Environmental Associates, Inc., of Bellevue, Washington conducted limited soil and groundwater sampling and testing, (report dated April 26, 2013) to initially evaluate subsurface conditions at the Site associated with former dry-cleaning operations.

Six soil borings were advanced to a maximum exploration depth of 16 feet bgs. Borings B1, B2, B3 and B5 were advanced through the slab foundation within the onsite building, presumably in the area of the historic dry-cleaning operations. Borings B4 and B6 were advanced though the asphalt parking lot. Soil and groundwater samples were taken in each of the borings and submitted to laboratory analysis for VOCs by EPA Method 8360C/5030C, Stoddard Solvents by NW-TPH-Gx and RCRA-8 Metals by EPA Method 6020.

Laboratory results indicated the following:

- Several VOCs were detected in soil on the Site. Perchloroethene (PCE) and trichloroethene (TCE) were detected in soils above the MTCA Method A cleanup levels beneath the slab foundation in borings B1 and B3 at a maximum depth of 4 feet bgs. Cis-1,2-Dichloroethene (DCE) was detected below the MTCA Method A cleanup level in soils beneath the slab foundation in borings B1, B2 and B3 at a maximum depth of 4 feet bgs. Vinyl Chloride (VC) was not detected in any onsite soil samples;
- PCE was detected in groundwater above the MTCA Method A cleanup level in borings B2, B3 and B4. TCE was detected in groundwater above the MTCA Method A cleanup level in boring B3. PCE was detected in groundwater below the cleanup level in boring B1. TCE was detected in groundwater below the cleanup level in borings B2 and B4. DCE was detected below the applicable cleanup level in groundwater in borings B2, B3 and B4. VC was not detected in any onsite groundwater samples;
- Stoddard solvents tested as Total Petroleum Hydrocarbons-Gasoline Range were detected below the MTCA Method A cleanup level for groundwater in all borings. Benzene was not detected in any onsite groundwater samples; and
- Cadmium was detected to a maximum concentration of 2.3 mg/kg in soil beneath the slab foundation in a single boring, B5. Reported at a depth of 3 feet bgs, this concentration is slightly above the MTCA Method A cleanup level of 2.0 mg/kg. No other metals were detected above applicable cleanup levels in the remaining soil and groundwater samples.

3.3 PHASE I ENVIRONMENTAL SITE ASSESSMENT, ANDERSEN ENVIRONMENTAL, SEPTEMBER 2014

On September 16, 2014, Andersen Environmental performed a Phase I ESA at the Site. The assessment was performed as part of a due diligence process for the property undergoing receivership. The objectives of the Phase I ESA were to evaluate any recognized environmental conditions associated with the Site, including possible issues relating to historical dry-cleaning operations. Andersen concluded:

- In June 2013, the Tacoma Power Company discovered that the two large transformers that service the subject property had been vandalized. This vandalism resulted in the release of an approximate total of 150 gallons of cooling fluid, reported to be a non-PCB containing product. Initial spill response actions were taken to limit further impact to the subject property. The subject property was subsequently listed on the Confirmed and Suspected Contaminated Sites List (CSCSL). This documented cooling oil release, having a responsible party independently assigned to it, is undergoing final cleanup by Tacoma Power.
- During the course of examining the Washington State Well Log database, Andersen Environmental discovered the presence of 15 "Geoprobe" boring cards from a previous investigation in April 2013, performed by Environmental Associates. Eventually obtained by the client, this report confirmed that the subject property was impacted by VOCs generated by previously identified dry-cleaning operations. Anderson documented the former dry-cleaning operations and reported VOC contamination as a recognized environmental condition, recommending that a Phase II ESA be performed on the Site.

4.0 FIELD ACTIVITIES

Between December 29, 2014 and March 12, 2015, all field activities pertaining to this investigation were completed.

4.1 FIELD PREPARATION

Prior to conducting field activities, Washington One Call was notified of the pending fieldwork a minimum of 48 hours before mobilization and was provided verification Ticket #14352295. Andersen Environmental also contracted with APS Locate (North Bend, WA) to specifically locate and mark any underground detections within the work area, both inside and outside the Site building. Boring locations were subsequently checked for utility conflicts, access limitations and other hindrances or issues that might be encountered during fieldwork. No conflicts with utilities were identified in the chosen boring locations.

A site specific Health and Safety Plan defining possible hazards encountered, and their respective precautionary actions needed during the course of field activities, was reviewed, and signed by all site personnel and presented in Appendix A to this report.

4.2 SOIL SAMPLING

From December 29, 2014 to March 12, 2015, Andersen Environmental field personnel directed Holocene Drilling of Puyallup, Washington to advance 13 borings at the Site (B1 through B13; Figure 2 and 3) and convert four borings into groundwater monitoring wells MW1 through MW4.

4.3 BORING LOCATIONS AND INVESTIGATIVE OBJECTIVES

Boring locations, sampling depths and investigative rationale were as follows:

Boring ID	Location	Total Depth (ft bgs)
B1/MW1	Western-most point (cross gradient) from release area, outside Site building. Cross- and slightly down-gradient from source area.	18.0
B2	Northwest corner from release area, outside Site building.	18.5
B3/MW2	Due north of release area, within down-gradient plume, approximately 40 feet from Site building.	18.0
B4	Northeast of release area, outside Site building.	14.0

Boring ID (Continued)	Location	Total Depth (ft bgs)
B5	Northeast of release area, outside Site building.	15.5
B6/MW3	Eastern-most point (cross gradient) from release area, outside Site building, cross-gradient.	18.0
B7	Northeast of release area, inside Site building	17.5
B8	Northeast of release area, inside Site building	10.0
B9	Estimated southern edge of release area, inside Site building	13.0
B10	Due west of release area, inside Site building	7.5
B11	Southeast of release area, inside Site building	12.0
B12	Due north of release area, within down-gradient plume, approximately 65 feet from Site building	21.0
B13/MW4	Northern-most property point, distal edge of down-gradient plume, approximately 110 feet from Site building	19.0

4.3.1 BOREHOLE ADVANCEMENT

Borings B1 through B6, B12 and B13 are located outside the Site building and were advanced using a truck-mounted hollow stem auger (HSA) drill rig equipped with a 6-inch diameter auger. Borings B7 through B11 are located within the Site building and were advanced using a hydraulic push technology (Geoprobe) on a limited access drilling unit equipped with a 2.25-inch drive rod. Given the lithography encountered, advancement refusal was encountered in some direct-push borings prior to interface with groundwater.

Soil samples were collected at 4-feet bgs and approximately every 4 feet thereafter to terminal depth in all borings (or at terminal depth in the event of refusal), in addition to near the water table interface and changes in lithology. Each soil sample was evaluated for moisture content, relative color, possible odors, texture and soil classification using the Unified Soil Classification System (USCS). Soil samples required for laboratory analysis using the HSA drilling unit were collected by advancing a split-spoon sampler through the hollow stem auger into undisturbed soil. The sampler was lined with three 6-inch long

stainless steel sleeves. Upon retrieval of the sampler, the soil corresponding to the desired sampling depth was obtained, transferred to the proper sampling container, immediately labeled and placed in a chilled (approximately 4°C) ice chest pending laboratory analysis. Soil samples required for laboratory analysis using the Geoprobe drilling unit were collected by hydraulically advancing a steel rod lined with an acetate sleeve into undisturbed soil. After being driven to the desired depth, the rods were removed from the borehole. The acetate sleeve containing the soil sample was removed from the sampling device, transferred to the proper sampling container, immediately labeled and placed in a chilled (approximately 4°C) ice chest pending laboratory analysis.

Borings B1, B3, B5, B6, B7, B9, B12 and B13 encountered groundwater.

EPA required soil procedures for CVOCs were followed throughout and samples placed in required containers for EPA Method 8260C analysis. All samples collected were transported on ice and submitted to a State-certified laboratory (Onsite Environmental, Kirkland Washington) under proper chain of custody documentation. Samples held for possible future analysis were archived in the laboratory.

A copy of the full analytical reports and chain of custody forms are included in Appendix D to this report. Upon completion of each boring, excess soil generated was stored on-site in DOT approved 55-gallon drums pending disposal.

4.3.2 ENCOUNTERED SOIL TYPES

Soils encountered during this assessment were classified as follows:

Shallow soils (approximately zero to 4 feet bgs): Generally Clayey Sands, Silty Sands, and well graded Silty Gravel (USCS soil type classification "SC", "SM" and "GM", respectively); brown to gray, overall dry with sparse organics, overlain with either concrete or asphalt; typical of weathered glacial till with no evidence of imported fill.

Deeper soils (approximately 4 feet bgs to maximum exploration depth of 25 feet bgs): Silty Sands and Poorly Graded Sands (USCS soil type classification "SM" and "SP", respectively); with or without gravel; light to dark gray; with generally increasing moisture at greater depths; consistent with un-weathered glacial till.

No unusual or chemical odors were detected during boring activities. Generally, borings indicate pre-construction grading activities well into a dense compacted sand layer. Given the shallow depth in which boring refusal was met subsurface, the likelihood of having encountered glacial erratics remains a possibility.

Groundwater was encountered in various borings at approximately 9.5 to 14 feet bgs. Boring logs are included as Appendix B.

4.4 GROUNDWATER MONITORING WELL CONSTRUCTION

From December 29, 2014 to March 12, 2015, upon reaching terminal depths between 18 and 19 feet bgs, borings B1, B3, B6 and B13 were completed as groundwater monitoring wells. As indicated above, installation was performed using a truck-mounted hollow stem auger (HSA) drill rig, constructed according to required standards (including WAC 173-160 and 173-162) and completed by Washington State licensed drillers (Holocene Drilling, Puyallup, Washington). Monitoring well construction reports were generated, submitted to Ecology and are provided in Appendix B. The four wells were of generally identical construction depending upon terminal depth.

Wells were constructed of 2-inch diameter, Schedule 40 polyvinyl chloride (PVC) casing with a factory slotted (20/in), screen installed between 14 and 19 feet bgs (determined based upon observed depth to

groundwater, and lithologic observations in the field). Clean, graded, kiln-dried Colorado sand was emplaced as the filter pack from 19 and 13 feet bgs.

A 12 to 13-foot hydrated bentonite seal was placed above the sand pack to approximately 1 feet bgs. The well was completed with a neat cement sanitary seal to near grade. Surface completion consisted of a traffic-rated well monument with concrete apron approximately flush with surface grade. The well casing was secured with a locking well cap. Well construction diagrams are included as part of the boring logs in Appendix B.

4.4.1 GROUNDWATER SAMPLING

Between December 29, 2014 and February 25, 2015, groundwater samples were collected from borings B5, B7, B9 and B12, and wells MW1 through MW4. In the borings where monitoring wells were not constructed, a temporary well screen was installed in an attempt to sample groundwater. The temporary screens were subsequently retracted and these boreholes abandoned.

Dedicated small diameter plastic tubing was extended from a peristaltic pump into each well to recover groundwater samples.

4.4.2 WELL SURVEY

On February 25, 2015, and March 12, 2015, the Top of Casing (TOC) elevation, latitude and longitude of each well was surveyed by Washington State licensed surveyors (True North Land Surveying, Seattle, WA and Prizm Surveying, Tacoma WA, respectively). TOC was surveyed as feet above mean sea level (AMSL), using a state plane coordinate system, to an accuracy of 0.01 inches. Survey reports are provided in Appendix C.

4.4.3 IN-SITU GROUNDWATER PARAMETERS

On March 12, 2015, groundwater quality parameters for wells MW1 through MW4 were measured for temperature, pH, electrical conductivity, Redox Potential (ORP), and Dissolved Oxygen (D.O.). The objective of obtaining these parameters after initial installation was to allow for gradient stabilization within the wells.

Being more reflective of the actual groundwater environment, these parameters reveal conditions having a direct influence on CVOC degradation pathways.

Well	Temperature ^{o}C	pH	Conductivity mS/cm	ORP (mV)	D.O. mg/L
MW1	14.32	5.95	0.627	154.4	1.43
MW2	14.12	6.54	0.261	188.5	2.53
MW3	13.07	5.99	0.191	158.4	2.32
MW4	11.99	6.01	0.207	167.7	2.04

These results indicate a groundwater environment that varies slightly from an average Washington State groundwater temperature of 13^{o}C, is slightly below an average pH, but is highly reduced and contains low levels of dissolved oxygen.

5.0 HYDRAULIC GRADIENT MAGNITUDE AND DIRECTION

Depth to groundwater and groundwater elevations from MW1, MW2, MW3 and MW4 were measured on March 12, 2015. The groundwater was measured to an accuracy of 0.01 foot utilizing a depth-to-water meter (sounder). Results of the well gauging were as follows:

Well	TOC Elevation (feet AMSL)	Depth to Groundwater (feet)	Groundwater Elevation (feet AMSL)
MW1	387.07	8.69	378.38
MW2	386.99	11.01	375.98
MW3	386.59	10.18	376.41
MW4	386.70	14.35	372.35

Groundwater gradient and direction were calculated at approximately 0.0286 ft/ft towards the north.

Prior to the current investigation, and based on surrounding hydrogeologic data from topographic interpretations, the hydraulic gradient was expected towards the west or southwest. While current groundwater direction is different than originally anticipated, it is consistent through multiple measuring events. A groundwater elevation and contour map is presented in Figure 4.

6.0 CHEMICAL ANALYSIS

Select soil samples were field-preserved by EPA Method 5035A, and groundwater samples were collected in laboratory supplied 40 milliliter vials. All samples were immediately placed on ice within a dedicated transport cooler. Samples were then submitted for VOC chemical analysis by EPA Method 8260C, to Onsite Environmental (Kirkland, WA). Laboratory reports and chain-of-custody documentation are provided as Appendix D.

7.0 ANALYTICAL RESULTS

Analytical results were accompanied by the required quality control/quality assurance data. A review of this information was performed according to the National Functional Guidelines for Organic and Inorganic Data Review (US EPA, 2008). The review shows that aside from a minor qualifier flag for acetone calibration, the laboratory data provided is valid for its intended use. This section presents chemical analytical results of soil and groundwater analysis.

7.1 SOIL ANALYTICAL RESULTS

The section presents analytical results for soil chemical analysis. Select soil samples were analyzed for VOCs (EPA Method 8260C). VOCs in soil from the current and previous investigations are presented in Table 1.

7.1.1 VOLATILE ORGANIC COMPOUNDS IN SOIL

PCE and TCE were detected to maximum concentrations of 0.014 milligrams per kilogram (mg/kg) and 0.0023 mg/kg, respectively, both in B9 at 10 ft bgs. Other than PCE and TCE also being detected at trace levels in B8 at 10 ft bgs (0.0069 mg/kg and 0.0012 mg/kg, respectively), no other VOCs were detected beneath the building foundation in any soil samples analyzed during the current investigation. Maximum

trace detections of PCE, TCE and DCE , (0.0091 mg/kg, 0.0015 mg/kg, and 0.0019 mg/kg, respectively; B3 at 13 ft. bgs) were detected outside the building footprint. Other than PCE (B12 at 16 ft bgs) also being detected at trace levels of 0.0011 mg/kg, no other chlorinated VOCs were detected outside the building footprint in any soil samples analyzed during the current investigation.

Concentrations of these chlorinated VOCs in soil were compared to MTCA Method A and Method B cleanup levels. These detections for PCE, TCE, and DCE were significantly lower than their respective cleanup levels of 0.05 mg/kg, 0.03 mg/kg and 160.0 mg/kg. It should be noted that trace detections of Naphthalene and 1,2,4-Trimethylebenzene, (0.270 mg/kg and 0.0015 mg/kg, respectively) were found in B6 at 15 ft bgs, also outside the building footprint. Concentrations of these VOCs in soil were compared to available cleanup levels. Naphthalene was found to be significantly lower than its MTCA Method A cleanup level of 0.48 mg/kg. While the trace level of 1,2,4 Trimethylbenzene is not expected to present any health or further risk to the environment, no current cleanup level is listed in Ecology's CLARC database.

VOCs in soils are presented in Table 1.

7.2 GROUNDWATER ANALYTICAL RESULTS

This section presents the groundwater analytical results. All groundwater samples were analyzed for VOCs (EPA Method 8260C). VOCs in groundwater from the current and previous investigations are presented in Table 2.

7.2.1 VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER

Maximum detections of PCE and TCE, (40 micrograms per liter [µg/l] and 11 µg/l, respectively; both in B3) were detected down-gradient, approximately 40 feet north of the Site building and historical release area. PCE (16 µg/l) was detected in B7, along the northern edge of the historic release area. PCE (5.5 µg/l) was detected in B9, along the southern edge of the historic release area. PCE and TCE, (25 µg/l and 5.5 µg/l, respectively) were detected in B12, approximately 65 feet north and down-gradient of the Site building and historical release area. These detections of PCE and TCE in groundwater were above the MTCA Method A cleanup level of 5 µg/l for each of these compounds. PCE was detected in B13, (1.1 µg/l, significantly below the Method A cleanup level), distally down-gradient, approximately 110 feet north of the Site building and historic release area.

Concentrations of TCE below Method A cleanup levels were detected in B7 and B9, (3.3 µg/l and 0.06 µg/l, respectively). Concentrations of cis-DCE below Method A cleanup level (80 µg/l), were detected in B3 (39 µg/l), B7 (6.9 µg/l), B9 (0.67 µg/l), B12 (17 µg/l), and B13 (0.21 µg/l). Concentrations of trans-DCE below Method A cleanup level (160 µg/l), were detected in B3 (0.78 µg/l) and B12 (0.21 µg/l). The only other chlorinated VOC detected was 1,1,1 Trichloroethane in B1, (at 0.33 µg/l), west and cross-gradient of the historic release area. It too was detected well below the Method A cleanup level of 5.0 µg/l.

Trace groundwater concentrations of VOCs normally related to Stoddard Solvents were found in B1, B3, B5, B7 and B9, proximal to the historical release area in cross-gradient and down-gradient directions. While not present in all these groundwater samples, these compounds included 1,2,4 trimethlybenzene, sec-Butylbenzene, Isopropylbenzene, Xylenes, Ethylenbenzene and benzene. Concentrations of these VOCs in groundwater were compared to available Method A cleanup levels. With the exception of Isopropylbenzene, which does not have a published cleanup level, all detections were significantly below respective cleanup levels. None of these Stoddard Solvent associated detections would likely present a risk to human health or the environment.

A summary of VOCs detected in groundwater are presented in Table 2.

8.0 DISCUSSION

This section provides the current Site conceptual model and details potential environmental concerns resulting from the subsurface investigation.

8.1 SOIL CONTAMINANT CONDITIONS

To date, no VOCs at the Site have been detected in shallow or deep soils above the MTCA Method B levels. However, residual amounts above Method A cleanup levels most likely remain beneath the slab foundation of the Site building in the historical release area of the former dry-cleaning operations. VOCs detections remain in the capillary zone in samples taken some distance from the historic release area, reflecting contaminant transport via groundwater rather than through the observed glacial till. Based upon past and recent soil data results, this presumed past release area appears centralized near Environmental Associates 2013 boring B_E3.

Due to the significant amounts of glacial till at the Site, the lateral impact to the vadose zone appears limited to an approximate 18 foot circumference, again at what appears to be residual concentrations. Based upon information that the original release associated with former dry-cleaning operations may have occurred as late as 1984 (last reported dry-cleaning business), it cannot be ruled out that the entire(?) mass of the original VOC source may have transferred to the groundwater.

8.2 GROUNDWATER CONTAMINANT CONDITIONS

No drinking water wells are found on Site, nor in the immediate half mile radius. Regional drinking water use is by public supply. In general, groundwater conditions detected during the current assessment display a low concentration plume of chlorinated VOCs proceeding due north from a past release centralized near Environmental Associates 2013 boring B3. Dissolved phase VOCs have impacted soils in the down-gradient capillary zone, yet at levels well below the respective MTCA Method A cleanup levels. Based upon the laboratory analytical data and the hydraulic gradient information, the VOC plume appears to extend from the source area to a distal edge approximately 135 feet northward with a maximum width of approximately 40 feet. The PCE groundwater plume is graphically presented in Figure 5.

While the groundwater detections are above the applicable MTCA Method A cleanup levels at certain areas of the subject property, the VOC plume shows an established attenuation pattern with the most distal portion reporting PCE at approximately five times less than the MTCA Method A level. No contaminant exceeding the applicable MTCA Method A cleanup level is moving off of the subject property.

With these current conditions, monitored natural attenuation would be the proposed remedial approach to address this site.

8.3 CONTAMINANT DEGRADATION CONDITIONS

In most anaerobic groundwater environments production of significant amounts of VC drives remedial actions. After several rounds of sampling over the last three years and performed by two separate State Accredited laboratories, no VC has been detected in soil or groundwater. The confirmed VC absence in both soil and groundwater rules out liquid phase dilution as an active reduction process. Based upon this observed trend, active in-situ degradation and mineralization of VC appears to be occurring faster than its production rate. Significant amounts of the cis-DCE intermediate compound greater than the parent PCE concentration are not observed either.

Literature suggests that an effective anaerobic oxidation process can occur when a reduced geochemical environment exists in the presence of Mn(IV) or Fe(III), which are often found in glacial till and similar sand environments, such as those at this particular Site. To confirm this possibility, in-situ groundwater

measurements were taken. The results verify that a highly reducing environment (positive ORP) and low oxygen (~2.0 mg/L) conditions already exist. While further testing of microbial populations and/or metal species were beyond the scope the work plan, the current degradation regime strongly suggests an anaerobic oxidation process is occurring on-site. Based upon this information, the established attenuation of dissolved-phase, chlorinated VOCs under natural conditions appears to be an effective remedial approach for this site.

9.0 QUALITY ASSURANCE / QUALITY CONTROL REVIEW

The objective of this review is to ensure adequate Quality Assurance/Quality Control (QA/QC) of the analytical data generated by the Site sampling activities. Samples results were generally evaluated in accordance with the National Functional Guidelines for Organic and Inorganic Data Review (US EPA, 2008). Using these guidelines the analytical data were evaluated for completeness, comparability, accuracy and precision. Towards this goal, the laboratory provided accompanying QA/QC results for each set of samples that were analyzed.

Samples were collected on December 29, 2014, January 13, 2015 and February 25, 2015 to identify possible impact from various organic chemicals that can pose an environmental concern at the Site. A total of 13 soil and 8 groundwater samples were collected and submitted for analyses in accordance with the properly completed chain of custody forms. The samples were documented as having been sampled in their required containers, properly preserved and received in good condition by Onsite Environmental (Kirkland, WA). All samples were analyzed within the required holding times. The data qualifier flag (Y) for Acetone in samples indicates that the calibration verification exceeded the 20% allowable drift and that detections of Acetone should be considered an estimate, if not invalid. Further noted is that Site samples were collected in extremely reduced subsurface conditions. Therefore the likelihood of actual acetone present within this environment is extremely unlikely. Percent moisture was also analyzed by the laboratory and appears consistent with field observations. Practical Quantitation limits (PQL) used by the laboratory with the sample analysis were well below the corresponding regulatory cleanup levels. QA/QC parameters supplied by the lab along with the sample data included surrogate recovery data, method (laboratory) blank data, duplicate blank data, matrix spike data and matrix spike duplicates where possible.

Surrogate recoveries for all samples were well within the required QC limits. Method blank analytical results meet the required QC criteria and no corrections are needed. Laboratory duplicate analyses were performed and proper analytical precision is displayed. Matrix spike results indicate the required analytical accuracy was achieved. Matrix spike duplicate results further demonstrate appropriate analytical precision. The data quality objectives as provided in the National Guidelines are met and these data can be considered valid and representative of Site conditions found during this Phase II ESA.

10.0 CONCLUSIONS AND RECOMMENDATIONS

Andersen Environmental has conducted soil sampling and groundwater monitoring well installation at 9201 Pacific Avenue, South in Tacoma, Washington. Thirteen soil borings were advanced to depths ranging from 7 feet to a maximum depth of 21 feet bgs. Four groundwater monitoring wells were installed on-site to depths of 18 to 19 feet bgs, to further assess groundwater characteristics. Soil samples were collected to assess chlorinated VOC presence at specified locations based upon historical records of previous dry-cleaner operations. Temporary and longer-term monitoring wells were sampled to delineate the presence of chlorinated VOCs in groundwater. In addition, in-situ chemical measurements were taken to assess the conditions favorable to natural degradation of chlorinated VOCs. Andersen Environmental's conclusions and recommendations are as follows:

- This assessment did not detect any VOCs in soils at concentrations above MTCA Method B levels. Of the isolated residual amounts above Method A, their contribution as a risk to human health or the environment at the site appears limited, and their concentrations are expected to attenuate over time.
- At no time during various investigations were non-aqueous phase liquids or chemical odors detected. No sumps, drain or utility trenches, cracks in the slab foundation, or fractured bedrock were encountered during various investigations. Given the low concentrations of VOCs present beneath the slab foundation, the potential to create unacceptable air levels to indoor receptors is low.
- This assessment did not detect any receptors affected by the groundwater conditions found at the Site. A plume of low concentration VOCs (maximum concentration less than 10x MTCA Method A levels) extends from the source area to a distal edge approximately 135 feet northward with a maximum width of approximately 40 feet. The plume shows a pattern of natural attenuation with a leading edge detection of PCE five time less than the MTCA Method A level, indicating that no impacted groundwater above MTCA Method A cleanup levels has moved off the Site. As such, Monitored Natural Attenuation (MNA) would be a feasible option for groundwater remediation.
- While presently vacant, the Site is expected to continued commercial operations sometime in the future. Reported plans do not include excavation or re-grading of the Site, nor possible access and/or use of groundwater. The groundwater is characterized as having an effective natural attenuation process of VOCs currently underway. Measurements were made to confirm in-situ conditions favorable to this process, and there is no reason to expect the process to decrease.
- Andersen Environmental recommends conducting three additional quarterly groundwater sampling events to establish stable or declining groundwater conditions beneath the Site, at which point a No Further Action determination by the Department of Ecology would be requested.

11.0 SIGNIFICANT ASSUMPTIONS, LIMITATIONS AND RELIANCE

This report has been prepared in accordance with generally-accepted environmental methodologies and industry standards as they relate to the Data Quality Objectives of the assessment. No warranties, expressed or implied, are made as to the professional services provided under the terms of Andersen Environmental's contract(s) or specified in this report. This assessment has been conducted, in part, based on information, data or reports provided or prepared by others. Andersen Environmental reviews and interprets these documents in good faith and relies that the provided data and documents are true and accurate.

Environmental conditions at the site were assessed or interpreted within the context of Andersen Environmental's contract(s) and existing environmental regulations of applicable jurisdiction(s) as of the date of the report. Regulatory requirements, regulations and guidance are subject to change subsequent to the date of the report. Unless otherwise stated in the report, evaluating compliance of past, present or future owners with applicable local, provincial and federal government laws and regulations was not included within the scope of the assessment.

The environmental assessment is limited by the availability of information at the time of the assessment. The conclusions and recommendations regarding environmental conditions presented in this report are based on a scope of work authorized by the Client. It is possible that unreported conditions impairing the environmental status of the site may have occurred which could not be identified. Andersen Environmental's opinions cannot be extended to portions of the site that were unavailable for direct access and observation reasonably beyond the control of Andersen Environmental or outside of the scope of the assessment. Environmental assessment activities, particularly the sampling of soil, vapor (air), groundwater and structure materials, represent those conditions which are present at the time of sampling within the immediate vicinity of the sample(s) collected. Although sampling plans are developed in an attempt to provide what is interpreted as sufficient coverage within the assessment area to achieve the investigative objectives, no extent of sampling can guarantee all environmental conditions, potential chemicals of concern (man-made or naturally occurring) and concentrations at which they occur have been identified and quantified absolutely. The assessment performed and outlined in this report was based, in part, upon visual observations of the site and attendant structures. It should be noted that compounds, materials or chemicals of potential concern other than those described could be present in the site environment, and the possibility remains that unexpected environmental conditions may be encountered at the site in locations not specifically investigated.

All components of this report, including but not limited to text, signatures, certifications, figures, tables, attachments, appendices, supporting documents and addenda are integral to the reporting of the assessment. This report may not be reproduced, except in full, without written approval of Andersen Environmental.

This report has been prepared for the sole use of WELLES RINNING. The contents should not be relied upon by any other parties without the express written consent of WELLES RINNING and Andersen Environmental.

1.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

This assessment has been conducted with the standards and level of care and skill exercised in such types of investigations, by qualified geologists, engineers, environmental scientists or environmental professionals, in conformance with generally-accepted industry standards and practices.

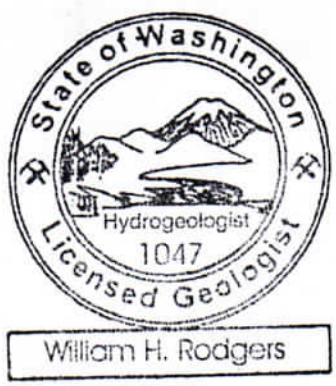
Prepared by: Date: May 12, 2015

Nels B. Cone
Environmental Site Assessor No.935835
Washington State

Reviewed and approved by: Date: May 12, 2015

Brian Martasin
Professional Geologist No. 8356
Principal Geologist

Reviewed and approved by: Date: May 12, 2015



Bill Rodgers
Licensed Hydrogeologist No.
Washington State

13.0 REFERENCES

The Riley Group, *Phase I Environmental Site Assessment*, January 28, 2005

Environmental Associates, Inc., *Limited Soil and Groundwater Sampling and Testing*, April 26, 2013

Andersen Environmental, *Phase I Environmental Site Assessment Report*, September 16, 2014

United States Geologic Survey, *South Tacoma, Washington, 7.5 Minute Topographic Quadrangle*, 1987

Washington State Model Toxics Control Act Cleanup Regulation Chapter 173-340 WAC, October 2007

Washington State Model Toxics Control Act Chapter 70.105D RCW, Publication No. 9406, revised 2013

Washington State Uniform Environmental Covenants Act Chapter 64.7, November 2007

Department of Ecology, *Cleanup Levels and Risk Calculation (CLARC) database*, May 2014 Update

Department of Ecology, *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action, Draft Final*, Publication No. 0909047, October 2009

Applied and Environmental Microbiology, *Anaerobic Oxidation of [1,2-^{14}C]Dichloroethene under Mn(IV)-Reducing Conditions,* P.M.Bradley, et.al., April 1998

United States Environmental Protection Agency, *Identifying Redox Conditions that Favor the Natural Attenuation of Chlorinated Ethenes in Contaminated Groundwater Systems*, EPA/540/R-96/509, 1996

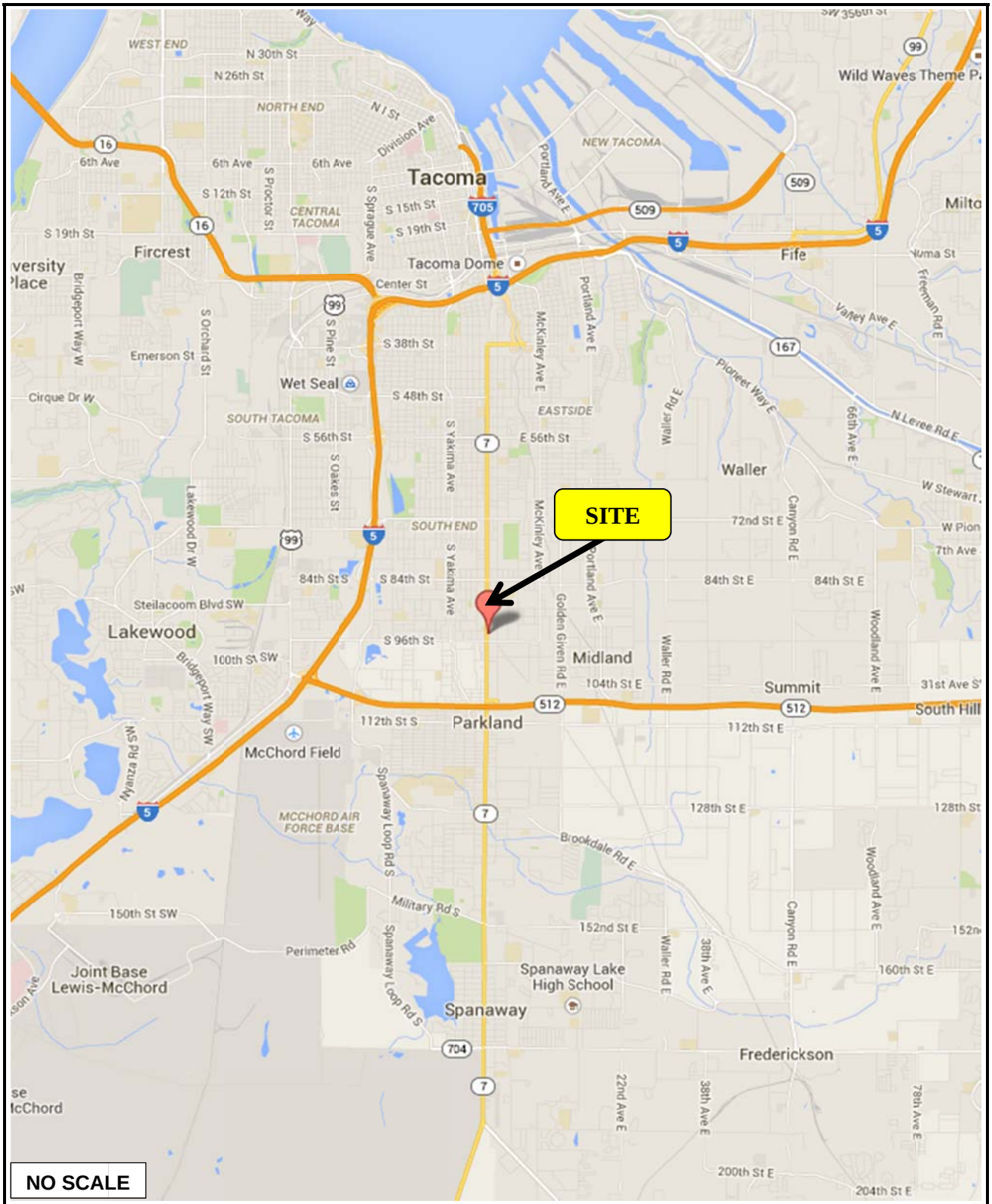
Environmental Science & Technology, *Anaerobic Mineralization of Vinyl Chloride in FE(III)-reducing conditions,* P.M.Bradley and F.H.Chapelle, 1996

United States Geologic Survey, *Anaerobic Oxidation of Vinyl Chloride Under Humic-Acid Reducing Conditions,* May 2014

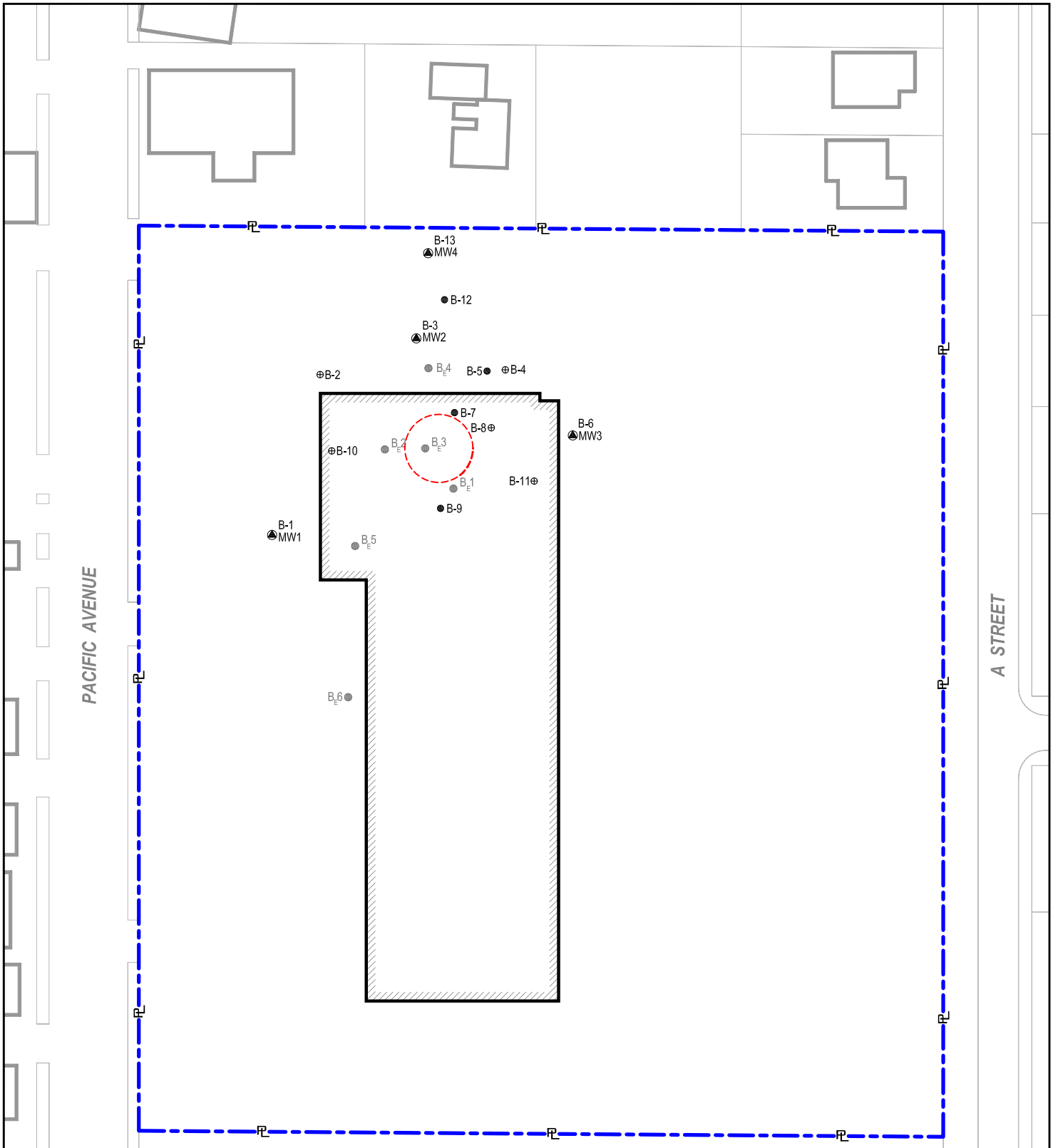
United States Geologic Survey, *Role of Acetogens in Anaerobic Oxidation of Vinyl Chloride*, May 2014

United States Environmental Protection Agency, *National Functional Guidelines for Organic and Inorganic Data Review*, US EPA, 2008

FIGURES



ANDERSEN ENVIRONMENTAL	**Figure 1: Site Location Map** 9201 South Pacifica Avenue Tacoma, Washington 98444	Source: Google, Inc., 2015 AE Project Number: 1412-2091 Drawn By: Shayan Simantob



LEGEND

- SUBJECT PROPERTY
- SITE STRUCTURE
- APPROX. AREA OF SOURCE ZONE
- B-6 MW3 — SOIL BORING CONVERTED TO PERMANENT GROUNDWATER MONITORING WELL (ANDERSEN, 2014 - 2015)
- B-5 — SOIL BORING & GROUNDWATER GRAB SAMPLING LOCATION (ANDERSEN, 2014 - 2015)
- B-10 — SOIL BORING (ANDERSEN, 2014)
- B_E6 — FORMER SOIL BORING & GROUNDWATER SAMPLING LOCATION (ENVIRONMENTAL ASSOCIATES, 2013)

FIGURE 2	SITE PLAN
ADDRESS:	9201 PACIFIC AVENUE TACOMA, CALIFORNIA 98444
SOURCE:	ANDERSEN ENVIRONMENTAL
PROJECT NO.:	1412-2091
DRAWN BY:	JOHN ESCALONA
CHECKED BY:	BRIAN MARTASIN
DATE:	04/13/2015

ANDERSEN ENVIRONMENTAL

APPROX. SCALE: 1"= 100'

0' 50' 100'

K:\AE 2014\Projects 2014\1412-2091_9201 Pacific Ave Tacoma WA 98444_PH1105 1412-2091_Reports\From Heidi\CAD

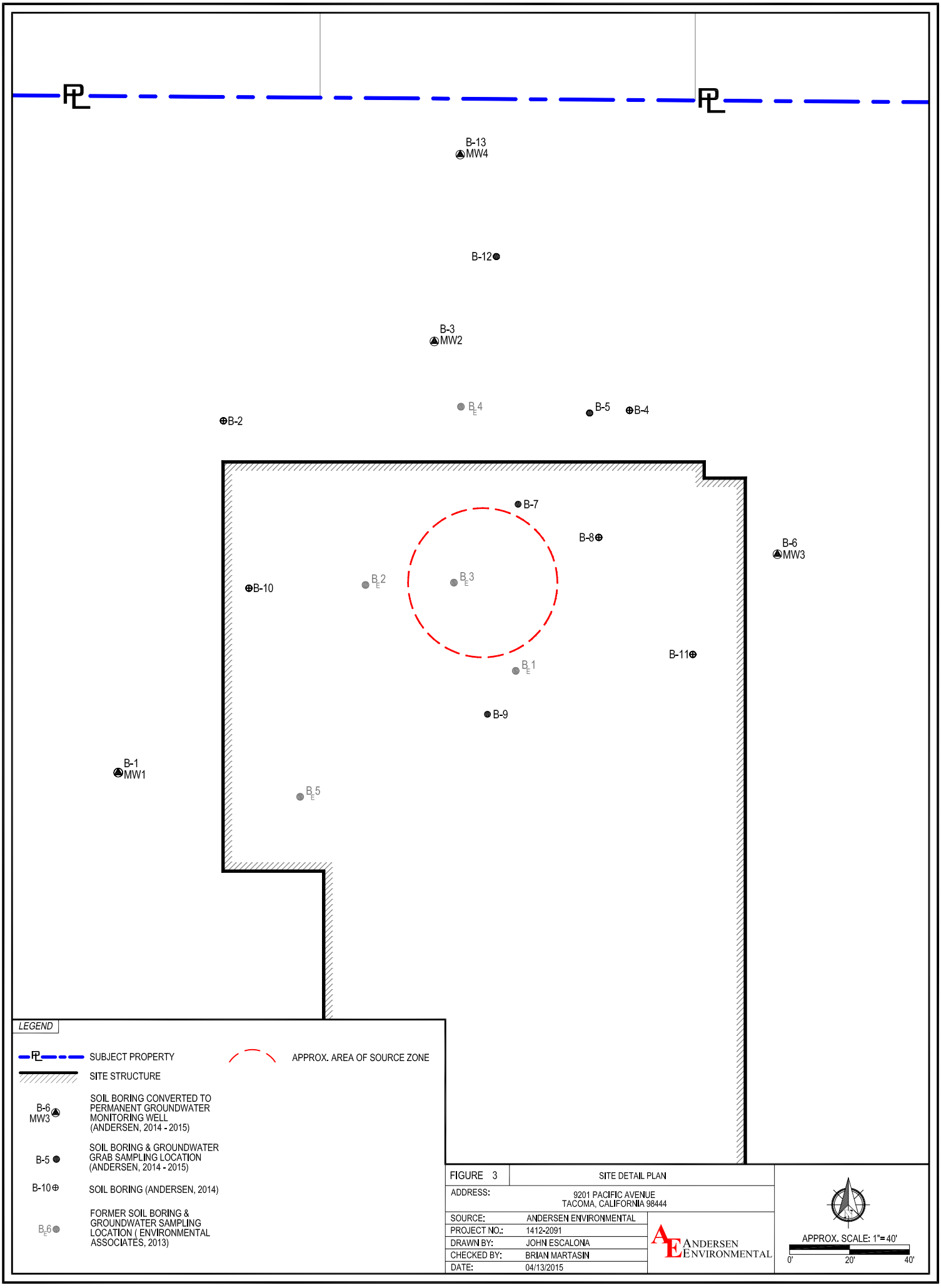


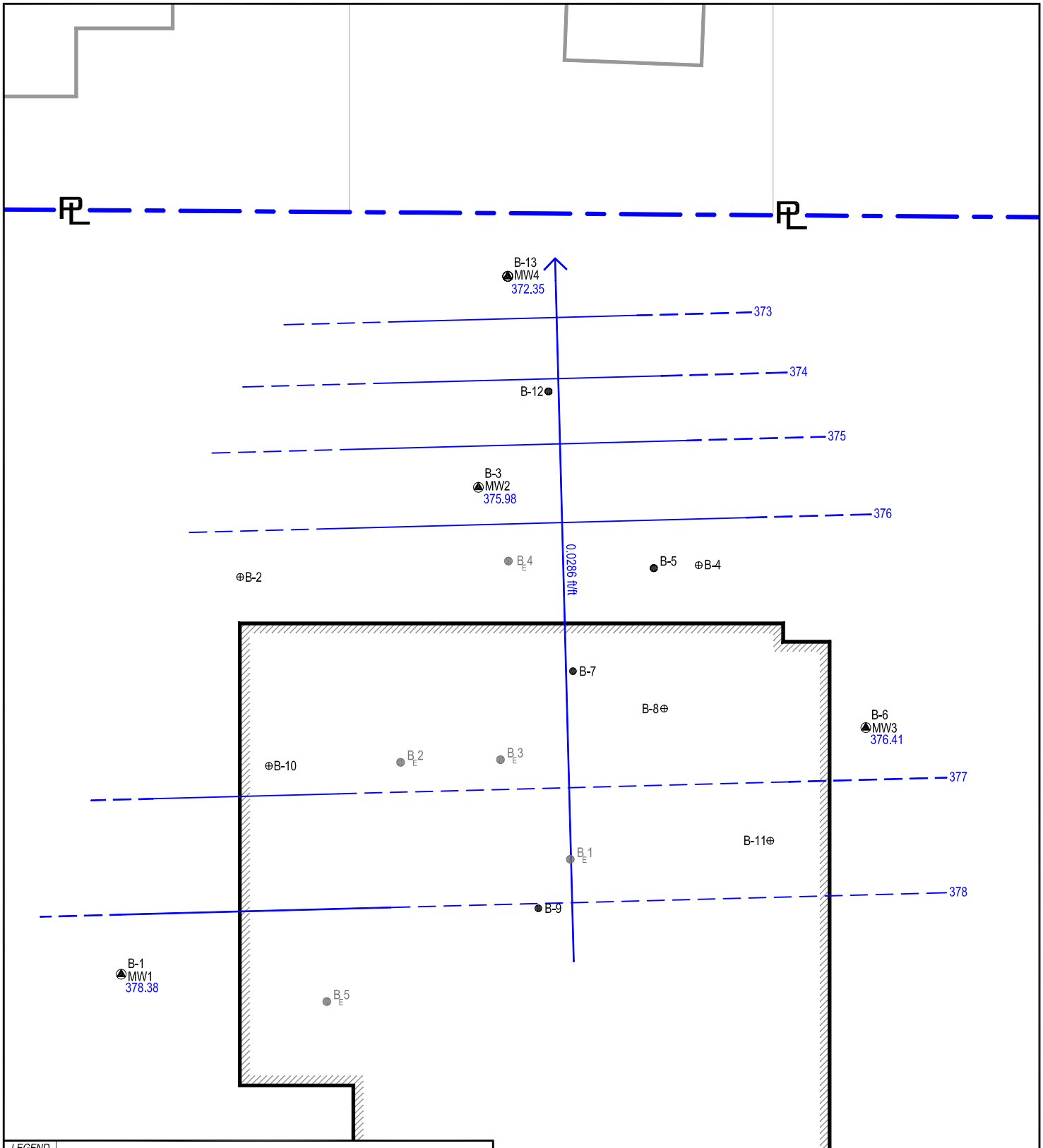
FIGURE 3	SITE DETAIL PLAN
ADDRESS:	9201 PACIFIC AVENUE TACOMA, CALIFORNIA 98444
SOURCE:	ANDERSEN ENVIRONMENTAL
PROJECT NO.:	1412-2091
DRAWN BY:	JOHN ESCALONA
CHECKED BY:	BRIAN MARTASIN
DATE:	04/13/2015

ANDERSEN ENVIRONMENTAL

APPROX. SCALE: 1"= 40'

0' 20' 40'

K:\AE 2014\Projects 2014\1412-2091_9201 Pacific Ave Tacoma WA 98444_PH I\GIS 1412-2091_Reports\From Heidi\CAD



LEGEND

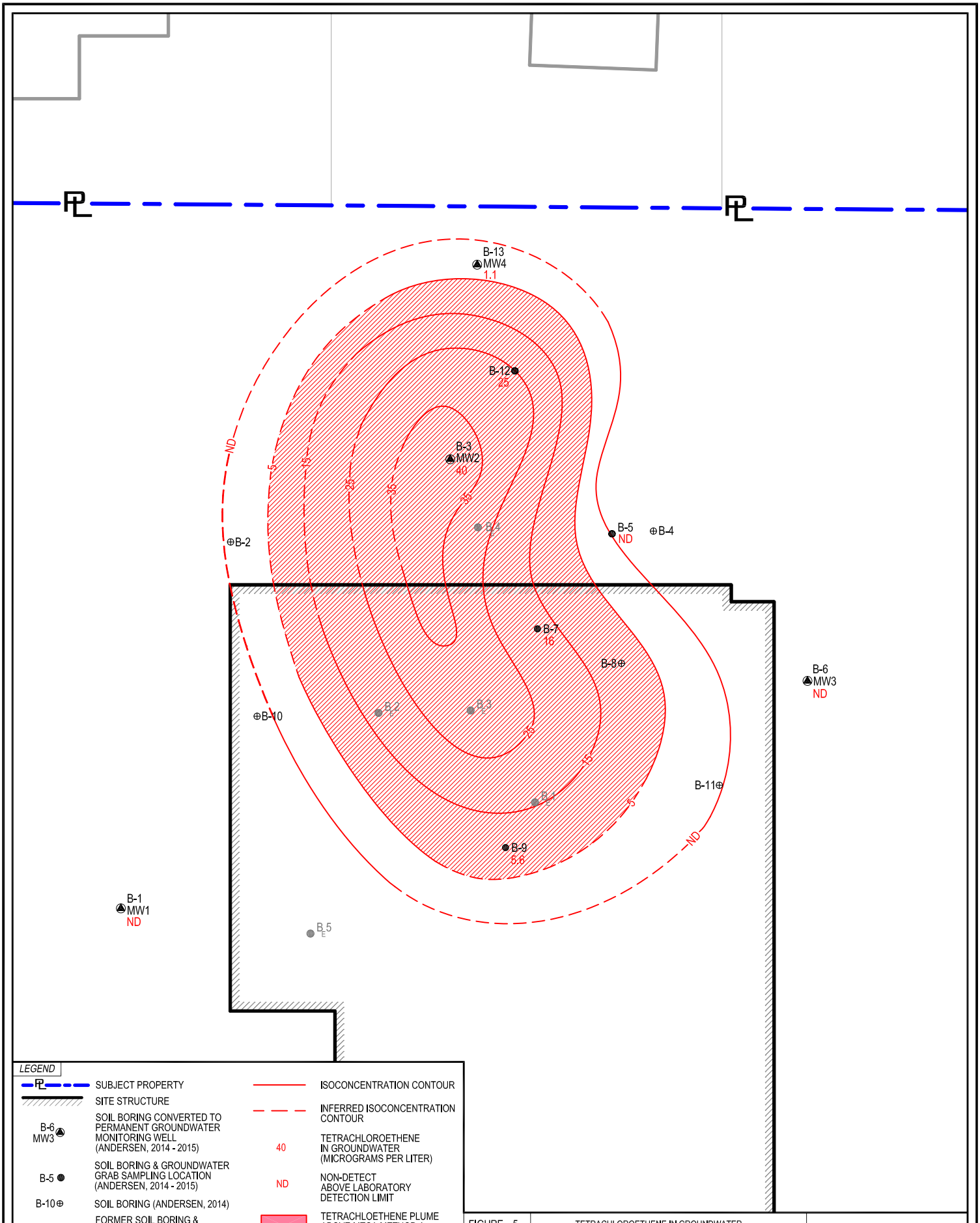
- SUBJECT PROPERTY
- SITE STRUCTURE
- B-6 MW3 — SOIL BORING CONVERTED TO PERMANENT GROUNDWATER MONITORING WELL (ANDERSEN, 2014 - 2015)
- B-5 — SOIL BORING & GROUNDWATER GRAB SAMPLING LOCATION (ANDERSEN, 2014 - 2015)
- B-10 — SOIL BORING (ANDERSEN, 2014)
- B6 — FORMER SOIL BORING & GROUNDWATER SAMPLING LOCATION (ENVIRONMENTAL ASSOCIATES, 2013)
- GROUNDWATER ISOCONTOUR
- INFERRED GROUNDWATER ISOCONTOUR
- 375.90 — GROUNDWATER TABLE ELEVATION IN FEET ABOVE MEAN SEA LEVEL (03/12/2015)
- 0.0286 ft/ft — GROUNDWATER GRADIENT AND FLOW DIRECTION

FIGURE 4	GROUNDWATER GRADIENT AND CONTOUR MAP
ADDRESS:	9201 PACIFIC AVENUE TACOMA, CALIFORNIA 98444
SOURCE:	ANDERSEN ENVIRONMENTAL
PROJECT NO.:	1412-2091
DRAWN BY:	JOHN ESCALONA
CHECKED BY:	BRIAN MARTASIN
DATE:	04/13/2015

ANDERSEN ENVIRONMENTAL

APPROX. SCALE: 1"= 40'

0' 20' 40'



LEGEND

- SUBJECT PROPERTY
- SITE STRUCTURE
- B-6 / MW3 — SOIL BORING CONVERTED TO PERMANENT GROUNDWATER MONITORING WELL (ANDERSEN, 2014 - 2015)
- B-5 — SOIL BORING & GROUNDWATER GRAB SAMPLING LOCATION (ANDERSEN, 2014 - 2015)
- B-10 — SOIL BORING (ANDERSEN, 2014)
- B_E6 — FORMER SOIL BORING & GROUNDWATER SAMPLING LOCATION (ENVIRONMENTAL ASSOCIATES, 2013)
- ISOCONCENTRATION CONTOUR
- INFERRED ISOCONCENTRATION CONTOUR
- 40 — TETRACHLOROETHENE IN GROUNDWATER (MICROGRAMS PER LITER)
- ND — NON-DETECT ABOVE LABORATORY DETECTION LIMIT
- TETRACHLOETHENE PLUME ABOVE MTCA METHOD A CLEANUP LEVEL

NOTES

A. SAMPLES FROM B-1/MW1, B-3/MW2, B-5 & B-6/MW3 COLLECTED ON 12/29/2014
B. SAMPLES FROM B-7 & B-9 COLLECTED ON 12/30/2014
C. SAMPLES FROM B-12 & B-13/MW4 COLLECTED ON 12/25/2015

FIGURE 5	TETRACHLOROETHENE IN GROUNDWATER
ADDRESS:	9201 PACIFIC AVENUE TACOMA, CALIFORNIA 98444
SOURCE:	ANDERSEN ENVIRONMENTAL
PROJECT NO.:	1412-2091
DRAWN BY:	JOHN ESCALONA
CHECKED BY:	BRIAN MARTASIN
DATE:	04/13/2015

ANDERSEN ENVIRONMENTAL

APPROX. SCALE: 1"= 40'
0' 20' 40'

K:\AE 2014\Projects 2014\1412-2091_9201 Pacific Ave Tacoma WA 98444_PH II\05 1412-2091_Reports\From Heidi\CAD

TABLES

Table 1: Volatile Organic Compounds in Soil
COGIC Property
9201 South Pacific Avenue, Tacoma, Washington 98444

Sample ID	Sample Date	Sample Depth (ft bgs)	EPA Method 8260C (mg/kg)										
			Tetrachloro-ethylene (PCE)	Trichloro-ethylene (TCE)	cis-1,2,Dichloro-ethylene	trans-1,2,Dichloro-ethylene	Vinyl Chloride	1,2, Dichloro-ethane	1,1,1,Trichloro-ethane	Napthalene	1,2,4,Trimethyl-benzene	Acetone	All Other 8260C VOC Analytes
B_E1-3	4/17/2013	3	ND<0.02	**0.03**	**0.05**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND
B_E1-3dup	4/17/2013	3	ND<0.02	**0.04**	**0.05**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND
B_E2-3	4/17/2013	3	ND<0.02	**0.03**	**0.25**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND
B_E3-4	4/17/2013	4	**1.2**	**0.5**	**0.19**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND
B_E4-3	4/17/2013	3	**0.03**	ND<0.02	**0.17**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND
B_E5-15	4/17/2013	15	ND<0.02	ND<0.02	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND
B_E6-15	4/17/2013	15	ND<0.02	ND<0.02	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND
B1-12	12/29/14	12	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	**0.011 Y**	ND
B2-14	12/29/14	14	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B3-13	12/29/14	13	**0.0091**	**0.0015**	**0.0019**	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B4-14	12/29/14	14	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B5-14	12/29/14	14	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B6-15	12/29/14	15	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	**0.27**	**0.0015**	ND<0.0056	ND
B7-17	12/30/14	17	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B8-10	12/30/14	10	**0.0069**	**0.0012**	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B9-10	12/30/14	10	**0.014**	**0.0023**	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B10-7	12/30/14	7	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B11-10	12/30/14	10	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B12-16	02/25/15	16	**0.011**	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B13-14	02/25/15	14	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
CUL			**0.05(A)**	**0.03(A)**	**160(B)**	**1600(B)**	**240(B)**	**1600(A)**	**2.0(A)**	**5.0(A)**	**NE**	**7200(B)**	**Varies**

Notes:
"B_E1-3" - Environmental Associates, 2013
"B1-12" - Andersen Environmental, 2014 - 2015
ND - Analyte not detected above Practical Quanitation Limit
NE - Not Established
PQL - Practical Quantitation Limit
CUL - Existing CleanUp Level under MTCA Method (A) or Method (B)
Detections in bold, detections exceeding screening criteria shaded in gray
Y - Laboratory calibration parameters not within nominal range. See laboratory report.
mg/kg = milligrams per kilogram

Table 2: Volatile Organic Compounds in Groundwater
COGIC Property
9201 South Pacific Avenue, Tacoma, Washington 98444

Sample ID	Sample Date	EPA Method 8260C (µg/l)														
		Tetrachloro-ethylene (PCE)	Trichloro-ethylene (TCE)	cis-1,2,Dichloro-ethylene	trans-1,2,Dichloro-ethylene	Vinyl Chloride	1,2,Dichloro-ethane	Chloroform	Benzene	Ethyl-benzene	Total Xylenes	Isopropyl-benzene	sec-Butyl-benzene	1,2,4,Tri-methyl-benzene	Acetone	All Other 8260C VOC Analytes
B_E1	4/17/2013	**2.4**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<10	ND
B_E1-dup	4/17/2013	**2.3**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<10	ND
B_E2	4/17/2013	**21**	**4.7**	**26**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<10	ND
B_E3	4/17/2013	**44**	**16**	**32**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<10	ND
B_E4	4/17/2013	**7**	**2.4**	**9.3**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<10	ND
B_E5	4/17/2013	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<10	ND
B_E6	4/17/2013	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<10	ND
B1/MW1	12/29/14	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	**0.33**	ND<0.2	**0.4**	**0.29**	**1.55**	**0.26**	**0.36**	**0.43**	ND<5	ND
B3/MW2	12/29/14	**40**	**11**	**39**	**0.78**	ND<0.2	ND<0.2	**0.24**	ND<0.2	ND<0.2	**0.72**	ND<0.2	ND<0.2	ND<0.2	ND<5	ND
B5	12/29/14	ND<0.2	ND	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	**0.41**	**1.92**	ND<0.2	ND<0.2	ND<0.2	ND<5	ND
B6/MW3	01/23/15	ND<0.2	ND	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.04	ND<0.2	ND<0.2	ND<0.2	ND<5	ND
B7	12/30/14	**16**	**3.3**	**6.9**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	**0.35**	**1.25**	ND<0.2	ND<0.2	ND<0.2	ND<5	ND
B9	12/30/14	**5.6**	**0.96**	**0.67**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	**0.2**	**0.42**	**1.45**	ND<0.2	ND<0.2	ND<0.2	**10 Y**	ND
B12	02/25/15	**25**	**5.5**	**17**	**0.21**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.04	ND<0.2	ND<0.2	ND<0.2	ND<5	ND
B13/MW4	02/25/15	**1.1**	ND<0.2	**0.21**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.04	ND<0.2	ND<0.2	ND<0.2	ND<5	ND
Trip Blank	10/30/14	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.04	ND<0.2	ND<0.2	ND<0.2	ND<5	ND
CUL		**5**	**5**	**80**	**160**	**0.2**	**5**	**80**	**5**	**700**	**1000**	**NE**	**80**	**80**	**7200**	**Varies**

Notes:
"BE1" - Environmental Associates, 2013
"B1" - Andersen Environmental, 2014 - 2015
ND - Analyte not detected above Practical Quanitation Limit
NE - Not established
PQL - Practical Quanitation Limit
CUL - Existing CleanUp Level under MTCA Method A or CLARC Tables
Detections in bold, detections exceeding screening levels shaded in gray

APPENDIX A

HEALTH AND SAFETY PLAN

SITE SPECIFIC HEALTH AND SAFETY PLAN

To be used for Emergency Response or jobs expected to last less than one week

Project Description Phase II Soil Borings Project No. 1412-2091

DESCRIPTION OF MATERIAL TO BE HANDLED -- To be completed by Project Manager Soil cuttings / water development water possibly impacted by chemicals of concern such as halogenated hydrocarbons

Actual T S and/or C = _____

T= Time Weighted Average (TWA) S = Short Term Exposure Limit (STEL) C = Ceiling

SITE LOCATION AND DESCRIPTION -- To be completed by Project Manager. (Include size/area, topography, open or confined space, ventilation, ignition sources, other materials/wastes in area, site accessibility, expected vapor dispersion, i.e., vertical -- horizontal -- likely to seek lower levels and form pockets -- etc., leakage, available body/eye safety showers, etc.) Five (5) Geoprobe borings in an open parking lot (4 monitoring well installations); five(5) Geoprobe borings using LAR inside large building. All work areas secured to non-working personnel. Formal Utility locates have been performed and are visibly marked. All site staff will be OSHA 40-hr trained and wearing Level D PPE depending upon task. Interior work will have additional precautions in place of supplied lighting and power equipment exhaust ventilation as needed. No electrical power found onsite. Possible under ground equipment drains indentified. Proper egress and access will be maintained at all times Overhead obstructions will be clearly marked.

SAFETY & HEALTH MANAGER TO COMPLETE THE FOLLOWING:
TOXICITY BY INHALATION SKIN ABSORPTION (CHECK ONE OR BOTH AS APPLICABLE)

Based on the lowest TWA, STEL and/or Ceiling. Check (X) the level of toxicity and circle T, S, or C to indicate TWA, STEL, and/or Ceiling below:

0 - 100 PPM	____	3	T	S	C	Severely Toxic - Hazardous waste that is capable of producing irreversible damage to employee health and/or employee death.
101 - 500 PPM	X	2	(T)	S	C	Moderately Toxic - Hazardous waste that is capable of causing reversible o irreversible changes in the human body not necessarily severe enough to cause serious physical impairment or threaten life.
Over 500 PPM	____	1	T	S	C	Low or Slightly Toxic - Hazardous wastes that are capable of producing changes readily reversible once exposure ceases with or without medical intervention.

TOXICITY BY INGESTION - Based on the lowest human LDLO or, if not available, the lowest animal LD50. Check (X) the applicable degree of toxicity below.

DOSE PER KG OF BODY WEIGHT		DEGREE OF TOXICITY	PROBABLE LETHAL DOSE FOR A 70 KG (155lb) MAN
more than 1.0 mg	____	(6) Dangerously Toxic	-- A taste
1 - 50 mg	____	(5) Seriously Toxic	-- A teaspoonful
(50 - 500mg)	____	(4) Highly toxic	(-- An ounce)
0.5 - 5 gm	X	(3) Moderately Toxic	-- A pint
5 - 15 gm	____	(2) Slightly Toxic	-- A quart
less than 15 gm	____	(1) Low Toxicity	-- More than a quart

PHYSICAL CHARACTERISTICS

Vapor Pressure 10mm Hg Vapor Density 5.83 (Air = 1) Other skin irritant

PHYSICAL HAZARDS - FIRE/EXPLOSION

Flash point NA °F LEL _____ % by Vol to UEL _____ % Other _____

REACTIVITY

Stable X Unstable _____ Pyroforic _____ Oxidizer _____ Water _____ Hazardous Polymerization _____

Decomposes to chlorinated ethenes

Type decomposition Reductive Dechlorination Due to: Heat

PROJECT PLAN BASED ON MATERIAL/SITE/HAZARD INFORMATION (to be completed by Project Manager) Five (5) outside, 5 inside Geoprobe borings will take place onsite. Minimal contact with soil cuttings and ground water. All electrical equipment will be properly grounded. Additional lighting and ventilation equipment to be used for all interior work. Proper egress/access maintained at all times. Hearing protection and dust inhalation protection as needed. Overhead obstructions removed as needed. All site work to be stopped should free product or saturated soils be encountered.

P P E (DETAIL) Level D: Hard hat, Safety vest, safety glasses, steel-toe boots, gloves, ear hearing protection, dust mask as needed.

DECONTAMINATION/FIRE PROTECTION standard soap/water used to decon equipment/personnel. All flame sources and vehicles (other than necessary equipment) located 50 f away

I.H. MONITORING (Determined by Safety/Health Manager. Circle one. YES (NO) _____

To be done by: _____ (A) On entry before job begins. Circle one. YES NO

(B) During time in hazardous waste location -- EEMR (Required) YES NO -- Copy to Safety/Health Mgr.

MEDICAL SURVEILLANCE (determined by Safety/Health Manager) YES (NO) _____

Emergency Numbers - Fire # Tacoma FD station 11 253-591-5749 (911) Injury # Tacoma General Hospital 253-403-1000 (911) Customer # 425-709-6993 Contact Name Dave Pinning

Nels B Cone — SAFETY & HEALTH MANAGER (REQUIRED) — DATE 12/29/14

Nels B Cone — PROJECT MANAGER/SUPERVISOR (REQUIRED) — DATE 12/29/14

CREW EMPLOYEES TO ACKNOWLEDGE ORIENTATION TO THIS CERP (REQUIRED)

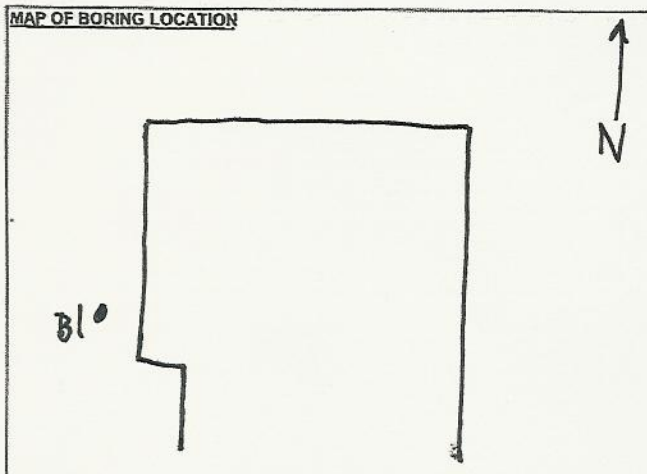
NAME	SOC. SEC. #	NAME	SOC. SEC. #
Mitch McCarley	12/29/14	Roddy Gilseth	2/25/15
Josh Marsh	12/29/14	[signature]	2/25/15
DATE TRAINED		TRAINING TIME	

APPENDIX B

BORING LOGS AND WELL COMPLETION LOGS

FIELD BORING LOG

MAP OF BORING LOCATION



(Show north arrow, distances to landmark)

PROJECT NAME/NUMBER: 1412-2091	BORING NUMBER: B1
LOGGED BY: NBC	PROJECT MANAGER: NBC
DRILLING CONTRACTOR: Holocene	DRILL RIG: 53
DRILLING METHOD: HSA	SAMPLING METHOD(S): SS
BORING DIAMETER:	HAMMER TYPE:
DRIVING HAMMER DEPTH (Kelly Bar): WEIGHT:	DROP HEIGHT:
RING SAMPLER TYPE O.D.: I.D.:	INCHES DRIVEN:
GROUNDWATER MEASUREMENT METHOD: WATER DEPTH / TIME: 14ft / 1045	
DRILL TIME START: 0830 FINISH: 10:30	DOWNTIME
BACKFILL METHOD: converted to MW1	
DATE: 12/29/14	SURFACE ELEVATION:
SURFACE CONDITION: pavement	

SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE TYPE	BLOWS/6 in	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	POCKET PEN. (tsf)		TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
									0830	1		Asphalt ~ 3" average condition
										2		
										3		
									9:00	4	SC	Sandy Clay, grey Ø odor, damp
										5		
										6		
										7		
									9:15	8	SC	clayey sand, grey, dense Ø odor, damp
										9		
										10		

FIELD BORING LOG (continued)

DEPTH	NUMBER	TYPE	BLOWS/6 in	IN. DRIVEN	IN. REC'VD	CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG
12	B1-12	Soil								1600	12	SM
14	B1-GW	H_2O								10:35	14	
										10:30	18	SM

PROJECT NAME/NUMBER: 1412-2091 | DATE: 12/29/14 | BORING NO.: B1

SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)

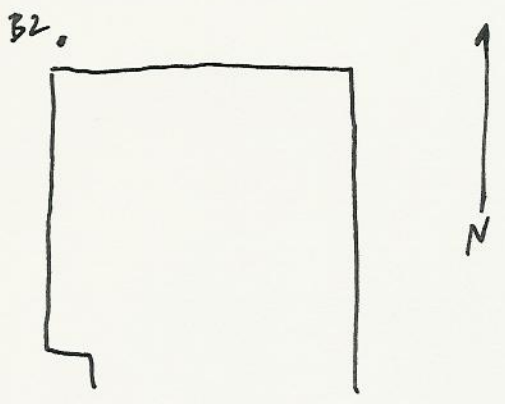
Silty Sand, Grey
Ø odor, damp
Sample taken

GW encountered
Sample taken

Dense Grey Silty Sand,
Final Depth, wet, Ø odor

FIELD BORING LOG

MAP OF BORING LOCATION



(Show north arrow, distances to landmark)

PROJECT NAME/NUMBER: 1412-2091	BORING NUMBER: B2
LOGGED BY: NBC	PROJECT MANAGER: NBC
DRILLING CONTRACTOR: Holocene	DRILL RIG: 53
DRILLING METHOD: HSA	SAMPLING METHOD(S): SS
BORING DIAMETER:	HAMMER TYPE:
DRIVING HAMMER DEPTH (Kelly Bar): WEIGHT:	DROP HEIGHT:
RING SAMPLER TYPE O.D.: I.D.:	INCHES DRIVEN:
GROUNDWATER MEASUREMENT METHOD: WATER DEPTH / TIME: N/A	
DRILL TIME START: 11:00 FINISH: 11:52	DOWNTIME
BACKFILL METHOD: bentonite / asphalt patch	
DATE: 12/29/14	SURFACE ELEVATION:
SURFACE CONDITION: pavement	

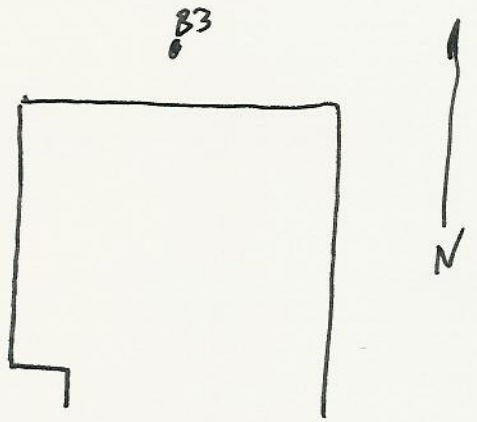
SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE TYPE	BLOWS/6 in	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
										11:00	1		Asphalt ~3" Average condition
											2		
											3		
										11:15	4	SC	Brown clayey sand damp, ϕ odor
											5		
											6		
											7		
										11:30	8	SM	Grey silty sands, damp ϕ odor
											9		
											10		

FIELD BORING LOG (continued)

DEPTH	NUMBER	TYPE	BLOWS/6 in	IN. DRIVEN	IN. REC'VD	CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	PROJECT NAME/NUMBER: 1412-2091	DATE: 12/29/14	BORING NO.: B2
											11		SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)		
										11:45	12	SP	Grey clease sand, dry Ø odor		
											13				
14	B2-14	soil								11:49	14	SM	Grey silty sand Sample taken, Ø odor, moist		
											15				
											16				
											17				
											18				
										11:52	19	SM	Final Depth, Refusal, Ø H2O pebbly sand, damp		
											20				
											21				
											22				
											23				
											24				
											25				
											26				
											27				
											28				
											29				
											30				

FIELD BORING LOG

MAP OF BORING LOCATION



(Show north arrow, distances to landmark)

PROJECT NAME/NUMBER: 1412-2091	BORING NUMBER: B3
LOGGED BY: NBC	PROJECT MANAGER: NBC
DRILLING CONTRACTOR: Holocene	DRILL RIG: 53
DRILLING METHOD: HSA	SAMPLING METHOD(S): SS
BORING DIAMETER:	HAMMER TYPE:
DRIVING HAMMER WEIGHT:	DROP HEIGHT:
DEPTH (Kelly Bar):	
RING SAMPLER TYPE O.D.: I.D.:	INCHES DRIVEN:
GROUNDWATER MEASUREMENT METHOD:	
WATER DEPTH / TIME: 14ft/12:35	
DRILL TIME START: 12:05 FINISH:	DOWNTIME
BACKFILL METHOD: convert to Monitoring Well #2	
DATE: 12/29/14	SURFACE ELEVATION:
SURFACE CONDITION: pavement	

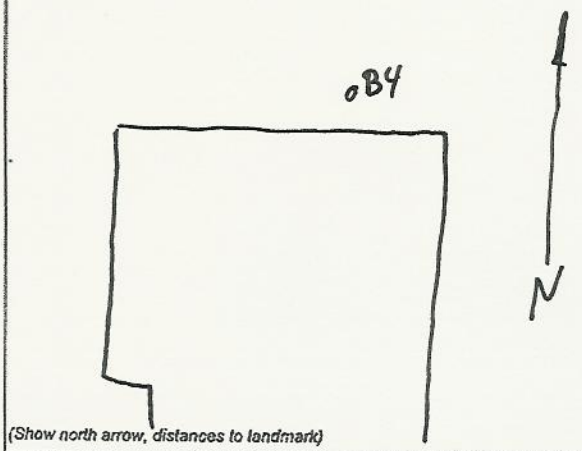
SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE TYPE	BLOWS/6 in	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
										12:05	1		Asphalt, average condition 3" Thick
											2		
											3		
										12:15	4	SC	Brown clayey sand, dry & odor
											5		
											6		
											7		
										12:20	8	SM	Brown silty sand, damp, odor
											9		
											10		

FIELD BORING LOG (continued)

DEPTH	NUMBER	TYPE	BLOWS/6 in	IN. DRIVEN	IN. RECVD	CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	PROJECT NAME/NUMBER: 1412-2091	DATE: 12/29/14	BORING NO.: B3
													SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)		
											11				
										1235	12	SW	Grey gravelley sand, moist Ø odor		
14ft 13-14	B3-GWB3-13	H_2O Soil								1235/1310	13		Sample taken Soil		
											14	SW	Ground Water encountered Sample taken		
											15				
											16				
											17				
											18	SM	Dense, grey silty sand, wet End of Boring Ø odor		
											19				
											20				
											21				
											22				
											23				
											24				
											25				
											26				
											27				
											28				
											29				
											30				

FIELD BORING LOG

MAP OF BORING LOCATION



(Show north arrow, distances to landmark)

PROJECT NAME/NUMBER: 1412-2091	BORING NUMBER: B4
LOGGED BY: NBC	PROJECT MANAGER: ABC
DRILLING CONTRACTOR: Holocene	DRILL RIG: 53
DRILLING METHOD: HSA	SAMPLING METHOD(S): SS
BORING DIAMETER:	HAMMER TYPE:
DRIVING HAMMER DEPTH (Kelly Bar): WEIGHT:	DROP HEIGHT:
RING SAMPLER TYPE O.D.: I.D.:	INCHES DRIVEN:
GROUNDWATER MEASUREMENT METHOD: WATER DEPTH / TIME: NA	
DRILL TIME START: 1:30 FINISH: 1:53	DOWNTIME:
BACKFILL METHOD: Bentonite asphalt patch	
DATE: 12/29/14	SURFACE ELEVATION:
SURFACE CONDITION: pavement	

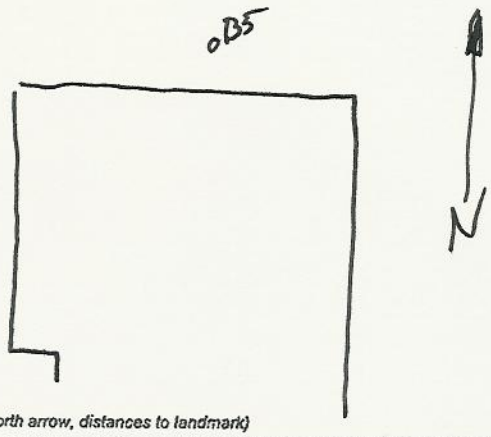
SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE TYPE	BLOWS/6 in	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
											1		Asphalt poor condition 2.5" thick
											2		
											3		
										1:35	4	SW	Brown, gravelly sand, damp ϕ odor
											5		
											6		
											7		
										1:40	8	SM	Grey silty sand, damp ϕ odor
											9		
											10		

FIELD BORING LOG (continued)

DEPTH	NUMBER	TYPE	BLOWS/6 in	IN. DRIVEN	IN. REC'VD	CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	PROJECT NAME/NUMBER: 1412-2091	DATE: 12/29/14	BORING NO.: B4
													SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)		
										1:45	11				
											12	SW	Grey Gravelly Sand, moist		
													No odor		
14'	B4-4	Soil								1:53	13				
											14	SM	Silty Sand		
													Dense, Grey to Light Grey		
													End of Boring, sample taken		
											15				
											16				
											17				
											18				
											19				
											20				
											21				
											22				
											23				
											24				
											25				
											26				
											27				
											28				
											29				
											30				

FIELD BORING LOG

MAP OF BORING LOCATION



(Show north arrow, distances to landmark)

PROJECT NAME/NUMBER: 1412-2091	BORING NUMBER: B5
LOGGED BY: NBC	PROJECT MANAGER: NBC
DRILLING CONTRACTOR: Holocene	DRILL RIG: 53
DRILLING METHOD: HSA	SAMPLING METHODS: SS
BORING DIAMETER:	HAMMER TYPE:
DRIVING HAMMER DEPTH (Kelly Bar): WEIGHT:	DROP HEIGHT:
RING SAMPLER TYPE O.D.: I.D.:	INCHES DRIVEN:
GROUNDWATER MEASUREMENT METHOD: WATER DEPTH / TIME:	15.5 / 3:00
DRILL TIME START: 2:15 FINISH: 3:05	DOWNTIME
BACKFILL METHOD	bentonite / asphalt patch
DATE: 12/14	SURFACE ELEVATION:
SURFACE CONDITION	pavement

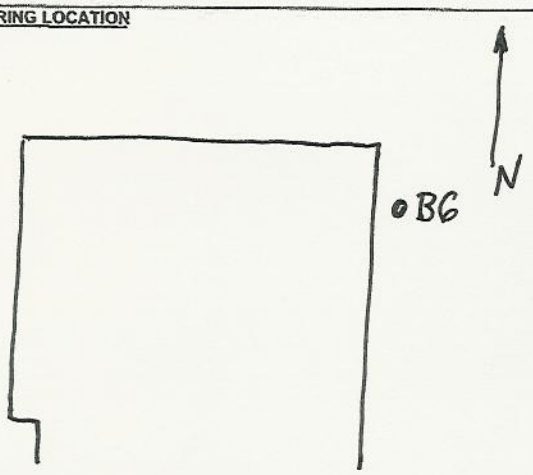
SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE TYPE	BLOWS/6 in	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
										2:15	1		Asphalt, poor condition ~2" thick
											2		
											3		
										2:20	4	SM	Brown silty sand, damp ϕ odor
											5		
											6		
											7		
										2:25	8	SM	Brown silty sand, dense damp, ϕ odor
											9		
											10		

FIELD BORING LOG (continued)

DEPTH	NUMBER	TYPE	BLOWS/6 in	IN. DRIVEN	IN. REC'VD	CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
													PROJECT NAME/NUMBER: 1412-2091 DATE: 12/29/14 BORING NO.: B5
										2:30	11		
											12	SM	Grey gravelly sand, moist, ϕodor
14ft	B5-14	soil								2:40	13		
											14		Sample soil taken
15ft	B5-GW	H2O								3:00	15		GW Encountered, Sample taken
										3:05	16	SP	End of Boring, wet dense sand grey, ϕodor
											17		
											18		
											19		
											20		
											21		
											22		
											23		
											24		
											25		
											26		
											27		
											28		
											29		
											30		

FIELD BORING LOG

MAP OF BORING LOCATION



(Show north arrow, distances to landmark)

PROJECT NAME/NUMBER: 1412-2091	BORING NUMBER: BG
LOGGED BY: NBC	PROJECT MANAGER: NBC
DRILLING CONTRACTOR: Holocene	DRILL RIG: 53
DRILLING METHOD: HSA	SAMPLING METHOD(S): SS
BORING DIAMETER:	HAMMER TYPE:
DRIVING HAMMER: DEPTH (Kelly Bar): WEIGHT:	DROP HEIGHT:
RING SAMPLER TYPE: O.D.: I.D.:	INCHES DRIVEN:
GROUNDWATER MEASUREMENT METHOD: WATER DEPTH / TIME: 17ft / 3:20	
DRILL TIME: START: 2:30 FINISH: 3:35	DOWNTIME
BACKFILL METHOD: convert to monitoring well #3	
DATE	SURFACE ELEVATION: SURFACE CONDITION: pavement

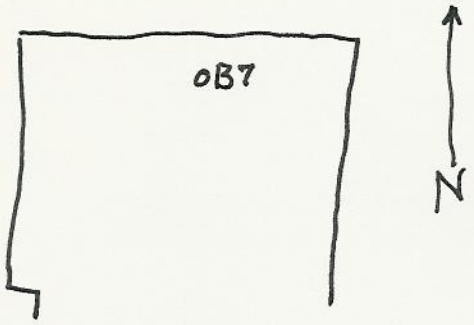
SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE TYPE	BLOWS/6 in	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
										2:30	1		Asphalt, good condition ~3" thick
											2		
											3		
										2:40	4	SW	Brown gravelly sand, ϕ odor, damp
											5		
											6		
											7		
										2:45	8	SC	Grey clayey sand, dense ϕ odor, damp
											9		
											10		

FIELD BORING LOG (continued)

DEPTH	NUMBER	TYPE	BLOWS/6 in	IN. DRIVEN	IN. REC'VD	CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	PROJECT NAME/NUMBER: 1412-2091	DATE: 12/29/14	BORING NO.: 6
													SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)		
											11				
										2:00	12	SP	Grey compacted sand, moist, ϕ odor		
											13				
15ft 14ft	BG-15 BG-W	Soil H_2O											11:05/13Jan5 ABC		
											14		Groundwater, low-flo grab sample		
										3:15	15	SC	Grey clayey sand, moist, ϕ odor sample taken soil		
											16				
										3:35-5:20	17		Ground H_2O Encountered		
											18	SM	End of boring, ϕ odor wet light gray sand, dense		
											19				
											20				
											21				
											22				
											23				
											24				
											25				
											26				
											27				
											28				
											29				
											30				

FIELD BORING LOG

MAP OF BORING LOCATION



(Show north arrow, distances to landmark)

PROJECT NAME/NUMBER: 1412-2091	BORING NUMBER: B7
LOGGED BY: NBC	PROJECT MANAGER: NBC
DRILLING CONTRACTOR: Holocene	DRILL RIG: LAR
DRILLING METHOD: Geoprobe	SAMPLING METHOD(S): discrete soil
BORING DIAMETER: 2"	HAMMER TYPE:
DRIVING HAMMER: DEPTH (Kelly Bar): WEIGHT:	DROP HEIGHT:
RING SAMPLER TYPE: O.D.: I.D.:	INCHES DRIVEN:
GROUNDWATER MEASUREMENT: METHOD: WATER DEPTH / TIME: 17.5 ft / 10:35	
DRILL TIME: START: 9:15 FINISH:	DOWNTIME:
BACKFILL METHOD: Bentonite / Concrete	
DATE: 12/30/14	SURFACE ELEVATION:
SURFACE CONDITION: concrete	

SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE TYPE	BLOWS/6 in	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
										9:15	1		concrete ~4" foundation inside Bldg
											2		
											3		
										9:25	4	SC	Brown clayey silt, damp Ø odor
											5		
											6		
											7		
										9:30	8	SM	Grey Silty sand, damp
											9		
											10		

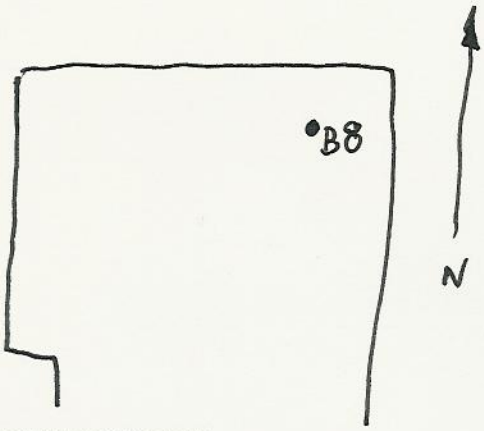
FIELD BORING LOG (continued)

PROJECT NAME/NUMBER	DATE	BORING NO.
1412-2091	12/30/14	B7

DEPTH	NUMBER	TYPE	BLOWS/6 in	IN. DRIVEN	IN. REC'VD	CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
											11		
										9:33	12	SM	Grey dense, silty sand, ϕ odor dry
											13		
										10:15	14	SM	Light Grey, dense, damp, ϕ odor sand
											15		
											16	SP	light Grey, compacted Sand, moist ϕ odor, Soil Sample taken
17ft 17ft	B7-GWB7-17	H_2O Soil								12:30/10:35	17		Refusal, H_2O / Mud Encountered GW recharge x 2hrs H_2O Sampled
											18		
											19		
											20		
											21		
											22		
											23		
											24		
											25		
											26		
											27		
											28		
											29		
											30		

FIELD BORING LOG

MAP OF BORING LOCATION



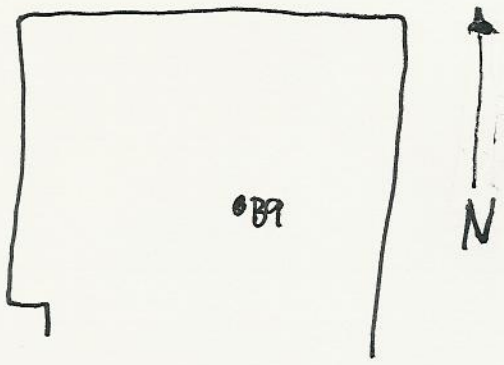
(Show north arrow, distances to landmark)

PROJECT NAME/NUMBER	1412-2091
BORING NUMBER	B8
LOGGED BY	NBC
PROJECT MANAGER	NBC
DRILLING CONTRACTOR	Holocene
DRILL RIG	LAR
DRILLING METHOD	Geoprobe
SAMPLING METHOD(S)	discrete soil
BORING DIAMETER	2"
HAMMER TYPE	
DRIVING HAMMER DEPTH (Kelly Bar): WEIGHT:	DROP HEIGHT:
RING SAMPLER TYPE O.D.: I.D.:	INCHES DRIVEN:
GROUNDWATER MEASUREMENT METHOD: WATER DEPTH / TIME:	NA
DRILL TIME START: 11:15 FINISH: 1:15	DOWNTIME 12:30→1:00
BACKFILL METHOD	bentonite / concrete
DATE 12/30/14	SURFACE ELEVATION
SURFACE CONDITION	concrete

SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE TYPE	BLOWS/6 in	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
										11:15	1		concrete foundation 26" thick inside Bldg
											2		
											3		
										11:30	4	SP	Brown Silty Sand, dry, ϕ odor dense
											5		
											6		
											7		
										12:00	8	SM	compacted Grey to light Grey silty Sand, dry ϕ odor
											9		
10 ft	B8-10	soil								1:15	10	SM	soil Sample taken Dense Grey Sand / Rock, dry possible erratic ϕ odor

FIELD BORING LOG

MAP OF BORING LOCATION



(Show north arrow, distances to landmark)

PROJECT NAME/NUMBER	1412-2091
BORING NUMBER	B9
LOGGED BY	NBC
PROJECT MANAGER	NBC
DRILLING CONTRACTOR	Holocene
DRILL RIG	LAR
DRILLING METHOD	Geoprobe
SAMPLING METHOD(S)	discrete soil
BORING DIAMETER	2"
HAMMER TYPE	
DRIVING HAMMER DEPTH (Kelly Bar): WEIGHT:	DROP HEIGHT:
RING SAMPLER TYPE O.D.: I.D.:	INCHES DRIVEN:
GROUNDWATER MEASUREMENT METHOD: WATER DEPTH / TIME:	12.5 ft / 3:45
DRILL TIME START: 2:40 FINISH: 3:45	DOWNTIME
BACKFILL METHOD	Bentonite / concrete
DATE	12/30/15
SURFACE ELEVATION	
SURFACE CONDITION	Concrete

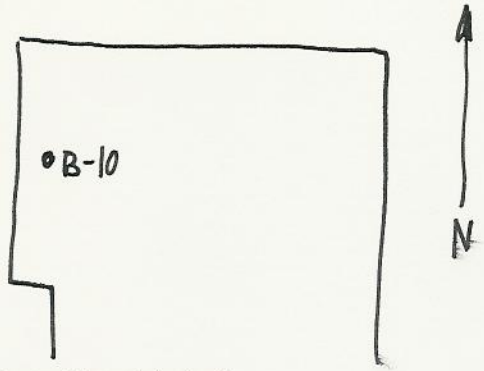
SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE TYPE	BLOWS/6 in	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
										2:40	1		Concrete foundation ~ 4" thick - inside Bldg
											2		
											3		
										2:50	4	SM	Brown silty sand, dry, ∅ odor Dense
											5		
											6		
											7		
										3:20	8	SM	Compacted Grey sandy silt, moist ∅ odor
											9		
10ft	BT-10	Soil								3:45	10	SM	compacted Grey silty sand, moist sample soil taken, ∅ odor

FIELD BORING LOG (continued)

DEPTH	NUMBER	TYPE	BLOWS/6 in	IN. DRIVEN	IN. RECVD	CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	PROJECT NAME/NUMBER: 1412-2091	DATE: 10/30/14	BORING NO.: B9
													SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)		
											11				
										3:20					
12.5	BTSW	GW								3:45	12	SM	Gray Compacted Silty sand, moist, ϕ odor		
											13		GW Sample taken; encountered End of boring		
											14				
											15				
											16				
											17				
											18				
											19				
											20				
											21				
											22				
											23				
											24				
											25				
											26				
											27				
											28				
											29				
											30				

FIELD BORING LOG

MAP OF BORING LOCATION



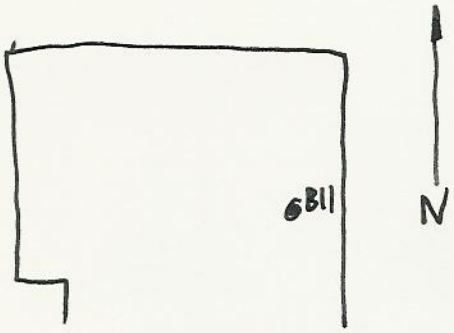
(Show north arrow, distances to landmark)

PROJECT NAME/NUMBER: 1412-2091	BORING NUMBER: B10
LOGGED BY: NBC	PROJECT MANAGER: NBC
DRILLING CONTRACTOR: Hologene	DRILL RIG: LAR
DRILLING METHOD: Geoprobe	SAMPLING METHOD: discrete soil
BORING DIAMETER:	HAMMER TYPE:
DRIVING HAMMER DEPTH (Kelly Bar): WEIGHT:	DROP HEIGHT:
RING SAMPLER TYPE O.D.: I.D.:	INCHES DRIVEN:
GROUNDWATER MEASUREMENT METHOD: WATER DEPTH / TIME: NA	
DRILL TIME START: 4:30 FINISH: 5:10	DOWNTIME:
BACKFILL METHOD: Bentonite / concrete	
DATE: 12/30/15	SURFACE ELEVATION:
SURFACE CONDITION: Concrete	

SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE TYPE	BLOWS/6 in	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
										4:30	1		concrete - 8" thick foundation, inside bldg
											2		
											3		
										4:45	4	ML	Dense, light grey, sandy silt dry, ϕ odor
											5		
											6		
7 ft	B10-7	soil								5:10	7	SM	Grey sandy silt compacted, dry REFUSAL, Sample taken ϕ odor
											8		
											9		
											10		

FIELD BORING LOG

MAP OF BORING LOCATION



(Show north arrow, distances to landmark)

PROJECT NAME/NUMBER: K12-2091	BORING NUMBER: B11
LOGGED BY: NBC	PROJECT MANAGER: NBC
DRILLING CONTRACTOR: Holocene	DRILL RIG: LAR
DRILLING METHOD: Geoprobe	SAMPLING METHOD: discrete soil
BORING DIAMETER: 2"	HAMMER TYPE:
DRIVING HAMMER DEPTH (Kelly Bar): WEIGHT:	DROP HEIGHT:
RING SAMPLER TYPE O.D.: I.D.:	INCHES DRIVEN:
GROUNDWATER MEASUREMENT METHOD: WATER DEPTH / TIME: NA	
DRILL TIME START: 5:30 FINISH: 6:35	DOWNTIME
BACKFILL METHOD: bentonite/concrete	
DATE: 12/30/15	SURFACE ELEVATION:
SURFACE CONDITION: concrete	

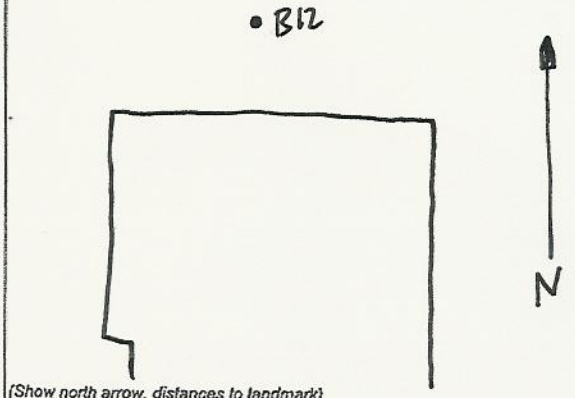
SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE TYPE	BLOWS/6 in	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
										5:30	1		6" concrete foundation inside building
											2		
											3		
										5:40	4	SC	Brown loamy sand, damp Ø odor
											5		
											6		
											7		
										6:10	8	SC	Brown clayey sand, moist Ø odor
											9		
10ft	B11-10	Soil								6:25	10	SM	Grey sandy silt, wet, Ø odor, dense Soil Sample taken

FIELD BORING LOG (continued)

DEPTH	NUMBER	TYPE	BLOWS/6 in	IN. DRIVEN	IN. REC'VD	CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	PROJECT NAME/NUMBER: 1412-2091	DATE: 12/30/15	BORING NO.: B11
											11		SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)		
										635	12		Refusal		
											13		Light Grey silty Sand, Compacted		
											14		& odor, damp		
											15				
											16				
											17				
											18				
											19				
											20				
											21				
											22				
											23				
											24				
											25				
											26				
											27				
											28				
											29				
											30				

FIELD BORING LOG

MAP OF BORING LOCATION



(Show north arrow, distances to landmark)

PROJECT NAME/NUMBER: 1412-2091	BORING NUMBER: B12
LOGGED BY: NBC	PROJECT MANAGER: NBC
DRILLING CONTRACTOR: Holocene	DRILL RIG: 53
DRILLING METHOD: HSA	SAMPLING METHOD(S): SS
BORING DIAMETER:	HAMMER TYPE:
DRIVING HAMMER DEPTH (Kelly Bar): WEIGHT:	DROP HEIGHT:
RING SAMPLER TYPE O.D.: I.D.:	INCHES DRIVEN:
GROUNDWATER MEASUREMENT METHOD: WATER DEPTH / TIME:	19ft / 8:27
DRILL TIME START: 0805 FINISH:	DOWNTIME:
BACKFILL METHOD:	Bentonite / asphalt patch
DATE: 2/25/15	SURFACE ELEVATION:
SURFACE CONDITION:	pavement

SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE TYPE	BLOWS/6 in	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL / GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
										0805	1		3" asphalt pavement average condition
											2		
											3		
										8:10	4	SW	Brown gravelly sand, damp ∅ odor
											5		
											6		
											7		
										8:15	8	SM	light brown silty sand, moist ∅ odor
											9		
											10		

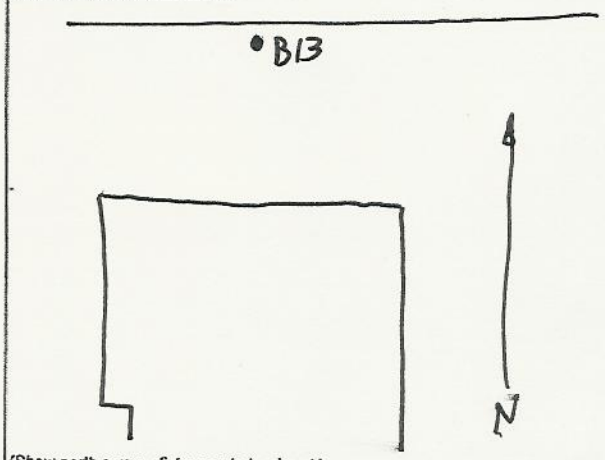
FIELD BORING LOG (continued)

DEPTH	NUMBER	TYPE	BLOWS/6 in	IN. DRIVEN	IN. RECVD	CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
											11		
										8:20	12	SM	light brown silty sand Ø odor, moist
											13		
											14		
											15		
16 ft	B12-16	Soil								8:25	16	SW	light brown, silty sand w/gravel Ø odor, moist Soil Sample
											17		
											18		
										8:27	19		Encountered groundwater
											20		
										8:30	21	SM	End of Boring
											22		
											23		
											24		
											25		
											26		
											27		
											28		
											29		
											30		

PROJECT NAME/NUMBER: 1412-2091 | DATE: 2/25/15 | BORING NO.: B12

FIELD BORING LOG

MAP OF BORING LOCATION



(Show north arrow, distances to landmark)

PROJECT NAME/NUMBER: 1412-2091	BORING NUMBER: B13
LOGGED BY: NBC	PROJECT MANAGER: NBC
DRILLING CONTRACTOR: Holocene	DRILL RIG: 53
DRILLING METHOD: HSA	SAMPLING METHOD(S): SS
BORING DIAMETER:	HAMMER TYPE:

DRIVING HAMMER
DEPTH (Kelly Bar):
WEIGHT: DROP HEIGHT:

RING SAMPLER TYPE
O.D.: I.D.: INCHES DRIVEN:

GROUNDWATER MEASUREMENT
METHOD:
WATER DEPTH / TIME: 16ft / 9:40

DRILL TIME
START: 0920 FINISH: 9:45 DOWNTIME

BACKFILL METHOD: convert to monitoring well #4

DATE	SURFACE ELEVATION	SURFACE CONDITION
2/25/15		pavement

SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE TYPE	BLOWS/6 In	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
										0920	1		3" Pavement asphalt
										0922	2	GW	small cobble, pebbles, moist Ø odor,
										0924	3	SW	gravelly sand, brown, moist Ø odor
										0925	4	SM	Brown silty sand and gravel, moist, Ø odor
											5		
											6		
											7		
										09:30	8	SM	Brown Dense, silty sand damp, Ø odor
											9		
											10		

FIELD BORING LOG (continued)

DEPTH	NUMBER	TYPE	BLOWS/6 in	IN. DRIVEN	IN. REC'VD	CONDITION	POCKET PEN. (tsf)			TIME	DEPTH (FEET)	USCS SYMBOL/ GRAPHIC LOG	SOIL DESCRIPTION (type, density/consistency, moisture, color, trace)
											11		
										0832	12	SW	Light brown sandy silt w/gravel, ϕ odor, moist
14ft	B13-14	Soil									13		
										0935	14	SM	light brown, dense silty sand, very moist, ϕ odor
16ft	B13-GW	1½0								0940	15		
											16		GW Encountered & Sampled
											17		
										0945	18		
											19	GM	Grey gravelly sand, wet End of boring ϕ odor
											20		
											21		
											22		
											23		
											24		
											25		
											26		
											27		
											28		
											29		
											30		

PROJECT NAME/NUMBER: 1412-2891 | DATE: 2/25/15 | BORING NO.: B13

B1 - MW1

MONITORING WELL REPORT

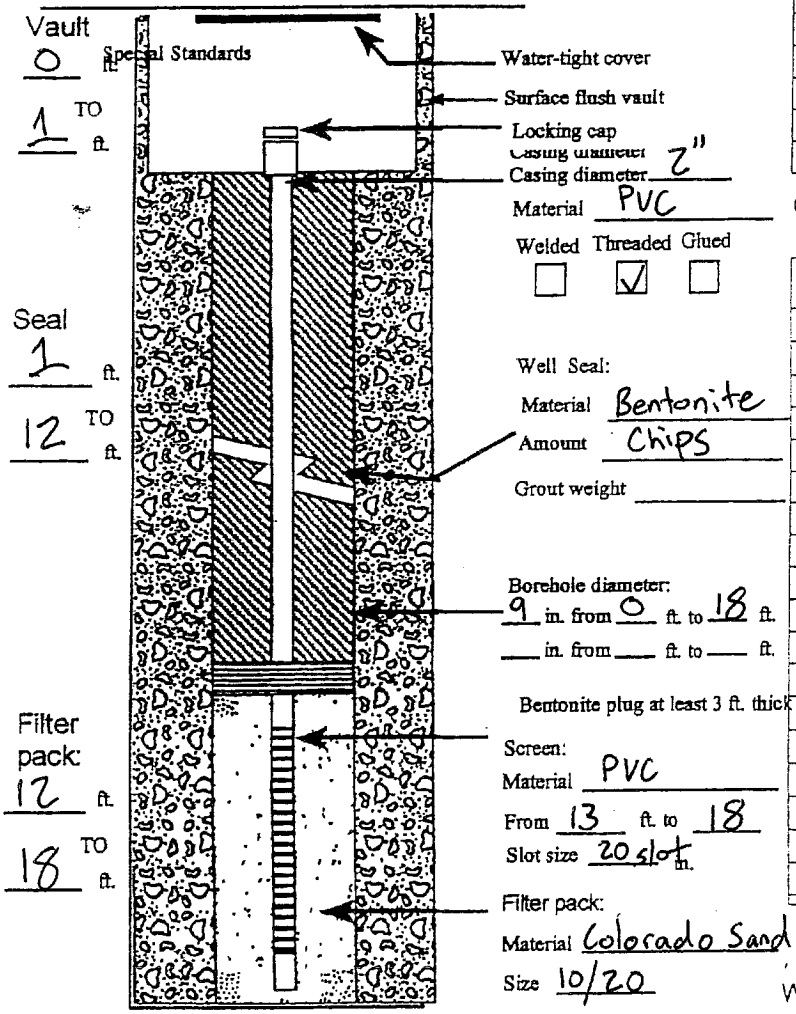
Well ID# BIP-119
Start Card # RE10813

(1) OWNER/PROJECT WELL NO. _____
Name Welles Rinning Company
Address 800 Bellevue Way NE, Suite 400
City Bellevue State WA Zip 98004

(2) TYPE OF WORK
☑ New construction ☐ Alteration (Repair/Recondition)
☐ Conversion ☐ Deepening ☐ Abandonment

(3) DRILLING METHOD
☐ Rotary Air ☐ Rotary Mud ☐ Cable
☑ Hollow Stem Auger ☐ Other _____

(4) BORE HOLE CONSTRUCTION:
Special Standards Yes ☐ No ☑ Depth of Completed Well 18 ft.



(5) WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian
Permeability _____ Yield _____ GPM
Conductivity _____ PH _____
Temperature of water _____ OF/C Depth artesian flow found _____ ft.
Was water analysis done? ☐ Yes ☐ No
By whom? _____
Depth of strata to be analyzed. From _____ ft. to _____ ft.
Remarks: _____
Name Of Supervising Geologist/Engineer _____

(6) LOCATION OF WELL By *legal description:*
County Pierce Latitude _____ Longitude _____
Township 20N (N or S) Range 3E (E or W) Section 33
SE 1/4 of SW 1/4 of above section.
Street address of well location _____
Tax lot number of well location _____

(7) STATIC WATER LEVEL:
_____ Ft. below land surface. Date _____
Artesian Pressure _____ lb/sq. in. Date

(8) WATER BEARING ZONES:
Depth at which water was first found _____

From	To	Est. Flow Rate	SWL

(9) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
Dense gravelly sand	0	18	

Date started 12-29-14 Completed 12-29-14

WELL CONSTRUCTION CERTIFICATION:
I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Type or Print Name David Puckett License No. 2769
Trainee Name _____ License No. _____
Drilling Company Holocene Drilling Inc
(Signed) [signature] License No. 2769
Address 1142 162nd Ave E Puyallup WA 98373
Registration No. HOLOCDI044KH Date

MONITORING WELL REPORT

B3 - MW2

Well ID# BIP-120

Start Card # RE10813

(1) OWNER/PROJECT WELL NO. _____

Name Welles Rinning Company

Address 800 Bellevue Way NE, Suite 400

City Bellevue State WA Zip 98004

(2) TYPE OF WORK

☑ New construction ☐ Alteration (Repair/Recondition)

☐ Conversion ☐ Deepening ☐ Abandonment

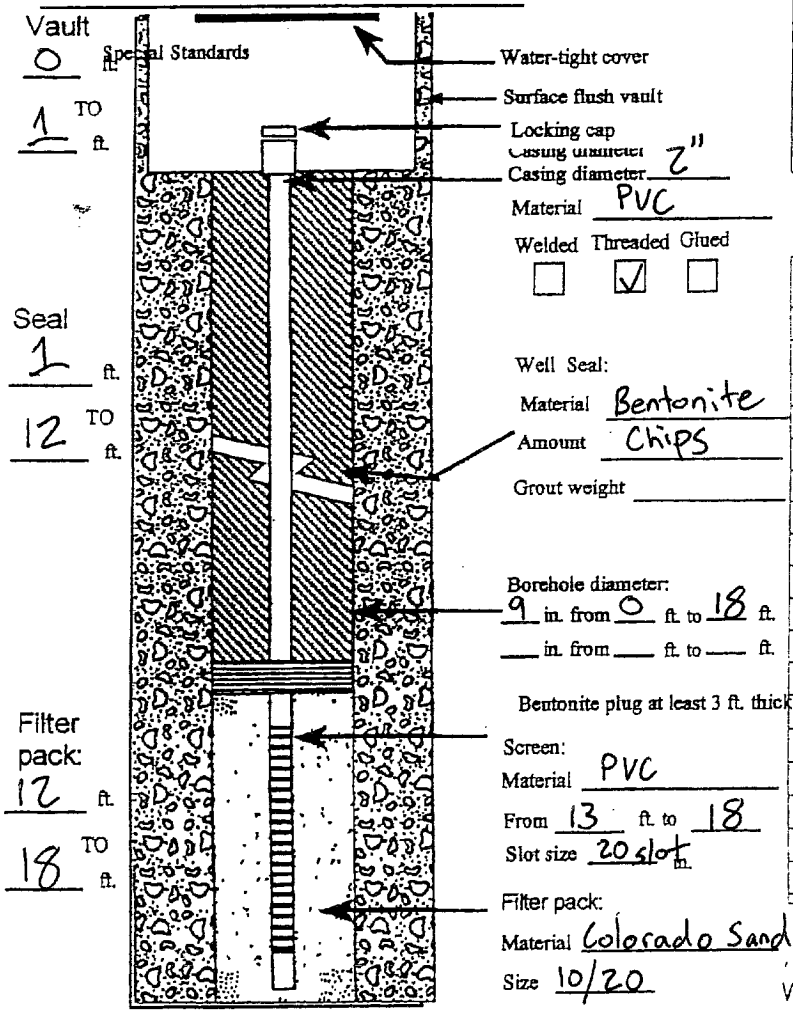
(3) DRILLING METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable

☑ Hollow Stein Auger ☐ Other _____

(4) BORE HOLE CONSTRUCTION:

Special Standards Yes ☐ No ☑ Depth of Completed Well 18 ft.



(5) WELL TESTS:

☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Permeability _____ Yield _____ GPM

Conductivity _____ PH _____

Temperature of water _____ O/C Depth artesian flow found _____ ft.

Was water analysis done? ☐ Yes ☐ No

By whom? _____

Depth of strata to be analyzed. From _____ ft. to _____ ft.

Remarks: _____

Name Of Supervising Geologist/Engineer _____

(6) LOCATION OF WELL By *legal description:*

County Pierce Latitude _____ Longitude _____

Township 20N (N or S) Range 3E (E or W) Section 33

SE 1/4 of SW 1/4 of above section.

Street address of well location _____

Tax lot number of well location _____

(7) STATIC WATER LEVEL:

_____ Ft. below land surface. Date _____

Artesian Pressure _____ lb/sq. in. Date _____

(8) WATER BEARING ZONES:

Depth at which water was first found _____

From	To	Est. Flow Rate	SWL

(9) WELL LOG:

Ground Elevation _____

Material	From	To	SWL
Dense gravelly sand	0	18	

Date started 12-29-14 Completed 12-29-14

WELL CONSTRUCTION CERTIFICATION:

I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Type or Print Name David Puckett License No. 2769

Trainee Name _____ License No. _____

Drilling Company Holocene Drilling Inc

(Signed) [signature] License No. 2769

Address 1142 162nd Ave E Puyallup WA 98373

Registration No. HOLOCDI044KH Date

MONITORING WELL REPORT

B6 - MW3

Well ID# BIP-121

Start Card # RE10813

(1) OWNER/PROJECT

WELL NO. _____

Name Welles Rinning Company

Address 800 Bellevue Way NE, Suite 400

City Bellevue State WA Zip 98004

(2) TYPE OF WORK

☑ New construction ☐ Alteration (Repair/Recondition)

☐ Conversion ☐ Deepening ☐ Abandonment

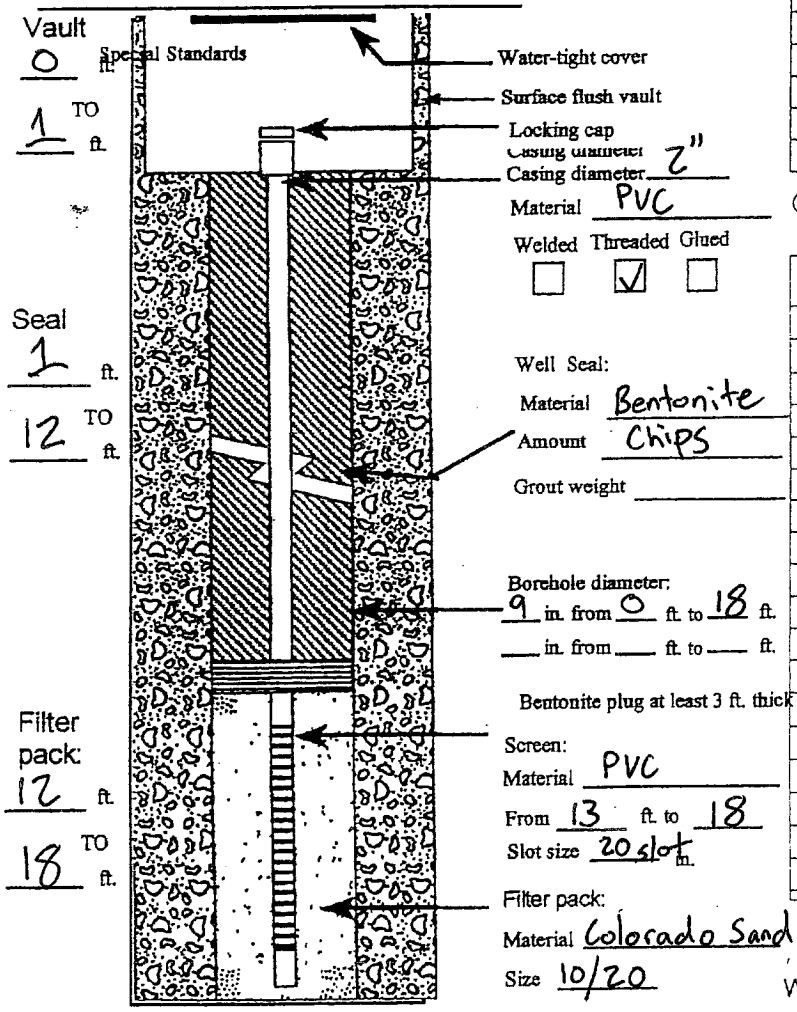
(3) DRILLING METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable

☑ Hollow Stein Auger ☐ Other _____

(4) BORE HOLE CONSTRUCTION:

Special Standards Yes ☐ No ☑ Depth of Completed Well 18 ft.



(5) WELL TESTS:

☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Permeability _____ Yield _____ GPM

Conductivity _____ PH _____

Temperature of water _____ OF/C Depth artesian flow found _____ ft.

Was water analysis done? ☐ Yes ☐ No

By whom? _____

Depth of strata to be analyzed. From _____ ft. to _____ ft.

Remarks: _____

Name Of Supervising Geologist/Engineer _____

(6) LOCATION OF WELL By *legal description:*

County Pierce Latitude _____ Longitude _____

Township 20N (N or S) Range 3E (E or W) Section 33

SE 1/4 of SW 1/4 of above section.

Street address of well location _____

Tax lot number of well location _____

(7) STATIC WATER LEVEL:

_____ Ft. below land surface. Date _____

Artesian Pressure _____ lb/sq. in. Date _____

(8) WATER BEARING ZONES:

Depth at which water was first found _____

From	To	Est. Flow Rate	SWL

(9) WELL LOG:

Ground Elevation _____

Material	From	To	SWL
Dense gravelly sand	0	18	

Date started 12-29-14 Completed 12-29-14

WELL CONSTRUCTION CERTIFICATION:

I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Type or Print Name David Ruckett License No. 2769

Trainee Name _____ License No. _____

Drilling Company Holocene Drilling Inc

(Signed) [signature] License No. 2769

Address 1142 162nd Ave E Puyallup WA 98373

Registration No. HOLOCDI044KH Date

MONITORING WELL REPORT

B13 - MW4

Well ID# BIQ-710

Start Card # RE10992

(1) OWNER/PROJECT

WELL NO. _____

Name Welles Rinning Company

Address 800 Bellevue Way NE, Suite 400

City Bellevue State WA Zip 98004

(2) TYPE OF WORK

☑ New construction ☐ Alteration (Repair/Recondition)

☐ Conversion ☐ Deepening ☐ Abandonment

(3) DRILLING METHOD

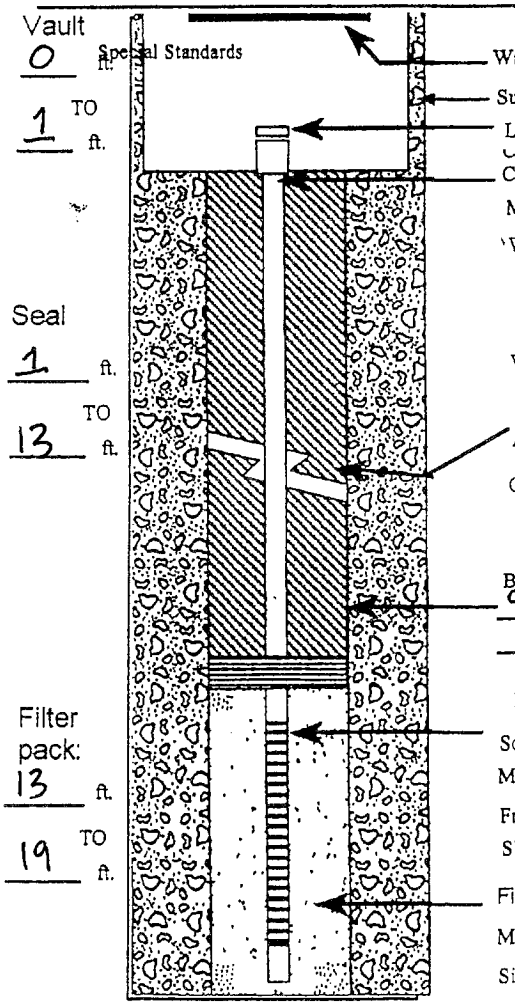
☐ Rotary Air ☐ Rotary Mud ☐ Cable

☑ Hollow Stein Auger ☐ Other _____

(4) BORE HOLE CONSTRUCTION:

Special Standards Yes ☐ No ☑

Depth of Completed Well 19 ft.



Water-tight cover

Surface flush vault

Locking cap

Casing diameter 2"

Material PVC

Welded ☐ Threaded ☑ Glued ☐

Well Seal:

Material Bentonite

Amount Chips

Grout weight _____

Borehole diameter:

9 in. from 0 ft. to 19 ft.

___ in. from ___ ft. to ___ ft.

Bentonite plug at least 3 ft. thick

Screen:

Material PVC

From 14 ft. to 19

Slot size 20slot in.

Filter pack:

Material Colorado Sand

Size 10/20

(5) WELL TESTS:

☐ Pump ☐ Bailer ☐ Air ☐ ~~Flowing~~ Artesian

Permeability _____ Yield _____ GPM

Conductivity _____ PH _____

Temperature of water _____ OF/C Depth artesian flow found _____ ft.

Was water analysis done? ☐ Yes ☐ No

By whom? _____

Depth of strata to be analyzed. From _____ ft. to _____ ft.

Remarks: _____

Name Of Supervising Geologist/Engineer _____

(6) LOCATION OF WELL By *legal description:*

County Pierce Latitude _____ Longitude _____

Township 20N (N or S) Range 3E (E or W) Section 33

SE 1/4 of SW 1/4 of above section.

Street address of well location _____

Tax lot number of well location _____

(7) STATIC WATER LEVEL:

_____ Ft. below land surface. Date _____

Artesian Pressure _____ lb/sq. in. Date _____

(8) WATER BEARING ZONES:

Depth at which water was first found _____

From	To	Est. Flow Rate	SWL

(9) WELL LOG:

Ground Elevation _____

Material	From	To	SWL
Till w/ sands and gravels	0	19	

Date started 2-25-15 Completed 2-25-15

WELL CONSTRUCTION CERTIFICATION:

I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Type or Print Name Roddy Gilseth License No. 3119

Trainee Name _____ License No. _____

Drilling Company Holocene Drilling, Inc.

(Signed) _____ License No. 3119

Address 11412 62nd Ave E. Puyallup, WA. 98373

Registration No. HOLOCDI044KH Date

APPENDIX C

WELL SURVEY REPORTS

GRAPHIC SCALE

50 0 25

1 inch = 50 ft.

BASIS OF BEARINGS

WASHINGTON STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM 83/91 HOLDING CITY OF TACOMA MONUMENT NUMBERS 103 & 104

MW – NEW
N 677336.821
E 1159698.863
ELEV = 385.70

MW – B3
N 677271.062
E 1159693.393
ELEV = 386.99

MW – B6
N 677201.538
E 1159798.174
ELEV = 387.59

MW – B1
N 677130.910
E 1159584.873
ELEV = 387.07

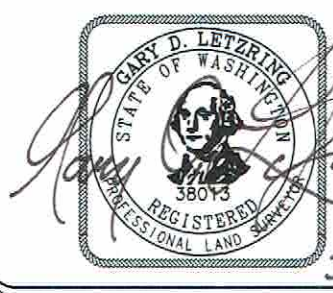
SITE ADDRESS

9201 PACIFIC AVENUE
TACOMA, WA 98444

ELEVATION DATUM

NORTH AMERICAN VERTICAL DATUM 1988
BENCHMARK: CASED MONUMENT AT INTX. OF S. 96TH ST. & PACIFIC AVE.

ELEVATION = 382.82



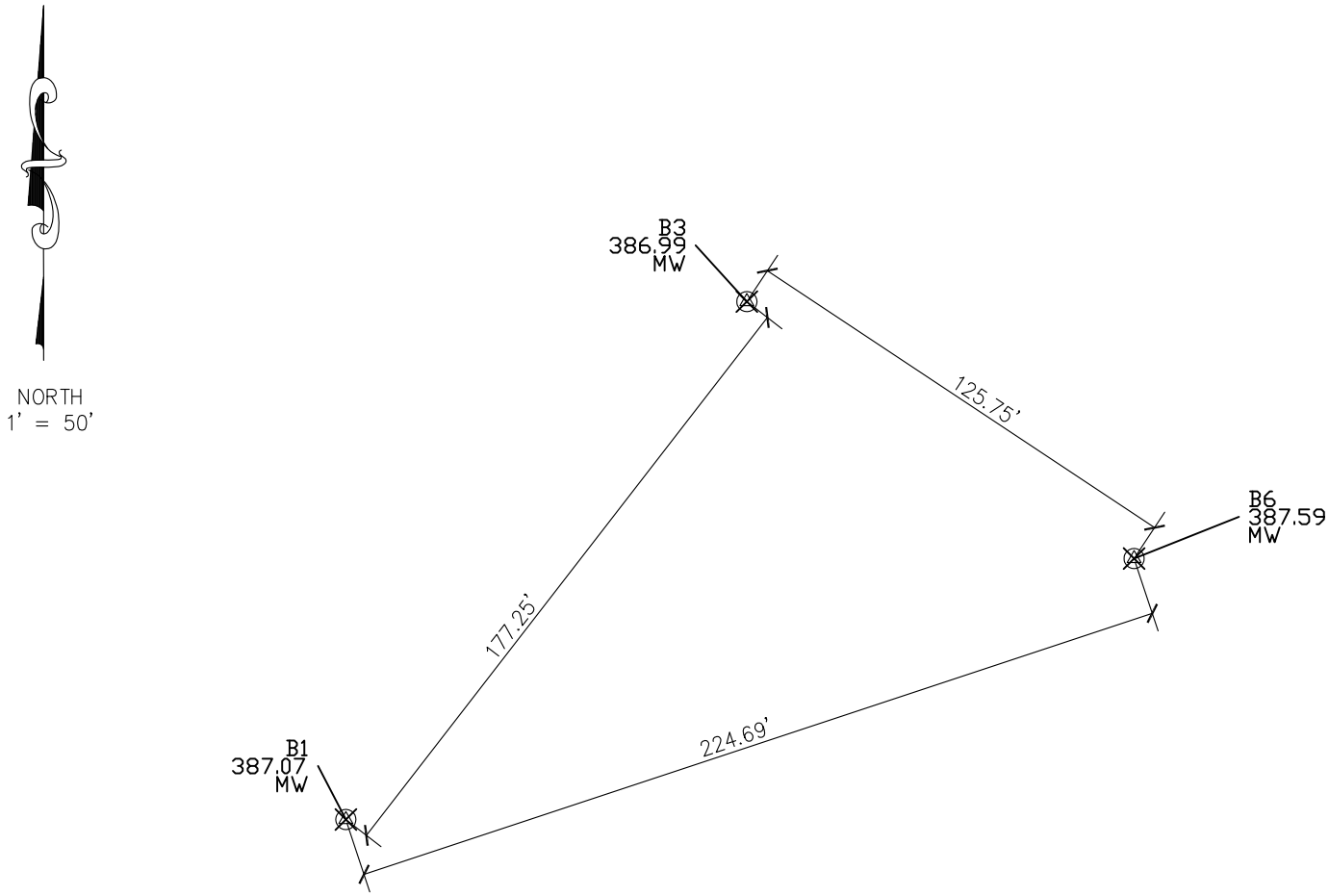
3/18/15

PRIZM
SURVEYING INC.
P. O. BOX 110700
TACOMA WA. 98411

ESTABLISHED 1993
OFFICE 253-404-0983
FAX 253-404-0984

CONSTRUCTION LAYOUT – BOUNDARY AND TOPOGRAPHIC SURVEYS

JOB NO. 2015-035



SITE:
9201 PACIFIC AVE
TACOMA, WA 98444

SURVEY DATE:
JAN. 07, 2015

DATUM NOTE:
HORIZONTAL DATUM:
WASHINGTON STATE PLANE COORDINATE SYSTEM, NAD 83/11, SOUTH ZONE
WSDOT SURVEY MONUMENT:
DESIGNATION HC27-18

VERTICAL DATUM:
NAVD 88
MONUMENT IN CASE, INTERSECTION OF PACIFIC AVE & S. 96TH ST.
NAIL IN CONCRETE, ±0.80' BELOW SURFACE GRADE
PUBLISHED ELEV: 382.82' (ESTABLISHED BY DIRECT GNSS OBSERVATION)

True NORTH LAND SURVEYING, INC.
815 S. Weller Street
Suite 200
Seattle WA 98104-3023
206.332.0800

MONITORING WELL	NORTHING (NAD 83/11)	EASTING (NAD 83/11)	ELEVATION (NAVD 88)	DESCRIPTION
B1	677130.9104	1159584.873	387.067	MW
B3	677271.0624	1159693.393	386.987	MW
B6	677201.5379	1159798.174	387.593	MW

APPENDIX D

LABORATORY REPORTS WITH CHAIN-OF-CUSTODY DOCUMENTATION

OnSite Environmental Inc.

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

January 9, 2015

Nels Cone
Anderson Environmental
5261 W. Imperial Highway
Los Angeles, CA 90045

Re: Analytical Data for Project 1412-2091
Laboratory Reference No. 1412-299

Dear Nels:

Enclosed are the analytical results and associated quality control data for samples submitted on December 31, 2014.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

Case Narrative

Samples were collected on December 29, 2014 and received by the laboratory on December 31, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

Volatiles EPA 8260C (soils) Analysis

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

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

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B1-2091-12**					
Laboratory ID:	12-299-01					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Chloromethane	ND	0.0056	EPA 8260C	12-31-14	12-31-14	
Vinyl Chloride	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Bromomethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Chloroethane	ND	0.0056	EPA 8260C	12-31-14	12-31-14	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Acetone	0.011	0.0056	EPA 8260C	12-31-14	12-31-14	Y
Iodomethane	ND	0.0056	EPA 8260C	12-31-14	12-31-14	
Carbon Disulfide	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Methylene Chloride	ND	0.0056	EPA 8260C	12-31-14	12-31-14	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Vinyl Acetate	ND	0.0056	EPA 8260C	12-31-14	12-31-14	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
2-Butanone	ND	0.0056	EPA 8260C	12-31-14	12-31-14	
Bromochloromethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Chloroform	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Benzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Trichloroethene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Dibromomethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Bromodichloromethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
2-Chloroethyl Vinyl Ether	ND	0.0056	EPA 8260C	12-31-14	12-31-14	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Methyl Isobutyl Ketone	ND	0.0056	EPA 8260C	12-31-14	12-31-14	
Toluene	ND	0.0056	EPA 8260C	12-31-14	12-31-14	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B1-2091-12**					
Laboratory ID:	12-299-01					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Tetrachloroethene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
2-Hexanone	ND	0.0056	EPA 8260C	12-31-14	12-31-14	
Dibromochloromethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Chlorobenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Ethylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
m,p-Xylene	ND	0.0022	EPA 8260C	12-31-14	12-31-14	
o-Xylene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Styrene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Bromoform	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Isopropylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Bromobenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
n-Propylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
2-Chlorotoluene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
4-Chlorotoluene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
tert-Butylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
sec-Butylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
n-Butylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromo-3-chloropropane	ND	0.0056	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Hexachlorobutadiene	ND	0.0056	EPA 8260C	12-31-14	12-31-14	
Naphthalene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*111*	*76-131*				
Toluene-d8	*107*	*82-129*				
4-Bromofluorobenzene	*108*	*79-126*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B2-2091-14**					
Laboratory ID:	12-299-03					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Chloromethane	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Vinyl Chloride	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Bromomethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Chloroethane	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Acetone	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Iodomethane	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Carbon Disulfide	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Methylene Chloride	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Methyl t-Butyl Ether	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Vinyl Acetate	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
2-Butanone	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Bromochloromethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Chloroform	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Benzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Trichloroethene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Dibromomethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Bromodichloromethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
2-Chloroethyl Vinyl Ether	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Methyl Isobutyl Ketone	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Toluene	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B2-2091-14**					
Laboratory ID:	12-299-03					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Tetrachloroethene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
2-Hexanone	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Dibromochloromethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Chlorobenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Ethylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
m,p-Xylene	ND	0.0025	EPA 8260C	12-31-14	12-31-14	
o-Xylene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Styrene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Bromoform	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Isopropylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Bromobenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
n-Propylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
2-Chlorotoluene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
4-Chlorotoluene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,3,5-Trimethylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
tert-Butylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trimethylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
sec-Butylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
p-Isopropyltoluene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
n-Butylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromo-3-chloropropane	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Hexachlorobutadiene	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Naphthalene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*100*	*76-131*				
Toluene-d8	*97*	*82-129*				
4-Bromofluorobenzene	*100*	*79-126*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B3-2091-13**					
Laboratory ID:	12-299-04					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Chloromethane	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Vinyl Chloride	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Bromomethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Chloroethane	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Acetone	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Iodomethane	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Carbon Disulfide	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Methylene Chloride	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Vinyl Acetate	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
(cis) 1,2-Dichloroethene	0.0019	0.0012	EPA 8260C	12-31-14	12-31-14	
2-Butanone	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Bromochloromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Chloroform	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Benzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Trichloroethene	0.0015	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Dibromomethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Bromodichloromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
2-Chloroethyl Vinyl Ether	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Methyl Isobutyl Ketone	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Toluene	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B3-2091-13**					
Laboratory ID:	12-299-04					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Tetrachloroethene	0.0091	0.0012	EPA 8260C	12-31-14	12-31-14	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
2-Hexanone	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Dibromochloromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Chlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Ethylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
m,p-Xylene	ND	0.0023	EPA 8260C	12-31-14	12-31-14	
o-Xylene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Styrene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Bromoform	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Isopropylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Bromobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
n-Propylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
2-Chlorotoluene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
4-Chlorotoluene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,3,5-Trimethylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
tert-Butylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trimethylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
sec-Butylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
p-Isopropyltoluene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
n-Butylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromo-3-chloropropane	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Hexachlorobutadiene	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Naphthalene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*110*	*76-131*				
Toluene-d8	*107*	*82-129*				
4-Bromofluorobenzene	*110*	*79-126*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B4-2091-14**					
Laboratory ID:	12-299-06					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Chloromethane	ND	0.0053	EPA 8260C	12-31-14	12-31-14	
Vinyl Chloride	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Bromomethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Chloroethane	ND	0.0053	EPA 8260C	12-31-14	12-31-14	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Acetone	ND	0.0053	EPA 8260C	12-31-14	12-31-14	
Iodomethane	ND	0.0053	EPA 8260C	12-31-14	12-31-14	
Carbon Disulfide	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Methylene Chloride	ND	0.0053	EPA 8260C	12-31-14	12-31-14	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Vinyl Acetate	ND	0.0053	EPA 8260C	12-31-14	12-31-14	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
2-Butanone	ND	0.0053	EPA 8260C	12-31-14	12-31-14	
Bromochloromethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Chloroform	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Benzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Trichloroethene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Dibromomethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Bromodichloromethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
2-Chloroethyl Vinyl Ether	ND	0.0053	EPA 8260C	12-31-14	12-31-14	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Methyl Isobutyl Ketone	ND	0.0053	EPA 8260C	12-31-14	12-31-14	
Toluene	ND	0.0053	EPA 8260C	12-31-14	12-31-14	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B4-2091-14**					
Laboratory ID:	12-299-06					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Tetrachloroethene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
2-Hexanone	ND	0.0053	EPA 8260C	12-31-14	12-31-14	
Dibromochloromethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Chlorobenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Ethylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
m,p-Xylene	ND	0.0021	EPA 8260C	12-31-14	12-31-14	
o-Xylene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Styrene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Bromoform	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Isopropylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Bromobenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
n-Propylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
2-Chlorotoluene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
4-Chlorotoluene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
tert-Butylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
sec-Butylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
n-Butylbenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromo-3-chloropropane	ND	0.0053	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Hexachlorobutadiene	ND	0.0053	EPA 8260C	12-31-14	12-31-14	
Naphthalene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	12-31-14	12-31-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*110*	*76-131*				
Toluene-d8	*105*	*82-129*				
4-Bromofluorobenzene	*108*	*79-126*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B5-2091-14**					
Laboratory ID:	12-299-07					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Chloromethane	ND	0.0061	EPA 8260C	12-31-14	12-31-14	
Vinyl Chloride	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Bromomethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Chloroethane	ND	0.0061	EPA 8260C	12-31-14	12-31-14	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Acetone	ND	0.0061	EPA 8260C	12-31-14	12-31-14	
Iodomethane	ND	0.0061	EPA 8260C	12-31-14	12-31-14	
Carbon Disulfide	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Methylene Chloride	ND	0.0061	EPA 8260C	12-31-14	12-31-14	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Vinyl Acetate	ND	0.0061	EPA 8260C	12-31-14	12-31-14	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
2-Butanone	ND	0.0061	EPA 8260C	12-31-14	12-31-14	
Bromochloromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Chloroform	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Benzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Trichloroethene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Dibromomethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Bromodichloromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
2-Chloroethyl Vinyl Ether	ND	0.0061	EPA 8260C	12-31-14	12-31-14	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Methyl Isobutyl Ketone	ND	0.0061	EPA 8260C	12-31-14	12-31-14	
Toluene	ND	0.0061	EPA 8260C	12-31-14	12-31-14	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B5-2091-14**					
Laboratory ID:	12-299-07					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Tetrachloroethene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
2-Hexanone	ND	0.0061	EPA 8260C	12-31-14	12-31-14	
Dibromochloromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Chlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Ethylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
m,p-Xylene	ND	0.0025	EPA 8260C	12-31-14	12-31-14	
o-Xylene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Styrene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Bromoform	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Isopropylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Bromobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
n-Propylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
2-Chlorotoluene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
4-Chlorotoluene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,3,5-Trimethylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
tert-Butylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trimethylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
sec-Butylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
p-Isopropyltoluene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
n-Butylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromo-3-chloropropane	ND	0.0061	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Hexachlorobutadiene	ND	0.0061	EPA 8260C	12-31-14	12-31-14	
Naphthalene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*76-131*				
Toluene-d8	*103*	*82-129*				
4-Bromofluorobenzene	*104*	*79-126*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B6-2091-15**					
Laboratory ID:	12-299-09					
Dichlorodifluoromethane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Chloromethane	ND	0.0048	EPA 8260C	1-8-15	1-8-15	
Vinyl Chloride	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Bromomethane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Chloroethane	ND	0.0048	EPA 8260C	1-8-15	1-8-15	
Trichlorofluoromethane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Acetone	ND	0.0048	EPA 8260C	1-8-15	1-8-15	
Iodomethane	ND	0.0048	EPA 8260C	1-8-15	1-8-15	
Carbon Disulfide	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Methylene Chloride	ND	0.0048	EPA 8260C	1-8-15	1-8-15	
(trans) 1,2-Dichloroethene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Methyl t-Butyl Ether	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Vinyl Acetate	ND	0.0048	EPA 8260C	1-8-15	1-8-15	
2,2-Dichloropropane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
(cis) 1,2-Dichloroethene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
2-Butanone	ND	0.0048	EPA 8260C	1-8-15	1-8-15	
Bromochloromethane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Chloroform	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,1,1-Trichloroethane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Carbon Tetrachloride	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloropropene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Benzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloroethane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Trichloroethene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloropropane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Dibromomethane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Bromodichloromethane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
2-Chloroethyl Vinyl Ether	ND	0.0048	EPA 8260C	1-8-15	1-8-15	
(cis) 1,3-Dichloropropene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Methyl Isobutyl Ketone	ND	0.0048	EPA 8260C	1-8-15	1-8-15	
Toluene	ND	0.0048	EPA 8260C	1-8-15	1-8-15	
(trans) 1,3-Dichloropropene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B6-2091-15**					
Laboratory ID:	12-299-09					
1,1,2-Trichloroethane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Tetrachloroethene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,3-Dichloropropane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
2-Hexanone	ND	0.0048	EPA 8260C	1-8-15	1-8-15	
Dibromochloromethane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromoethane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Chlorobenzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,1,1,2-Tetrachloroethane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Ethylbenzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
m,p-Xylene	ND	0.0019	EPA 8260C	1-8-15	1-8-15	
o-Xylene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Styrene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Bromoform	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Isopropylbenzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Bromobenzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,1,2,2-Tetrachloroethane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichloropropane	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
n-Propylbenzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
2-Chlorotoluene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
4-Chlorotoluene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,3,5-Trimethylbenzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
tert-Butylbenzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trimethylbenzene	0.0015	0.00097	EPA 8260C	1-8-15	1-8-15	
sec-Butylbenzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,3-Dichlorobenzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
p-Isopropyltoluene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,4-Dichlorobenzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,2-Dichlorobenzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
n-Butylbenzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromo-3-chloropropane	ND	0.0048	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trichlorobenzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Hexachlorobutadiene	ND	0.0048	EPA 8260C	1-8-15	1-8-15	
Naphthalene	0.27	0.048	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichlorobenzene	ND	0.00097	EPA 8260C	1-8-15	1-8-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*113*	*76-131*				
Toluene-d8	*111*	*82-129*				
4-Bromofluorobenzene	*114*	*79-126*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B7-2091-17**					
Laboratory ID:	12-299-10					
Dichlorodifluoromethane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Chloromethane	ND	0.0045	EPA 8260C	12-31-14	12-31-14	
Vinyl Chloride	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Bromomethane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Chloroethane	ND	0.0045	EPA 8260C	12-31-14	12-31-14	
Trichlorofluoromethane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Acetone	ND	0.0045	EPA 8260C	12-31-14	12-31-14	
Iodomethane	ND	0.0045	EPA 8260C	12-31-14	12-31-14	
Carbon Disulfide	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Methylene Chloride	ND	0.0045	EPA 8260C	12-31-14	12-31-14	
(trans) 1,2-Dichloroethene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Methyl t-Butyl Ether	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Vinyl Acetate	ND	0.0045	EPA 8260C	12-31-14	12-31-14	
2,2-Dichloropropane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
(cis) 1,2-Dichloroethene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
2-Butanone	ND	0.0045	EPA 8260C	12-31-14	12-31-14	
Bromochloromethane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Chloroform	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,1,1-Trichloroethane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Carbon Tetrachloride	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloropropene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Benzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloroethane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Trichloroethene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloropropane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Dibromomethane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Bromodichloromethane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
2-Chloroethyl Vinyl Ether	ND	0.0045	EPA 8260C	12-31-14	12-31-14	
(cis) 1,3-Dichloropropene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Methyl Isobutyl Ketone	ND	0.0045	EPA 8260C	12-31-14	12-31-14	
Toluene	ND	0.0045	EPA 8260C	12-31-14	12-31-14	
(trans) 1,3-Dichloropropene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B7-2091-17**					
Laboratory ID:	12-299-10					
1,1,2-Trichloroethane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Tetrachloroethene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,3-Dichloropropane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
2-Hexanone	ND	0.0045	EPA 8260C	12-31-14	12-31-14	
Dibromochloromethane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromoethane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Chlorobenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,1,1,2-Tetrachloroethane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Ethylbenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
m,p-Xylene	ND	0.0018	EPA 8260C	12-31-14	12-31-14	
o-Xylene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Styrene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Bromoform	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Isopropylbenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Bromobenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,1,2,2-Tetrachloroethane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichloropropane	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
n-Propylbenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
2-Chlorotoluene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
4-Chlorotoluene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,3,5-Trimethylbenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
tert-Butylbenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trimethylbenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
sec-Butylbenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,3-Dichlorobenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
p-Isopropyltoluene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,4-Dichlorobenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,2-Dichlorobenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
n-Butylbenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromo-3-chloropropane	ND	0.0045	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trichlorobenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Hexachlorobutadiene	ND	0.0045	EPA 8260C	12-31-14	12-31-14	
Naphthalene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichlorobenzene	ND	0.00089	EPA 8260C	12-31-14	12-31-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*99*	*76-131*				
Toluene-d8	*101*	*82-129*				
4-Bromofluorobenzene	*99*	*79-126*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B8-2091-10**					
Laboratory ID:	12-299-12					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Chloromethane	ND	0.0052	EPA 8260C	12-31-14	12-31-14	
Vinyl Chloride	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Bromomethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Chloroethane	ND	0.0052	EPA 8260C	12-31-14	12-31-14	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Acetone	ND	0.0052	EPA 8260C	12-31-14	12-31-14	
Iodomethane	ND	0.0052	EPA 8260C	12-31-14	12-31-14	
Carbon Disulfide	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Methylene Chloride	ND	0.0052	EPA 8260C	12-31-14	12-31-14	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Vinyl Acetate	ND	0.0052	EPA 8260C	12-31-14	12-31-14	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
2-Butanone	ND	0.0052	EPA 8260C	12-31-14	12-31-14	
Bromochloromethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Chloroform	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Benzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Trichloroethene	0.0012	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Dibromomethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Bromodichloromethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
2-Chloroethyl Vinyl Ether	ND	0.0052	EPA 8260C	12-31-14	12-31-14	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Methyl Isobutyl Ketone	ND	0.0052	EPA 8260C	12-31-14	12-31-14	
Toluene	ND	0.0052	EPA 8260C	12-31-14	12-31-14	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B8-2091-10**					
Laboratory ID:	12-299-12					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Tetrachloroethene	0.0069	0.0010	EPA 8260C	12-31-14	12-31-14	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
2-Hexanone	ND	0.0052	EPA 8260C	12-31-14	12-31-14	
Dibromochloromethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Chlorobenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Ethylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
m,p-Xylene	ND	0.0021	EPA 8260C	12-31-14	12-31-14	
o-Xylene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Styrene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Bromoform	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Isopropylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Bromobenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
n-Propylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
2-Chlorotoluene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
4-Chlorotoluene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
tert-Butylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
sec-Butylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
n-Butylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromo-3-chloropropane	ND	0.0052	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Hexachlorobutadiene	ND	0.0052	EPA 8260C	12-31-14	12-31-14	
Naphthalene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*76-131*				
Toluene-d8	*101*	*82-129*				
4-Bromofluorobenzene	*103*	*79-126*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B9-2091-10**					
Laboratory ID:	12-299-13					
Dichlorodifluoromethane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Chloromethane	ND	0.0047	EPA 8260C	12-31-14	12-31-14	
Vinyl Chloride	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Bromomethane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Chloroethane	ND	0.0047	EPA 8260C	12-31-14	12-31-14	
Trichlorofluoromethane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Acetone	ND	0.0047	EPA 8260C	12-31-14	12-31-14	
Iodomethane	ND	0.0047	EPA 8260C	12-31-14	12-31-14	
Carbon Disulfide	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Methylene Chloride	ND	0.0047	EPA 8260C	12-31-14	12-31-14	
(trans) 1,2-Dichloroethene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Methyl t-Butyl Ether	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Vinyl Acetate	ND	0.0047	EPA 8260C	12-31-14	12-31-14	
2,2-Dichloropropane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
(cis) 1,2-Dichloroethene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
2-Butanone	ND	0.0047	EPA 8260C	12-31-14	12-31-14	
Bromochloromethane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Chloroform	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,1,1-Trichloroethane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Carbon Tetrachloride	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloropropene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Benzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloroethane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Trichloroethene	0.0023	0.00095	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloropropane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Dibromomethane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Bromodichloromethane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
2-Chloroethyl Vinyl Ether	ND	0.0047	EPA 8260C	12-31-14	12-31-14	
(cis) 1,3-Dichloropropene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Methyl Isobutyl Ketone	ND	0.0047	EPA 8260C	12-31-14	12-31-14	
Toluene	ND	0.0047	EPA 8260C	12-31-14	12-31-14	
(trans) 1,3-Dichloropropene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B9-2091-10**					
Laboratory ID:	12-299-13					
1,1,2-Trichloroethane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Tetrachloroethene	0.014	0.00095	EPA 8260C	12-31-14	12-31-14	
1,3-Dichloropropane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
2-Hexanone	ND	0.0047	EPA 8260C	12-31-14	12-31-14	
Dibromochloromethane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromoethane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Chlorobenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,1,1,2-Tetrachloroethane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Ethylbenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
m,p-Xylene	ND	0.0019	EPA 8260C	12-31-14	12-31-14	
o-Xylene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Styrene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Bromoform	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Isopropylbenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Bromobenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,1,2,2-Tetrachloroethane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichloropropane	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
n-Propylbenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
2-Chlorotoluene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
4-Chlorotoluene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,3,5-Trimethylbenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
tert-Butylbenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trimethylbenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
sec-Butylbenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,3-Dichlorobenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
p-Isopropyltoluene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,4-Dichlorobenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,2-Dichlorobenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
n-Butylbenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromo-3-chloropropane	ND	0.0047	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trichlorobenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Hexachlorobutadiene	ND	0.0047	EPA 8260C	12-31-14	12-31-14	
Naphthalene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichlorobenzene	ND	0.00095	EPA 8260C	12-31-14	12-31-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*111*	*76-131*				
Toluene-d8	*107*	*82-129*				
4-Bromofluorobenzene	*110*	*79-126*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B10-2091-7**					
Laboratory ID:	12-299-15					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Chloromethane	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Vinyl Chloride	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Bromomethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Chloroethane	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Acetone	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Iodomethane	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Carbon Disulfide	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Methylene Chloride	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Vinyl Acetate	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
2-Butanone	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Bromochloromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Chloroform	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Benzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Trichloroethene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Dibromomethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Bromodichloromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
2-Chloroethyl Vinyl Ether	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Methyl Isobutyl Ketone	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Toluene	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B10-2091-7**					
Laboratory ID:	12-299-15					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Tetrachloroethene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
2-Hexanone	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Dibromochloromethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Chlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Ethylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
m,p-Xylene	ND	0.0023	EPA 8260C	12-31-14	12-31-14	
o-Xylene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Styrene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Bromoform	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Isopropylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Bromobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
n-Propylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
2-Chlorotoluene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
4-Chlorotoluene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,3,5-Trimethylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
tert-Butylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trimethylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
sec-Butylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
p-Isopropyltoluene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
n-Butylbenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromo-3-chloropropane	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Hexachlorobutadiene	ND	0.0058	EPA 8260C	12-31-14	12-31-14	
Naphthalene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	12-31-14	12-31-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*76-131*				
Toluene-d8	*102*	*82-129*				
4-Bromofluorobenzene	*101*	*79-126*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B11-2091-10**					
Laboratory ID:	12-299-16					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Chloromethane	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Vinyl Chloride	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Bromomethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Chloroethane	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Acetone	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Iodomethane	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Carbon Disulfide	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Methylene Chloride	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Methyl t-Butyl Ether	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Vinyl Acetate	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
2-Butanone	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Bromochloromethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Chloroform	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Benzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Trichloroethene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Dibromomethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Bromodichloromethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
2-Chloroethyl Vinyl Ether	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Methyl Isobutyl Ketone	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Toluene	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B11-2091-10**					
Laboratory ID:	12-299-16					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Tetrachloroethene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
2-Hexanone	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Dibromochloromethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Chlorobenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Ethylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
m,p-Xylene	ND	0.0025	EPA 8260C	12-31-14	12-31-14	
o-Xylene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Styrene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Bromoform	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Isopropylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Bromobenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
n-Propylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
2-Chlorotoluene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
4-Chlorotoluene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,3,5-Trimethylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
tert-Butylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trimethylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
sec-Butylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
p-Isopropyltoluene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
n-Butylbenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromo-3-chloropropane	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Hexachlorobutadiene	ND	0.0063	EPA 8260C	12-31-14	12-31-14	
Naphthalene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	12-31-14	12-31-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*111*	*76-131*				
Toluene-d8	*108*	*82-129*				
4-Bromofluorobenzene	*110*	*79-126*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

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

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1231S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Chloromethane	ND	0.0050	EPA 8260C	12-31-14	12-31-14	
Vinyl Chloride	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Bromomethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Chloroethane	ND	0.0050	EPA 8260C	12-31-14	12-31-14	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Acetone	ND	0.0050	EPA 8260C	12-31-14	12-31-14	
Iodomethane	ND	0.0050	EPA 8260C	12-31-14	12-31-14	
Carbon Disulfide	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Methylene Chloride	ND	0.0050	EPA 8260C	12-31-14	12-31-14	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Vinyl Acetate	ND	0.0050	EPA 8260C	12-31-14	12-31-14	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
2-Butanone	ND	0.0050	EPA 8260C	12-31-14	12-31-14	
Bromochloromethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Chloroform	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Benzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Trichloroethene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Dibromomethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Bromodichloromethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	12-31-14	12-31-14	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	12-31-14	12-31-14	
Toluene	ND	0.0050	EPA 8260C	12-31-14	12-31-14	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1231S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Tetrachloroethene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
2-Hexanone	ND	0.0050	EPA 8260C	12-31-14	12-31-14	
Dibromochloromethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Chlorobenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Ethylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
m,p-Xylene	ND	0.0020	EPA 8260C	12-31-14	12-31-14	
o-Xylene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Styrene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Bromoform	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Isopropylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Bromobenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
n-Propylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
2-Chlorotoluene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
4-Chlorotoluene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
tert-Butylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
sec-Butylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
n-Butylbenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	12-31-14	12-31-14	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	12-31-14	12-31-14	
Naphthalene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	12-31-14	12-31-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*111*	*76-131*				
Toluene-d8	*111*	*82-129*				
4-Bromofluorobenzene	*110*	*79-126*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

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

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0108S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Chloromethane	ND	0.0050	EPA 8260C	1-8-15	1-8-15	
Vinyl Chloride	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Bromomethane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Chloroethane	ND	0.0050	EPA 8260C	1-8-15	1-8-15	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Acetone	ND	0.0050	EPA 8260C	1-8-15	1-8-15	
Iodomethane	ND	0.0050	EPA 8260C	1-8-15	1-8-15	
Carbon Disulfide	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Methylene Chloride	ND	0.0050	EPA 8260C	1-8-15	1-8-15	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Vinyl Acetate	ND	0.0050	EPA 8260C	1-8-15	1-8-15	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
2-Butanone	ND	0.0050	EPA 8260C	1-8-15	1-8-15	
Bromochloromethane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Chloroform	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Benzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Trichloroethene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Dibromomethane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Bromodichloromethane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	1-8-15	1-8-15	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	1-8-15	1-8-15	
Toluene	ND	0.0050	EPA 8260C	1-8-15	1-8-15	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0108S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Tetrachloroethene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
2-Hexanone	ND	0.0050	EPA 8260C	1-8-15	1-8-15	
Dibromochloromethane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Chlorobenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Ethylbenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
m,p-Xylene	ND	0.0020	EPA 8260C	1-8-15	1-8-15	
o-Xylene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Styrene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Bromoform	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Isopropylbenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Bromobenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
n-Propylbenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
2-Chlorotoluene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
4-Chlorotoluene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
tert-Butylbenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
sec-Butylbenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
n-Butylbenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	1-8-15	1-8-15	
Naphthalene	ND	0.0050	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	1-8-15	1-8-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*113*	*76-131*				
Toluene-d8	*111*	*82-129*				
4-Bromofluorobenzene	*114*	*79-126*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1231S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0455**	**0.0459**	0.0500	0.0500	91	92	66-129	1	15	
Benzene	**0.0516**	**0.0510**	0.0500	0.0500	103	102	71-123	1	15	
Trichloroethene	**0.0476**	**0.0473**	0.0500	0.0500	95	95	75-115	1	15	
Toluene	**0.0491**	**0.0486**	0.0500	0.0500	98	97	75-120	1	15	
Chlorobenzene	**0.0449**	**0.0446**	0.0500	0.0500	90	89	75-121	1	15	
Surrogate:										
Dibromofluoromethane					*101*	*102*	*76-131*			
Toluene-d8					*100*	*101*	*82-129*			
4-Bromofluorobenzene					*100*	*102*	*79-126*			

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0108S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0482**	**0.0505**	0.0500	0.0500	96	101	66-129	5	15	
Benzene	**0.0547**	**0.0563**	0.0500	0.0500	109	113	71-123	3	15	
Trichloroethene	**0.0500**	**0.0491**	0.0500	0.0500	100	98	75-115	2	15	
Toluene	**0.0519**	**0.0511**	0.0500	0.0500	104	102	75-120	2	15	
Chlorobenzene	**0.0435**	**0.0432**	0.0500	0.0500	87	86	75-121	1	15	
Surrogate:										
Dibromofluoromethane					*103*	*106*	*76-131*			
Toluene-d8					*104*	*101*	*82-129*			
4-Bromofluorobenzene					*104*	*102*	*79-126*			

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B1-2091-GW**					
Laboratory ID:	12-299-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloromethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Vinyl Chloride	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromomethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloroethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Acetone	ND	5.0	EPA 8260C	1-8-15	1-8-15	
Iodomethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Carbon Disulfide	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methylene Chloride	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Vinyl Acetate	ND	1.0	EPA 8260C	1-8-15	1-8-15	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Butanone	ND	5.0	EPA 8260C	1-8-15	1-8-15	
Bromochloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloroform	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Benzene	0.40	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloroethane	0.33	0.20	EPA 8260C	1-8-15	1-8-15	
Trichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Dibromomethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromodichloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	1-8-15	1-8-15	
Toluene	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B1-2091-GW**					
Laboratory ID:	12-299-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Tetrachloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Hexanone	ND	2.0	EPA 8260C	1-8-15	1-8-15	
Dibromochloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Ethylbenzene	0.29	0.20	EPA 8260C	1-8-15	1-8-15	
m,p-Xylene	1.2	0.40	EPA 8260C	1-8-15	1-8-15	
o-Xylene	0.35	0.20	EPA 8260C	1-8-15	1-8-15	
Styrene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromoform	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Isopropylbenzene	0.26	0.20	EPA 8260C	1-8-15	1-8-15	
Bromobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
n-Propylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
tert-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trimethylbenzene	0.43	0.20	EPA 8260C	1-8-15	1-8-15	
sec-Butylbenzene	0.36	0.20	EPA 8260C	1-8-15	1-8-15	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
p-Isopropyltoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
n-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Naphthalene	ND	1.0	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*79-122*				
Toluene-d8	*98*	*80-120*				
4-Bromofluorobenzene	*96*	*80-120*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B3-2091-GW**					
Laboratory ID:	12-299-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloromethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Vinyl Chloride	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromomethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloroethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Acetone	ND	5.0	EPA 8260C	1-8-15	1-8-15	
Iodomethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Carbon Disulfide	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methylene Chloride	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(trans) 1,2-Dichloroethene	0.78	0.20	EPA 8260C	1-8-15	1-8-15	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Vinyl Acetate	ND	1.0	EPA 8260C	1-8-15	1-8-15	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
(cis) 1,2-Dichloroethene	39	0.20	EPA 8260C	1-8-15	1-8-15	
2-Butanone	ND	5.0	EPA 8260C	1-8-15	1-8-15	
Bromochloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloroform	0.24	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Benzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Trichloroethene	11	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Dibromomethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromodichloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	1-8-15	1-8-15	
Toluene	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B3-2091-GW**					
Laboratory ID:	12-299-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Tetrachloroethene	40	0.20	EPA 8260C	1-8-15	1-8-15	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Hexanone	ND	2.0	EPA 8260C	1-8-15	1-8-15	
Dibromochloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Ethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
m,p-Xylene	0.49	0.40	EPA 8260C	1-8-15	1-8-15	
o-Xylene	0.23	0.20	EPA 8260C	1-8-15	1-8-15	
Styrene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromoform	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Isopropylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
n-Propylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
tert-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
sec-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
p-Isopropyltoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
n-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Naphthalene	ND	1.0	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*103*	*79-122*				
Toluene-d8	*101*	*80-120*				
4-Bromofluorobenzene	*98*	*80-120*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B5-2091-GW**					
Laboratory ID:	12-299-08					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloromethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Vinyl Chloride	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromomethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloroethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Acetone	ND	5.0	EPA 8260C	1-8-15	1-8-15	
Iodomethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Carbon Disulfide	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methylene Chloride	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Vinyl Acetate	ND	1.0	EPA 8260C	1-8-15	1-8-15	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Butanone	ND	5.0	EPA 8260C	1-8-15	1-8-15	
Bromochloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloroform	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Benzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Trichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Dibromomethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromodichloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	1-8-15	1-8-15	
Toluene	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B5-2091-GW**					
Laboratory ID:	12-299-08					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Tetrachloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Hexanone	ND	2.0	EPA 8260C	1-8-15	1-8-15	
Dibromochloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Ethylbenzene	0.41	0.20	EPA 8260C	1-8-15	1-8-15	
m,p-Xylene	1.3	0.40	EPA 8260C	1-8-15	1-8-15	
o-Xylene	0.62	0.20	EPA 8260C	1-8-15	1-8-15	
Styrene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromoform	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Isopropylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
n-Propylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
tert-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
sec-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
p-Isopropyltoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
n-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Naphthalene	ND	1.0	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*79-122*				
Toluene-d8	*104*	*80-120*				
4-Bromofluorobenzene	*102*	*80-120*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B7-2091-GW**					
Laboratory ID:	12-299-11					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloromethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Vinyl Chloride	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromomethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloroethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Acetone	ND	5.0	EPA 8260C	1-8-15	1-8-15	
Iodomethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Carbon Disulfide	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methylene Chloride	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Vinyl Acetate	ND	1.0	EPA 8260C	1-8-15	1-8-15	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
(cis) 1,2-Dichloroethene	6.9	0.20	EPA 8260C	1-8-15	1-8-15	
2-Butanone	ND	5.0	EPA 8260C	1-8-15	1-8-15	
Bromochloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloroform	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Benzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Trichloroethene	3.3	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Dibromomethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromodichloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	1-8-15	1-8-15	
Toluene	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B7-2091-GW**					
Laboratory ID:	12-299-11					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Tetrachloroethene	16	0.20	EPA 8260C	1-8-15	1-8-15	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Hexanone	ND	2.0	EPA 8260C	1-8-15	1-8-15	
Dibromochloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Ethylbenzene	0.35	0.20	EPA 8260C	1-8-15	1-8-15	
m,p-Xylene	0.87	0.40	EPA 8260C	1-8-15	1-8-15	
o-Xylene	0.48	0.20	EPA 8260C	1-8-15	1-8-15	
Styrene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromoform	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Isopropylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
n-Propylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
tert-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
sec-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
p-Isopropyltoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
n-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Naphthalene	ND	1.0	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*79-122*				
Toluene-d8	*103*	*80-120*				
4-Bromofluorobenzene	*101*	*80-120*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B9-2091-GW-13**					
Laboratory ID:	12-299-14					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloromethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Vinyl Chloride	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromomethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloroethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Acetone	10	5.0	EPA 8260C	1-8-15	1-8-15	
Iodomethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Carbon Disulfide	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methylene Chloride	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Vinyl Acetate	ND	1.0	EPA 8260C	1-8-15	1-8-15	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
(cis) 1,2-Dichloroethene	0.67	0.20	EPA 8260C	1-8-15	1-8-15	
2-Butanone	ND	5.0	EPA 8260C	1-8-15	1-8-15	
Bromochloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloroform	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Benzene	0.20	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Trichloroethene	0.96	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Dibromomethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromodichloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	1-8-15	1-8-15	
Toluene	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B9-2091-GW-13**					
Laboratory ID:	12-299-14					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Tetrachloroethene	5.6	0.20	EPA 8260C	1-8-15	1-8-15	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Hexanone	ND	2.0	EPA 8260C	1-8-15	1-8-15	
Dibromochloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Ethylbenzene	0.42	0.20	EPA 8260C	1-8-15	1-8-15	
m,p-Xylene	1.7	0.40	EPA 8260C	1-8-15	1-8-15	
o-Xylene	0.75	0.20	EPA 8260C	1-8-15	1-8-15	
Styrene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromoform	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Isopropylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
n-Propylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
tert-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
sec-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
p-Isopropyltoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
n-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Naphthalene	ND	1.0	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*103*	*79-122*				
Toluene-d8	*104*	*80-120*				
4-Bromofluorobenzene	*100*	*80-120*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TRIP BLANK**					
Laboratory ID:	12-299-17					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloromethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Vinyl Chloride	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromomethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloroethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Acetone	ND	5.0	EPA 8260C	1-8-15	1-8-15	
Iodomethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Carbon Disulfide	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methylene Chloride	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Vinyl Acetate	ND	1.0	EPA 8260C	1-8-15	1-8-15	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Butanone	ND	5.0	EPA 8260C	1-8-15	1-8-15	
Bromochloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloroform	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Benzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Trichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Dibromomethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromodichloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	1-8-15	1-8-15	
Toluene	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TRIP BLANK**					
Laboratory ID:	12-299-17					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Tetrachloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Hexanone	ND	2.0	EPA 8260C	1-8-15	1-8-15	
Dibromochloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Ethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
m,p-Xylene	ND	0.40	EPA 8260C	1-8-15	1-8-15	
o-Xylene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Styrene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromoform	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Isopropylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
n-Propylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
tert-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
sec-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
p-Isopropyltoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
n-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Naphthalene	ND	1.0	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*79-122*				
Toluene-d8	*104*	*80-120*				
4-Bromofluorobenzene	*102*	*80-120*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

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

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0108W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloromethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Vinyl Chloride	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromomethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloroethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Acetone	ND	5.0	EPA 8260C	1-8-15	1-8-15	
Iodomethane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Carbon Disulfide	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methylene Chloride	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Vinyl Acetate	ND	1.0	EPA 8260C	1-8-15	1-8-15	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Butanone	ND	5.0	EPA 8260C	1-8-15	1-8-15	
Bromochloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chloroform	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Benzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Trichloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Dibromomethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromodichloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	1-8-15	1-8-15	
Toluene	ND	1.0	EPA 8260C	1-8-15	1-8-15	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-8-15	1-8-15	

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0108W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Tetrachloroethene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Hexanone	ND	2.0	EPA 8260C	1-8-15	1-8-15	
Dibromochloromethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Chlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Ethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
m,p-Xylene	ND	0.40	EPA 8260C	1-8-15	1-8-15	
o-Xylene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Styrene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromoform	ND	1.0	EPA 8260C	1-8-15	1-8-15	
Isopropylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Bromobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-8-15	1-8-15	
n-Propylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
tert-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
sec-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
p-Isopropyltoluene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
n-Butylbenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-8-15	1-8-15	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Naphthalene	ND	1.0	EPA 8260C	1-8-15	1-8-15	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-8-15	1-8-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*97*	*79-122*				
Toluene-d8	*101*	*80-120*				
4-Bromofluorobenzene	*99*	*80-120*				

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0108W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**8.38**	**9.21**	10.0	10.0	84	92	64-138	9	16	
Benzene	**9.13**	**10.2**	10.0	10.0	91	102	76-125	11	14	
Trichloroethene	**7.38**	**7.71**	10.0	10.0	74	77	70-125	4	16	
Toluene	**9.28**	**9.83**	10.0	10.0	93	98	75-125	6	15	
Chlorobenzene	**8.48**	**9.18**	10.0	10.0	85	92	80-140	8	15	
Surrogate:										
Dibromofluoromethane					*95*	*103*	*79-122*			
Toluene-d8					*103*	*99*	*80-120*			
4-Bromofluorobenzene					*101*	*101*	*80-120*			

Date of Report: January 9, 2015
Samples Submitted: December 31, 2014
Laboratory Reference: 1412-299
Project: 1412-2091

% MOISTURE

Date Analyzed: 12-31-14

Client ID	Lab ID	% Moisture
B1-2091-12	12-299-01	11
B2-2091-14	12-299-03	12
B3-2091-13	12-299-04	12
B4-2091-14	12-299-06	8
B5-2091-14	12-299-07	9
B6-2091-15	12-299-09	9
B7-2091-17	12-299-10	10
B8-2091-10	12-299-12	9
B9-2091-10	12-299-13	10
B10-2091-7	12-299-15	9
B11-2091-10	12-299-16	14

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page NBC 1 of 2

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

Company: Anderson Environmental
Project Number: 1412-2091
Project Name: COGIC
Project Manager: NB Cone
Sampled by: NB Cone

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Laboratory Number: 12-299

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	B1-2091-12	12/29/14	10:00	soil	4					X												X
2	B1-2091-GW		10:30	water	1					X												
3	B2-2091-14		11:48	soil	4					X												X
4	B3-2091-13		12:30	soil	4					X												X
5	B3-2091-GW		12:35	water	1					X												
6	B4-2091-14		NBC 1:53	soil	4					X												X
7	B5-2091-14		2:40	soil	4					X												X
8	B5-2091-GW		3:00	water	1					X												
9	B6-2091-15		3:15	soil	4					X												X
										X												

	Signature	Company	Date	Time
Relinquished	NBlone	Anderson Env	12/31/14	9:34
Received		OSE	12/31/14	0934
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions
note all these samples taken on 12/29/14

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐ _____

Chain of Custody

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

Company: Anderson Environmental
Project Number: 1412-2091
Project Name: COGIC
Project Manager: Nels B Cone
Sampled by: N B Cone

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 12-299

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
10	B7-2091-17	10/30/14	10:35	soil	4					X												X
11	B7-2091-GW		12:30	water	1					X												
12	B8-2091-10		1:15	soil	4					X												X
13	B9-2091-10		3:15	soil	4					X												X
14	B9-2091-GW-~~13~~ NBC		3:45	water	1					X												
15	B10-2091-7		5:10	soil	4					X												X
16	B11-2091-10		6:25	soil	4					X												X
	~~B 2091- NBC~~									X												
	~~B 2091- NBC~~									X												
17	Trip Blank			water						X												

	Signature	Company	Date	Time
Relinquished	N B Cone	Anderson Enviro	12/31/14	9:34
Received		OSE	12/31/14	0934
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐ _____

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

January 14, 2015

Nels Cone
Anderson Environmental
5261 W. Imperial Highway
Los Angeles, CA 90045

Re: Analytical Data for Project 1412-2091
Laboratory Reference No. 1501-067

Dear Nels:

Enclosed are the analytical results and associated quality control data for samples submitted on January 13, 2015.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: January 14, 2015
Samples Submitted: January 13, 2015
Laboratory Reference: 1501-067
Project: 1412-2091

Case Narrative

Samples were collected on January 13, 2015 and received by the laboratory on January 13, 2015. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

Date of Report: January 14, 2015
Samples Submitted: January 13, 2015
Laboratory Reference: 1501-067
Project: 1412-2091

VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B6-2091-GW**					
Laboratory ID:	01-067-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Chloromethane	ND	1.0	EPA 8260C	1-13-15	1-13-15	
Vinyl Chloride	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Bromomethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Chloroethane	ND	1.0	EPA 8260C	1-13-15	1-13-15	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Acetone	ND	6.8	EPA 8260C	1-13-15	1-13-15	
Iodomethane	ND	1.3	EPA 8260C	1-13-15	1-13-15	
Carbon Disulfide	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Methylene Chloride	ND	1.0	EPA 8260C	1-13-15	1-13-15	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Vinyl Acetate	ND	1.0	EPA 8260C	1-13-15	1-13-15	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
2-Butanone	ND	5.0	EPA 8260C	1-13-15	1-13-15	
Bromochloromethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Chloroform	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Benzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Trichloroethene	ND	0.26	EPA 8260C	1-13-15	1-13-15	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Dibromomethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Bromodichloromethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-13-15	1-13-15	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	1-13-15	1-13-15	
Toluene	ND	1.0	EPA 8260C	1-13-15	1-13-15	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-13-15	1-13-15	

Date of Report: January 14, 2015
Samples Submitted: January 13, 2015
Laboratory Reference: 1501-067
Project: 1412-2091

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B6-2091-GW**					
Laboratory ID:	01-067-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Tetrachloroethene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
2-Hexanone	ND	2.0	EPA 8260C	1-13-15	1-13-15	
Dibromochloromethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Chlorobenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Ethylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
m,p-Xylene	ND	0.40	EPA 8260C	1-13-15	1-13-15	
o-Xylene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Styrene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Bromoform	ND	1.0	EPA 8260C	1-13-15	1-13-15	
Isopropylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Bromobenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
n-Propylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
tert-Butylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
sec-Butylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
p-Isopropyltoluene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
n-Butylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-13-15	1-13-15	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Naphthalene	ND	1.0	EPA 8260C	1-13-15	1-13-15	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*116*	*79-122*				
Toluene-d8	*106*	*80-120*				
4-Bromofluorobenzene	*90*	*80-120*				

Date of Report: January 14, 2015
Samples Submitted: January 13, 2015
Laboratory Reference: 1501-067
Project: 1412-2091

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

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0113W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Chloromethane	ND	1.0	EPA 8260C	1-13-15	1-13-15	
Vinyl Chloride	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Bromomethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Chloroethane	ND	1.0	EPA 8260C	1-13-15	1-13-15	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Acetone	ND	6.8	EPA 8260C	1-13-15	1-13-15	
Iodomethane	ND	1.3	EPA 8260C	1-13-15	1-13-15	
Carbon Disulfide	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Methylene Chloride	ND	1.0	EPA 8260C	1-13-15	1-13-15	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Vinyl Acetate	ND	1.0	EPA 8260C	1-13-15	1-13-15	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
2-Butanone	ND	5.0	EPA 8260C	1-13-15	1-13-15	
Bromochloromethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Chloroform	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Benzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Trichloroethene	ND	0.26	EPA 8260C	1-13-15	1-13-15	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Dibromomethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Bromodichloromethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-13-15	1-13-15	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	1-13-15	1-13-15	
Toluene	ND	1.0	EPA 8260C	1-13-15	1-13-15	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-13-15	1-13-15	

Date of Report: January 14, 2015
Samples Submitted: January 13, 2015
Laboratory Reference: 1501-067
Project: 1412-2091

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0113W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Tetrachloroethene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
2-Hexanone	ND	2.0	EPA 8260C	1-13-15	1-13-15	
Dibromochloromethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Chlorobenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Ethylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
m,p-Xylene	ND	0.40	EPA 8260C	1-13-15	1-13-15	
o-Xylene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Styrene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Bromoform	ND	1.0	EPA 8260C	1-13-15	1-13-15	
Isopropylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Bromobenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-13-15	1-13-15	
n-Propylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
tert-Butylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
sec-Butylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
p-Isopropyltoluene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
n-Butylbenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-13-15	1-13-15	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Hexachlorobutadiene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Naphthalene	ND	1.0	EPA 8260C	1-13-15	1-13-15	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-13-15	1-13-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*117*	*79-122*				
Toluene-d8	*102*	*80-120*				
4-Bromofluorobenzene	*88*	*80-120*				

Date of Report: January 14, 2015
Samples Submitted: January 13, 2015
Laboratory Reference: 1501-067
Project: 1412-2091

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0113W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**10.1**	**10.4**	10.0	10.0	101	104	64-138	3	16	
Benzene	**9.71**	**10.1**	10.0	10.0	97	101	76-125	4	14	
Trichloroethene	**7.11**	**7.46**	10.0	10.0	71	75	70-125	5	16	
Toluene	**8.67**	**9.41**	10.0	10.0	87	94	75-125	8	15	
Chlorobenzene	**9.16**	**9.66**	10.0	10.0	92	97	80-140	5	15	
Surrogate:										
Dibromofluoromethane					*117*	*111*	*79-122*			
Toluene-d8					*100*	*103*	*80-120*			
4-Bromofluorobenzene					*89*	*90*	*80-120*			

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

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

Laboratory Number: 01-067

Company: Anderson Environmental
Project Number: 1417-2091
Project Name: COGIC
Project Manager: Nels B Cone
Sampled by: N B Cone

Turnaround Request (in working days)

(Check One)

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

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A						% Moisture
1	BG-2091-GW	1/13/15	11:05	water	3					X																	

	Signature	Company	Date	Time
Relinquished	N B Cone	Anderson Enviro	1/13/15	2:45
Received		COGE	1/13/15	1445
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐ _____

OnSite Environmental Inc.

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

March 3, 2015

Nels Cone
Anderson Environmental
5261 W. Imperial Highway
Los Angeles, CA 90045

Re: Analytical Data for Project 1412-2091
Laboratory Reference No. 1502-225

Dear Nels:

Enclosed are the analytical results and associated quality control data for samples submitted on February 25, 2015.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

Case Narrative

Samples were collected on February 25, 2015 and received by the laboratory on February 25, 2015. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

Halogenated Volatiles EPA 8260C (soil) Analysis

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

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

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

HALOGENATED VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B12-2091-16**					
Laboratory ID:	02-225-01					
Dichlorodifluoromethane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Chloromethane	ND	0.0085	EPA 8260C	2-26-15	2-26-15	
Vinyl Chloride	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Bromomethane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Chloroethane	ND	0.0085	EPA 8260C	2-26-15	2-26-15	
Trichlorofluoromethane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloroethene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Iodomethane	ND	0.0085	EPA 8260C	2-26-15	2-26-15	
Methylene Chloride	ND	0.0085	EPA 8260C	2-26-15	2-26-15	
(trans) 1,2-Dichloroethene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloroethane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
2,2-Dichloropropane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
(cis) 1,2-Dichloroethene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Bromochloromethane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Chloroform	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
1,1,1-Trichloroethane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Carbon Tetrachloride	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloropropene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
1,2-Dichloroethane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Trichloroethene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
1,2-Dichloropropane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Dibromomethane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Bromodichloromethane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
2-Chloroethyl Vinyl Ether	ND	0.0085	EPA 8260C	2-26-15	2-26-15	
(cis) 1,3-Dichloropropene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
(trans) 1,3-Dichloropropene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

HALOGENATED VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B12-2091-16**					
Laboratory ID:	02-225-01					
1,1,2-Trichloroethane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Tetrachloroethene	0.011	0.0017	EPA 8260C	2-26-15	2-26-15	
1,3-Dichloropropane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Dibromochloromethane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
1,2-Dibromoethane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Chlorobenzene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
1,1,1,2-Tetrachloroethane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Bromoform	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Bromobenzene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
1,1,2,2-Tetrachloroethane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
1,2,3-Trichloropropane	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
2-Chlorotoluene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
4-Chlorotoluene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
1,3-Dichlorobenzene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
1,4-Dichlorobenzene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
1,2-Dichlorobenzene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
1,2-Dibromo-3-chloropropane	ND	0.0085	EPA 8260C	2-26-15	2-26-15	
1,2,4-Trichlorobenzene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Hexachlorobutadiene	ND	0.0085	EPA 8260C	2-26-15	2-26-15	
1,2,3-Trichlorobenzene	ND	0.0017	EPA 8260C	2-26-15	2-26-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*76-131*				
Toluene-d8	*105*	*82-129*				
4-Bromofluorobenzene	*103*	*79-126*				

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

HALOGENATED VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B13-2091-14**					
Laboratory ID:	02-225-03					
Dichlorodifluoromethane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Chloromethane	ND	0.0068	EPA 8260C	2-26-15	2-26-15	
Vinyl Chloride	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Bromomethane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Chloroethane	ND	0.0068	EPA 8260C	2-26-15	2-26-15	
Trichlorofluoromethane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloroethene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Iodomethane	ND	0.0068	EPA 8260C	2-26-15	2-26-15	
Methylene Chloride	ND	0.0068	EPA 8260C	2-26-15	2-26-15	
(trans) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloroethane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
2,2-Dichloropropane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
(cis) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Bromochloromethane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Chloroform	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,1,1-Trichloroethane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Carbon Tetrachloride	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloropropene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,2-Dichloroethane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Trichloroethene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,2-Dichloropropane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Dibromomethane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Bromodichloromethane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
2-Chloroethyl Vinyl Ether	ND	0.0068	EPA 8260C	2-26-15	2-26-15	
(cis) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
(trans) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

HALOGENATED VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B13-2091-14**					
Laboratory ID:	02-225-03					
1,1,2-Trichloroethane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Tetrachloroethene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,3-Dichloropropane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Dibromochloromethane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,2-Dibromoethane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Chlorobenzene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,1,1,2-Tetrachloroethane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Bromoform	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Bromobenzene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,1,2,2-Tetrachloroethane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,2,3-Trichloropropane	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
2-Chlorotoluene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
4-Chlorotoluene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,3-Dichlorobenzene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,4-Dichlorobenzene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,2-Dichlorobenzene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
1,2-Dibromo-3-chloropropane	ND	0.0068	EPA 8260C	2-26-15	2-26-15	
1,2,4-Trichlorobenzene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Hexachlorobutadiene	ND	0.0068	EPA 8260C	2-26-15	2-26-15	
1,2,3-Trichlorobenzene	ND	0.0014	EPA 8260C	2-26-15	2-26-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*100*	*76-131*				
Toluene-d8	*100*	*82-129*				
4-Bromofluorobenzene	*96*	*79-126*				

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

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

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0226S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Chloromethane	ND	0.0050	EPA 8260C	2-26-15	2-26-15	
Vinyl Chloride	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Bromomethane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Chloroethane	ND	0.0050	EPA 8260C	2-26-15	2-26-15	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Iodomethane	ND	0.0050	EPA 8260C	2-26-15	2-26-15	
Methylene Chloride	ND	0.0050	EPA 8260C	2-26-15	2-26-15	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Bromochloromethane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Chloroform	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Trichloroethene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Dibromomethane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Bromodichloromethane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	2-26-15	2-26-15	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

HALOGENATED VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0226S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Tetrachloroethene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Dibromochloromethane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Chlorobenzene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Bromoform	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Bromobenzene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
2-Chlorotoluene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
4-Chlorotoluene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	2-26-15	2-26-15	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	2-26-15	2-26-15	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	2-26-15	2-26-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*76-131*				
Toluene-d8	*106*	*82-129*				
4-Bromofluorobenzene	*108*	*79-126*				

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

HALOGENATED VOLATILES EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0226S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0447**	**0.0468**	0.0500	0.0500	89	94	66-129	5	15	
Benzene	**0.0468**	**0.0477**	0.0500	0.0500	94	95	71-123	2	15	
Trichloroethene	**0.0488**	**0.0490**	0.0500	0.0500	98	98	75-115	0	15	
Toluene	**0.0481**	**0.0488**	0.0500	0.0500	96	98	75-120	1	15	
Chlorobenzene	**0.0461**	**0.0455**	0.0500	0.0500	92	91	75-121	1	15	
Surrogate:										
Dibromofluoromethane					*100*	*101*	*76-131*			
Toluene-d8					*97*	*99*	*82-129*			
4-Bromofluorobenzene					*97*	*99*	*79-126*			

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

HALOGENATED VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B12-2091-GW**					
Laboratory ID:	02-225-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Chloromethane	ND	1.0	EPA 8260C	2-26-15	2-26-15	
Vinyl Chloride	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Bromomethane	ND	0.29	EPA 8260C	2-26-15	2-26-15	
Chloroethane	ND	1.0	EPA 8260C	2-26-15	2-26-15	
Trichlorofluoromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloroethene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Iodomethane	ND	1.0	EPA 8260C	2-26-15	2-26-15	
Methylene Chloride	ND	1.0	EPA 8260C	2-26-15	2-26-15	
(trans) 1,2-Dichloroethene	0.21	0.20	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
2,2-Dichloropropane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
(cis) 1,2-Dichloroethene	17	0.20	EPA 8260C	2-26-15	2-26-15	
Bromochloromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Chloroform	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Carbon Tetrachloride	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloropropene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dichloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Trichloroethene	5.5	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dichloropropane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Dibromomethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Bromodichloromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	2-26-15	2-26-15	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-26-15	2-26-15	

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

HALOGENATED VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B12-2091-GW**					
Laboratory ID:	02-225-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Tetrachloroethene	25	0.20	EPA 8260C	2-26-15	2-26-15	
1,3-Dichloropropane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Dibromochloromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dibromoethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Chlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Bromoform	ND	1.0	EPA 8260C	2-26-15	2-26-15	
Bromobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2,3-Trichloropropane	ND	0.25	EPA 8260C	2-26-15	2-26-15	
2-Chlorotoluene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
4-Chlorotoluene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	2-26-15	2-26-15	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Hexachlorobutadiene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*96*	*79-122*				
Toluene-d8	*98*	*80-120*				
4-Bromofluorobenzene	*101*	*80-120*				

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

HALOGENATED VOLATILES EPA 8260C
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B13-2091-GW**					
Laboratory ID:	02-225-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Chloromethane	ND	1.0	EPA 8260C	2-26-15	2-26-15	
Vinyl Chloride	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Bromomethane	ND	0.29	EPA 8260C	2-26-15	2-26-15	
Chloroethane	ND	1.0	EPA 8260C	2-26-15	2-26-15	
Trichlorofluoromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloroethene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Iodomethane	ND	1.0	EPA 8260C	2-26-15	2-26-15	
Methylene Chloride	ND	1.0	EPA 8260C	2-26-15	2-26-15	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
2,2-Dichloropropane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
(cis) 1,2-Dichloroethene	0.21	0.20	EPA 8260C	2-26-15	2-26-15	
Bromochloromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Chloroform	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Carbon Tetrachloride	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloropropene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dichloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Trichloroethene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dichloropropane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Dibromomethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Bromodichloromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	2-26-15	2-26-15	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-26-15	2-26-15	

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

HALOGENATED VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B13-2091-GW**					
Laboratory ID:	02-225-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Tetrachloroethene	1.1	0.20	EPA 8260C	2-26-15	2-26-15	
1,3-Dichloropropane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Dibromochloromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dibromoethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Chlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Bromoform	ND	1.0	EPA 8260C	2-26-15	2-26-15	
Bromobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2,3-Trichloropropane	ND	0.25	EPA 8260C	2-26-15	2-26-15	
2-Chlorotoluene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
4-Chlorotoluene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	2-26-15	2-26-15	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Hexachlorobutadiene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*91*	*79-122*				
Toluene-d8	*103*	*80-120*				
4-Bromofluorobenzene	*102*	*80-120*				

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

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

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0226W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Chloromethane	ND	1.0	EPA 8260C	2-26-15	2-26-15	
Vinyl Chloride	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Bromomethane	ND	0.29	EPA 8260C	2-26-15	2-26-15	
Chloroethane	ND	1.0	EPA 8260C	2-26-15	2-26-15	
Trichlorofluoromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloroethene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Iodomethane	ND	1.0	EPA 8260C	2-26-15	2-26-15	
Methylene Chloride	ND	1.0	EPA 8260C	2-26-15	2-26-15	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
2,2-Dichloropropane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Bromochloromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Chloroform	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Carbon Tetrachloride	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1-Dichloropropene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dichloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Trichloroethene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dichloropropane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Dibromomethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Bromodichloromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	2-26-15	2-26-15	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	2-26-15	2-26-15	

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

HALOGENATED VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0226W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Tetrachloroethene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,3-Dichloropropane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Dibromochloromethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dibromoethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Chlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Bromoform	ND	1.0	EPA 8260C	2-26-15	2-26-15	
Bromobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2,3-Trichloropropane	ND	0.25	EPA 8260C	2-26-15	2-26-15	
2-Chlorotoluene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
4-Chlorotoluene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	2-26-15	2-26-15	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Hexachlorobutadiene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	2-26-15	2-26-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*87*	*79-122*				
Toluene-d8	*98*	*80-120*				
4-Bromofluorobenzene	*97*	*80-120*				

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

HALOGENATED VOLATILES EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0226W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**8.16**	**8.24**	10.0	10.0	82	82	64-138	1	16	
Benzene	**8.24**	**8.37**	10.0	10.0	82	84	76-125	2	14	
Trichloroethene	**6.95**	**7.18**	10.0	10.0	70	72	70-125	3	16	
Toluene	**8.33**	**8.53**	10.0	10.0	83	85	75-125	2	15	
Chlorobenzene	**8.25**	**8.40**	10.0	10.0	83	84	80-140	2	15	
Surrogate:										
Dibromofluoromethane					*91*	*90*	*79-122*			
Toluene-d8					*95*	*93*	*80-120*			
4-Bromofluorobenzene					*100*	*95*	*80-120*			

Date of Report: March 3, 2015
Samples Submitted: February 25, 2015
Laboratory Reference: 1502-225
Project: 1412-2091

% MOISTURE

Date Analyzed: 2-26-15

Client ID	Lab ID	% Moisture
B12-2091-16	02-225-01	11
B13-2091-14	02-225-03	14

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

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

Company: Andersen Environmental
Project Number: 1412-2091
Project Name: COGIC
Project Manager: Nels B. Cone
Sampled by: Nels B Cone

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☑ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Laboratory Number: 02-225

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	B12-2091-16	2/25/15	0825	soil	4						X											X
2	B12-2091-GW	2/25/15	10:55	water	3						X											
3	~~B~~13-2091-14*	2/25/15	0935	soil	4						X											X
4	B13-2091-GW	2/25/15	11:20	water	3						X											

	Signature	Company	Date	Time
Relinquished	NBCone	Andersen Envir	2/25/15	2:09
Received	DSR	OSE	2/25/15	209
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions
* Rain water in B13-2091-14 soil sample

Reviewed/Date
Reviewed/Date
Chromatograms with final report ☐

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