Public Review Draft

Remedial Investigation Report

Fuel Processors

March 10, 2022

The Department of Ecology (Ecology) has determined that the information presented in this Remedial Investigation Report (RI Report) fulfills the purpose for remedial investigations described in Washington Administrative Code (WAC) 173-340-350(7)(a); specifically, Ecology has determined that this RI Report includes the data necessary to adequately characterize the site for the purpose of developing and evaluating cleanup action alternatives to address the known environmental conditions for the Site described in the RI Report.

This RI Report has added the following supplemental information to this report to facilitate the Public Review.

- Comments where appropriate to identify statements and
- Letters retained in Ecology files regarding the following: conclusions with which Ecology does not concur.

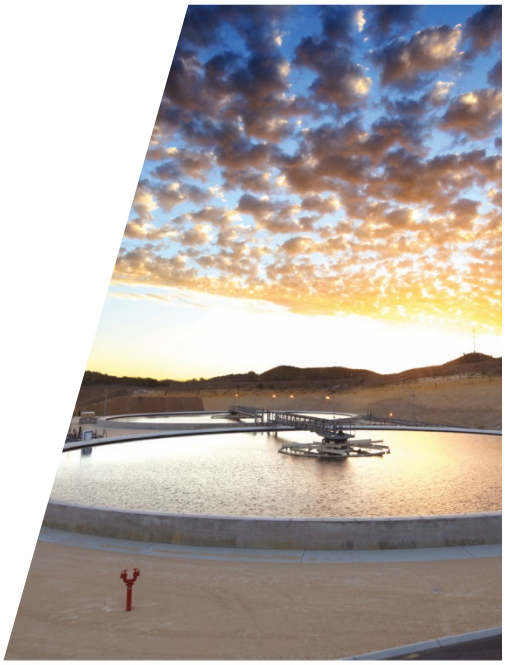
1) Designating Shell Oil Products US (Shell) as a potentially liable party for performing a remedial investigation and feasibility study (FS) and preparing a draft cleanup action plan (CAP) for the site pursuant to Agreed Order No 5054;

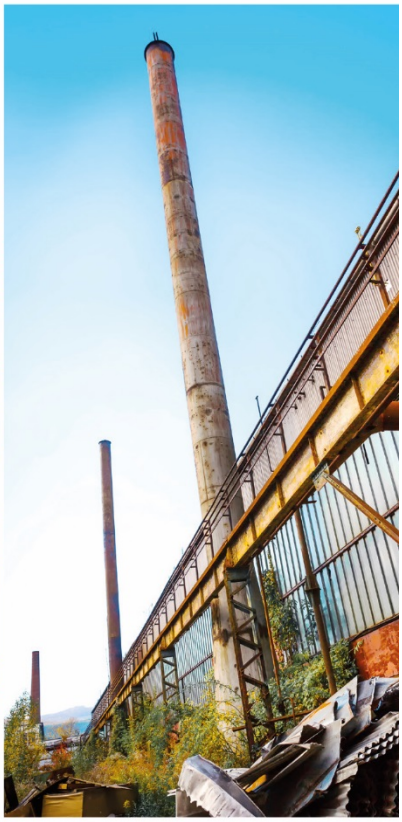
2) Describing Ecology's review and comments to the RI Report; and

3) An assessment of Vapor Intrusion at the Site.

Remedial Investigation Report

Fuel Processors
701 Bozarth Avenue Woodland, WA 98674
Facility PlaNet Site ID 10005961
Agreed Order No. 5054





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1. Introduction

GHD Services Inc. (GHD) prepared this *Remedial Investigation (RI) Report* on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) for the facility located at 701 Bozarth Avenue in Woodland, Cowlitz County, Washington (Property). This RI report was prepared following completion of the data gap investigation detailed by GHD in our *Remedial Investigation Work Plan* dated April 5, 2018 and approved by the Washington State Department of Ecology (Ecology) in their letter dated April 25, 2018. The RI is intended to satisfy the requirements of Model Toxics Control Act (MTCA; Washington Administrative Code (WAC) Chapter 173-340) and summarizes RI findings for the Property in preparation of evaluating potential cleanup alternatives as part of the feasibility study to be prepared upon approval of this RI Report. A list of all documents reviewed in preparation of this report is included in Appendix A.

2. Site Summary

2.1 Property Use and Description

Former operations at the Property included use as a bulk fuel facility and as a used-oil recycling facility. The Property is currently used for storage of vehicles and equipment. The Property is located at the southwestern corner of the intersection of Bozarth Avenue and 6th Street, in Woodland, Washington (Figure 1) and consists of two tax parcels identified as Cowlitz County tax parcel numbers 50144 and 50145, which comprise approximately 0.67 acres of land.

The layout of the Property is shown on Figure 2. The Property is developed with an approximately 3,150 square foot warehouse building with an elevated floor, an approximately 1,500 square foot shop, an approximately 1,300 square foot, permanently-abandoned, single-family residence, and an approximately 950 square foot loading rack canopy. Additional Property features include three sumps located to the north and northeast of the warehouse building (H-2, H-3, and H-4), two decommissioned-in-place diesel underground storage tanks (USTs) located to the northwest of the warehouse building (the exact locations of these USTs are unknown due to inconsistences in historical records), and one sump and associated surface drain located in the north-central portion of the Property (H-1). Several cut-off pipes are located under the loading rack canopy, a steel surface plate labeled “gasoline” with an associated apparent fill port is located in the north-central portion of the Property and north-northwest of the loading rack canopy. It is unknown whether a UST was associated with the apparent gasoline fill port, since the fill port or an associated UST were not depicted on any of the historical documents.

Historical Property features include a former tank farm area located in the northwestern portion of the Property, which most recently was occupied by four used oil aboveground storage tanks (ASTs), two spec fuel ASTs, one diesel fuel AST (which formerly contained off-spec fuel), one condenser AST, one light end fuel AST, two process water ASTs, and an air scrubber. Additional former features located to the north of the warehouse building under the building overhang, included one fuel oil AST, one oil/water separator (OWS), one bag filter for heated oil, and one shaker. The western portion of the warehouse building historically was occupied by a distillation AST and a former fuel oil AST was located in the northeastern portion of the warehouse building. The exact

location of these features is unknown, since they were not depicted on any of the historical documents.

The approximate extent of the former Shell footprint, based on a review of aerial photographs and a 1943 Sanborn fire insurance map, is presented on Figure 2 and Figure 2A. Former Property features present during Shell operations (pre-1969; Figure 2A) included a combination building and pump house, a barrel platform, a fill stand, two meters, five transfer pumps, one former 2,000-gallon UST, three former 12,400-gallon ASTs, and one former 25,000-gallon AST.

All fueling infrastructure was reportedly removed and/or decommissioned from the Property in 2005 and 2007; however, in 2018 and 2019, GHD observed leaves, debris, and approximately six inches of oily liquid within the H-3 sump, and heavy oil within a stand pipe under the loading rack canopy. Additionally, heavily stained soil was observed beneath the elevated warehouse floor, in an area where the floor boards had been removed east of the former distillation AST.

The Property is located within the Lewis River Valley at approximately 30 feet above mean sea level. The local topography is relatively flat within the vicinity of the Property; however, it gently slopes down to Horseshoe Lake, a narrow, man-made oxbow, which is approximately 1,500 feet to the southeast.

2.2 Site Discovery and Regulatory Status

Petroleum hydrocarbons were potentially released to the subsurface at the Property sometime prior to 1985; however, in addition, a release of several thousand gallons of used oil was reportedly spilled from a punctured tank or broken pipe in the eastern portion of the former tank farm in March 1985. At the time of this spill, the tank farm was unpaved and a remedial excavation was subsequently completed by Fuel Processors Inc. (FPI) across the tank farm area. This area was then filled and a concrete berm was constructed. Subsequent to the remedial excavation, the United States Environmental Protection Agency (USEPA) conducted a soil sampling event in April 1985 at four locations within the western portion of the former tank farm area. Concentrations of lead, tetrachloroethene (PCE), and trichloroethene (TCE) were identified exceeding Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A cleanup levels in soils at depths ranging from the surface to 3 feet below ground surface (bgs).

In October 1985, an additional remedial excavation was reportedly completed in the western portion of the former tank farm (Patrick H. Wicks, Sampling and Analysis Plan, October 1985). However, based on the subsequent sampling by the USEPA in April 1986, additional volatile organic compounds (VOCs) and carcinogenic polycyclic aromatic hydrocarbons (cPAHs) impacts were identified at concentrations exceeding Ecology's MTCA Method A cleanup levels in soil at 0.5 and 5 feet bgs on the northern portion of the Property.

Subsequent subsurface investigations conducted from 2008 through 2019 identified additional petroleum exceedances in soil and groundwater in the vicinity of the former tank farm area, the loading rack canopy, within the vicinity of the warehouse building, and to the northwest of the Property boundary. A summary of previous investigations and remedial activities is included as Appendix B. Soil and groundwater data are provided in Tables 1 and 2, respectively.

An Early Notice Letter was sent by Ecology in 1994 and a Site Hazard Assessment and a Hazardous Sites Listing was completed in 1997. In April 2008, Ecology, FPI, and Oil Re-Refining

Co. (ORRCO) entered into an Agreed Order (AO#5054) to provide remedial action at the Property. Subsequently, Ecology determined that sufficient evidence existed to name Shell as a potentially liable party (PLP) by March 2011, and AO#5054 was modified. The current status of the site with Ecology is “Cleanup Started” as of February 2019.

MTCA Method A cleanup levels for soil and groundwater will be used as screening levels for purposes of discussion of investigation results. Cleanup standards are more fully developed and discussed in Section 7.

2.3 Site and Property Location / Definition

The Property is a former bulk fuel and oil recycling facility, which is currently used for the storage of vehicles and equipment. A legal description of the Property, including past and present property owners and operators, is included as Appendix C.

The MTCA site (Site) is defined as all affected areas from the petroleum release associated with the Property and potentially impacted adjacent parcels. The Site boundary is presented on Figure 2.

2.4 Neighborhood Setting

The Property is zoned as light industrial. Land use in the vicinity of the Property is zoned as low density residential to the north and beyond by public/quasi-public institutional; low density residential to the east and beyond by central business; light industrial to the south; and heavy industrial to the west. Immediately adjacent properties consist of the following:

- North: The Property is bounded to the north by Bozarth Avenue, and beyond by single-family residences
- East: The Property is bounded to the east by 6th Street, and beyond by single-family residences
- South: The Property is bounded to the south by the Woodland Action food bank
- West: The Property is bounded to the west by a Burlington Northern Santa Fe (BNSF) right-of-way (ROW), after researching this property, the City of Woodland actually owns the land but the BNSF railroad runs through the property. We will refer to this property as BNSF property for the purpose of this report.

An area map showing surrounding properties is included as Figure 3.

2.5 Utilities and Water Supply

Subsurface utilities present beneath the Site include sanitary sewer, stormwater, and water. Overhead electrical and telecommunication are also present at the Site. A subsurface natural gas utility is present within the north adjoining Bozarth Avenue and a communications utility is present within the west adjoining BNSF ROW. Additional subsurface utilities may be present, but were not identified by GHD. Based on the depth to groundwater beneath the Site (between 5 and 14.5 feet bgs), subsurface utilities could potentially act as conduits for preferential migration of contaminants.

Drinking water is supplied to the Property by the City of Woodland’s water system. The City’s water is collected from an aquifer beneath the North Fork of the Lewis River, and the water is collected by a series of horizontal pipes. GHD searched the Ecology Well Log Database for potential water

supply wells located within 1-mile of the Property. Six potential domestic wells were identified within a 1-mile radius of the Property. Of the six wells, five are located down- to cross-gradient toward the northwest, or west; the other remaining well is located cross-gradient to the northeast. The well log for the well located 0.07 mile northwest of the Property indicates that it was drilled to 203 feet bgs, completed with welded casings from the surface to 203 feet bgs, and was sealed from the surface to 35 feet bgs; however, the log indicates it was not completed with a screen or perforations. The following water wells were identified within a 1-mile radius:

- 855 Goerig Road: Two domestic wells associated with Theony Farms Inc. drilled to 39 and 40 feet bgs with a 12-inch diameter well casing. This property is located approximately 0.3 miles southwest.
- 906 Caples Road: One domestic well associated with a private residence drilled to 24 feet bgs with a 6-inch diameter well casing. This property is located approximately 0.35 miles northwest.
- 300 N Pekin Road: Several resource protection and industrial supply wells associated with Columbia River Carbonates. These wells do not appear to be used for domestic supply. This property is located approximately 0.42 miles north-northwest.
- 122 and 137 Vista Drive: Two domestic wells associated with private residences, one drilled to 14 feet bgs with a 1.25-inch diameter well casing and one drilled to an unknown depth with a 3-inch well casing. These properties are located approximately 0.93 and 0.96 miles northwest.

Additionally, two dewatering wells associated with the City of Woodland and one test well associated with the Woodland School District were identified northeast and cross-gradient of the Property. The test well is located approximately 0.20 mile northeast; the exact locations of the dewatering wells were not specified. One water supply well is reported to be located at Hoffman Street and Washington Street, which is approximately 0.6 miles northeast and cross-gradient. As discussed in subsequent sections, the dissolved phase plume is fully defined in the downgradient direction by a network of clean wells, and therefore, it is unlikely the dissolved phase plume could impact the domestic wells.

2.6 Past Property Uses and Facilities

Based on a review of historical reports, historical aerial photographs, and Sanborn fire insurance maps, the following past Property uses and facilities were determined:

Prior to 1917:	Unknown
1917:	A former structure was constructed on the southwestern portion of the Property.
1919:	The Property operated as a lumber mill. The southwestern portion of the Property was occupied by a dressed lumber shed and an unspecified shed, and an office was constructed on the north-central portion of the Property.
1928:	The Property was sold to Washington Refinery Co.
1929:	One former 25,000-gallon AST was installed on the northwestern portion of the Property and a second former structure was constructed on the southwestern portion of the Property.

1931: The Property operated as a Shell wholesale petroleum plant through at least 1969.

1936: Two former 12,400-gallon ASTs were installed on the northwestern portion of the Property.

1943: Associated fuel pumps and canopy were constructed on the northwestern portion of the Property, and the structures on the southwestern portion of the Property were historically used as an oil drum platform with associated fill stand, piping, and transfer pumps, and a grease warehouse. A former outbuilding or platform, located southeast of the former grease warehouse, was constructed and was used to store chemicals and petroleum products.

1944: Three residential structures were constructed on the northeastern portion of the Property.

1948: A fourth former 12,400-gallon AST was installed on the northwestern portion of the Property. Products stored in the ASTs included leaded gasoline (Shell *Bill of Sale*, August 19, 1969).

1963: The former northeastern residential structures and canopy cover over the southwestern oil drum platform were removed.

1969: The Property was sold to Mr. and Mrs. Deans, who operated the bulk fuel terminal. The Bill of Sale indicated that the Property consisted of a combination building and pump house, two meters and five transfer pumps, a barrel platform, a fill stand, one former 2,000-gallon UST, three former 12,400-gallon USTs, and one former 25,000-gallon UST. Based on a review of other historical records, including aerial photographs, it is apparent that the 12,400- and 25,000-gallon USTs were actually ASTs. The location of the former 2,000-gallon UST is unknown and it is unclear if it was actually a UST or an AST.

1972: The Property was sold several times to various private individuals, who reportedly continued to operate the Property as a bulk fuel terminal through 1976.

1973: A second generation of ASTs was installed in the northwestern portion of the Property, which included six 25,000-gallon ASTs and one 12,500-gallon AST. The bottom layer of these former ASTs were reportedly reinforced with fiberglass in 1974.

1976: The Property was sold to Jensen and Grove, Inc., Herbert Jensen, and to Ivers and Drexler.

1977: The southwestern warehouse building is shown in its current configuration on the southwestern portion of the Property. The existing shop building was constructed on the southeastern portion of the Property, and the existing loading rack, with a former attached structure to the north, were constructed on the central portion of the Property. Six additional former ASTs were installed on the northwestern portion of the Property.

1978: The Property was sold to ARRCOM and Wally Drexler, and the existing closed in-place diesel UST was reportedly installed northwest of the warehouse building.

1979: The Property operated as ARRCOM, a used oil recycling facility, owned by the Drexler family. The four existing sumps, H-1 through H-4, were installed at the Property. Records indicated a fifth sump at the Property; however, the location was not specified.

1979 and 1981: ARRCOM sold the Property to Mr. Warren Bingham, who continued to operate a used oil recycling facility.

1980: The existing residence was constructed on the northeastern portion of the Property. The existing building overhang was constructed on the Property's warehouse building, a former outbuilding was constructed south of the existing loading rack, and the former northern attachment to the existing loading rack was removed. Additionally, two former 12,500-gallon ASTs were installed in the western portion of the former tank farm and the former 12,500-gallon AST was installed within the western portion of the warehouse building.

1985-2002: The Property was leased to FPI to operate an oil recycling facility in January and FPI ultimately purchased the Property in April 1985. A former 3,500-gallon AST was installed in the northern portion of the former tank farm by 1985. The former outbuilding south of the existing loading rack was removed by 1990. Based on a review of historical records, products that were reportedly received at the facility include PCB-contaminated transformer oil and waste oil, spent Tarr solvent, and the waste oil that was processed at the facility contained up to six percent benzene. Additionally, one drum was observed leaking and labeled "waste gasoline" during a site inspection conducted by Ecology and the EPA (Ecology *Inspection Report*, September 12, 1991). FPI ceased processing used oil at the site in 1992. Fuel Processors used the facility from 1992 until 2003 as a transportation and storage facility for used oil.

2002: Used oil transfer facility operations ceased at the Property and six of the former ASTs were removed.

2005-2007: Product pipes and sumps at the Property were reportedly cleaned of petroleum products.

2007: The remaining ASTs were removed from the Property.

2.7 Current Property Use and Facilities

The Property is currently leased for storage of vehicles and equipment.

2.8 Potential Off-Property Sources of Contamination

Ecology's *What's In My Neighborhood* database identified the following properties within a 0.5-mile radius of the subject Property which may be potential off-Property sources of contamination. Four

facilities are identified located within a 0.5-mile radius of the Property. Among these, two facilities are located up-gradient (south-southeast) of the Property and are listed below.

- Unocal Bulk Plant 0885 (Ecology Facility ID 1111, 333 6th Street): This property historically operated as a bulk fuel and distribution facility with five ASTs, with associated piping and pumps. Historical releases from operations impacted soil and groundwater at this property; however, the impacts have been remediated to below applicable MTCA cleanup levels. This property received a No Further Action (NFA) determination from Ecology in August 2015. This property is located 0.11 mile south and up- to cross-gradient of the subject Property.
- Nancy A Miller (Ecology Facility ID 68885692, 233 Davidson Avenue): This property is listed as having three leaded gasoline and one unleaded gasoline USTs that were removed. This property is currently listed in Ecology's LUST program with confirmed petroleum impacts to soil and groundwater, and potentially surface water. This property is located approximately 0.23 mile east-southeast and up-gradient of the subject Property.

Based on the distance of the properties relative to the subject Property and/or their current regulatory status, it is unlikely that these properties present a source of contamination to the Site.

3. Natural Conditions

3.1 Geology

The Site is located in the Lewis River Valley. Regional geology consists of alluvium, which is described as unconsolidated and semi-consolidated alluvial clay, silt, sand, gravel, and/or cobble deposits (Washington Department of Natural Resources, Washington Geologic Information Portal).

The Site is underlain by alluvial deposits consisting of sand with varying amounts of silt, clay, and gravel from ground surface to at least 30 feet bgs. Silt and clay layers are also intermittently present throughout the Site ranging from depths of approximately 3 to 18 feet bgs. In the former tank farm area, the concrete is underlain by gravel and another discontinuous layer of concrete on top of sandy fill. Railroad ballast and associated fill were encountered in the borings advanced to the west of the Property from the surface to approximately 3.5 feet bgs. All soil sample locations are presented on Figure 4 and cross sections depicting subsurface soil and groundwater conditions are presented on Figures 5 and 6. Historical boring logs are included as Appendix D and boring logs from GHD's 2018 site investigation activities are included as Appendix E.

3.2 Groundwater

The Site is located within the Lewis River watershed. The Lewis River is fed by glacier melt from Mt. Adams and smaller tributaries in the Cascade Range, and flows west to southwest and drains into the Columbia River (Salmon-Washougal and Lewis Watershed Management Plan, 2006).

Based on the results of previous investigations and groundwater monitoring conducted at the Site, groundwater is present between approximately 5 and 14.5 feet bgs. Groundwater flow direction is predominantly towards the northwest, with a gradient ranging from 0.002 to 0.004 foot per foot. Figures 7 through 9 present the groundwater flow directions in May 2016, August 2018 and February 2019, respectively.

3.3 Surface Water

The Property is mostly paved with concrete, with the exception of vacant land along the western Property boundary. Surface runoff that collects in the northwestern portion of the Property, in the former tank farm, is contained by a concrete berm and is directed into a sump (H-1), located along the north-central Property boundary. Surface runoff in the central portion of the Property is directed into two stormwater catch basins, a surface drain located along the north-central Property boundary, and unpaved areas under the loading rack canopy. The surface drain discharges to the H-1 sump, which is self-contained. The stormwater catch basins are reportedly connected to the former municipal stormwater system; however, based on the utility locating survey performed in 2018, it was unclear if these catch basins had been connected to the existing municipal stormwater system, which was identified within the Bozarth Avenue ROW. Three additional sumps (H-2 through H-4), which reportedly held wash water and/or water and oil, are located along the northern exterior of the warehouse building, under the building overhang. These sumps are also self-contained.

Based on a review of historical reports and aerial photographs, the western portion of the Property was partially unpaved from the time of development until the mid-1970's when additional development at the Property occurred. The eastern portion of the AST farm had been paved and a concrete berm had been completed around the entire tank farm by April 1985. By April 1986, the western portion of the AST farm had been paved. The eastern portion of the Property was unpaved until it was developed in the mid-1970s; therefore, surface runoff at least partially infiltrated into the Property's subsurface during this time period.

The nearest surface water bodies include: Horseshoe Lake, located approximately 1,500 feet to the southeast at its closest point; Lewis River, located approximately 0.72 mile to the east-southeast; and, the Columbia River, located approximately 1.8 miles southwest of the Property.

3.4 Natural Resources and Ecological Receptors

The Site qualifies for an exclusion from terrestrial ecological evaluation (TEE) under WAC 173-370-7491(1)(b), because all soil contamination is or will be covered by physical barriers (i.e. buildings or pavement) that prevent exposure to plants and wildlife, and institutional controls will be used to manage the remaining contamination. A TEE form is included as Appendix F. This pathway may be reevaluated following cleanup action.

4. Contaminant Occurrence and Movement

4.1 Summary of Previous Investigations

A total of 15 monitoring wells, 11 soil sample locations, one hand auger boring, and 30 soil borings have been completed at the Site. The following reports include details of the environmental investigations which have been conducted at the Site:

- 1985, USEPA, *Site Reconnaissance and Soil Sampling to Determine Compliance Issues at the Fuel Processors Inc. (Arrcom) Site*
- 1986, USEPA, *Sampling Results – Fuel Processors, Woodland, WA*

- 2008, Ecology, Final MTCA AO No. 5054 for the Fuel Processors Facility
- 2009, Coles & Associates, LLC (Coles), *Interim Summary of the Subsurface Investigation at the Fuel Processors, Inc. Facility*
- 2011, Coles, *Initial Site Investigation*
- 2015, Coles, *Preliminary Evaluation of the Results from the May 2015 Phase II Subsurface Investigation at FPI's Woodland, Washington Site*
- 2015, Coles, *Fuel Processors, Inc. Woodland, Washington Site Data Packet for the First Monitoring Event After the May 2015 Site Investigation Activities*
- 2016, Coles, *Fuel Processors, Inc. Woodland, Washington Site Data Packet for the Second Monitoring Event After the May 2015 Site Investigation Activities*
- 2016, 2018 and 2019, GHD, data provided herein

A complete chronological summary of work completed during the investigations listed above at the Site is included as Appendix B. Reports summarized in Appendix B represent all available investigation reports obtained by or provided to GHD. A summary of historical soil analytical data is presented in Table 1 and a summary of groundwater monitoring data is presented in Table 2. All available historical boring logs for the previous investigations are included in Appendix D.

4.1.1 2016 Groundwater Monitoring Event

On May 10 and 11, 2016, Blaine Tech Services, Inc. (Blaine Tech) conducted a groundwater monitoring event that consisted of gauging and sampling wells MW-1 through MW-10. Groundwater analysis included total petroleum hydrocarbon (TPH) gasoline-range (TPHg), TPH diesel-range (TPHd), TPH oil-range (TPHo), benzene, toluene, ethylbenzene, and xylenes (BTEX), naphthalene, dissolved lead, PAHs, polychlorinated biphenyls (PCBs), and/or VOCs.

Blaine Tech gauged MW-10 for the presence of separate phase hydrocarbons (SPH), and approximately 2.83 feet of SPH was measured. A sample of this product was collected for fingerprinting analysis and the results are discussed in Section 4.3.1.

Field data sheets are provided in Appendix G and the laboratory analytical reports are provided in Appendix H. A discussion of groundwater results is provide in Section 4.3 and tabulated in Table 2.

4.1.2 2018 Subsurface Investigation

On July 8 and 9, 2018, GHD oversaw the advancement of soil borings SB-1 through SB-4 and the installation of permanent groundwater monitoring wells MW-11 through MW-15. During field activities, permanent groundwater monitoring wells MW-11 through MW-15 were referred to as borings A through E, and soil borings SB-1 through SB-4 were referred to as borings F through I, respectively. The location of the advanced borings and wells are presented on Figure 4. The waste disposal documentation from the investigation derived waste is included in Appendix I.

4.1.2.1 Soil Assessment

Borings SB-1 through SB-4 and permanent groundwater monitoring wells MW-11 through MW-15 were completed by Holt Services, Inc. (Holt), under the direction of GHD. Soil borings SB-1 through

SB-4 were advanced to 15 or 16 feet bgs, and soil boring SB-4 was advanced to 30 feet bgs. Soil borings SB-1 through SB-4 were advanced to the southwest, southeast, northeast, and northwest of well MW-10, respectively, to assess the extent of petroleum related impacts and SPH identified in MW-10.

Wells MW-12 and MW-13 were advanced to 15 feet bgs and wells MW-11, MW-14 and MW-15 were advanced to 16 feet bgs. Wells MW-11 and MW-12 were advanced on the west adjoining BNSF property to attempt to determine the extent of the Site's groundwater plume. Well MW-13 was installed northwest of the Property, in a down-gradient position relative to well MW-10 to attempt to determine the extent of the SPH. Well MW-14 was installed in the center of the former AST farm to assess for the presence of SPH in an up-gradient position relative to well MW-10 and to assess for the presence of VOCs that have been previously identified in the eastern portion of the former tank farm area. Well MW-15 was installed on the northeastern portion of the former AST farm to assess for the presence of SPH east of MW-10 and to assess for the presence of VOCs, that have been previously identified in the eastern portion of the former tank farm area.

Soil samples were collected and submitted for laboratory analysis from 5, 10, and 15 feet bgs from wells MW-11 through MW-15 and borings SB-1 through SB-4. Soil analysis included TPHg, TPHd, TPHo, BTEX, and/or VOCs.

The laboratory reports, along with the USEPA Stage 4 full level data validation report provided by EcoChem, Inc. (EcoChem), an independent third party data validator, are provided in Appendix H. A discussion of soil results is provided in Section 4.2 and tabulated in Table 1.

4.1.2.2 Well Installation, and Third Quarter 2018 Groundwater Monitoring

Holt advanced wells MW-11 through MW-15 and installed the permanent well materials using a direct push drilling rig. Each permanent well was installed with a screen from 3 to 15 feet bgs. The wells were constructed with pre-packed wells consisting of 2-inch Schedule 40, polyvinyl chloride (PVC), 0.010-inch slot screen, flush threaded with PVC blank well casing from the top of the screen to the top of the well. The well annulus consists of sand pack to 1 foot above the top of the screen, 2 feet bgs, and was sealed with hydrated bentonite chips above the filter pack to 1 foot bgs. One foot of a cement mixture was used as a surface seal around the flush mount, traffic rated well box that wells MW-11 and MW-12 were completed with. Wells MW-13 through MW-15 were completed with a stove pipe well casing.

After installation, the wells were developed by surging the well screens and promoting groundwater flow into the well casing, followed by purging, with each well being purged dry twice. On August 14, 2018, wells MW-1 through MW-15 were gauged and sampled by Blaine Tech. Groundwater analysis included TPHg, TPHd, TPHo, BTEX, naphthalene, and/or VOCs.

Field data sheets are provided in Appendix G, and the laboratory analytical reports are provided in Appendix H along with EcoChem's USEPA Stage 4 full level data validation report. A discussion of groundwater results is provided in Section 4.3 and tabulated in Table 2.

4.1.2.3 Additional Site Investigation

During field activities associated with the boring advancement and monitoring well installation in July and August 2018, GHD observed approximately 1.5 feet of product in a stand pipe in the loading

rack. GHD observed that the bottom of this pipe contained some loose sediment debris; however, water was not present in the pipe. A representative of Coles would not allow GHD to sample the product, because this task was not included in the approved Work Plan. GHD noted that there were no signs of cement or bentonite in any of the pipes, potentially indicating the stand pipe was not decommissioned.

GHD also noted apparent oil-impacted soil beneath the elevated warehouse floor, where the flooring had been removed east of the former AST location. A representative of Coles would not allow GHD to sample the oil-impacted soil, because this task was not included in the approved Work Plan. During February 2019, FPI and Coles approved a subsequent sampling attempt, however, the area was not accessible for sampling when GHD arrived on site. Historically, samples collected from borings HP-6, HP-7, and HP-13 were collected from this area, however, these borings do not adequately characterize the extent of impacts. .

4.1.3 2019 Groundwater Monitoring Event

On February 26 and 27, 2019, Blaine Tech conducted a groundwater monitoring event of the Site's entire well network (MW-1 through MW-15). Groundwater analysis included TPHg, TPHd, TPHo, and VOCs. Blaine Tech also gauged MW-10 for the presence of SPH, and approximately 4.31 feet of SPH was measured. A sample of this product was collected for fingerprinting analysis.

Field data sheets are provided in Appendix G, and the laboratory analytical reports are provide in Appendix H. A discussion of groundwater results is provide in Section 4.3 and tabulated in Table 2.

4.1.4 2019 Additional Site Investigation

Concurrent to the February 2019 groundwater monitoring activities, GHD had planned to collect a sample of the heavily stained soil observed beneath the elevated warehouse floor. However, remodeling had occurred within the building and GHD had to remove up to five layers of plywood that had been screwed across the hole in the flooring. Once the plywood was removed, GHD observed that the void space between the elevated floor boards and formerly observed stained soil had been filled with old building materials and other debris; therefore, the area was not accessible and this soil sample could not be collected.

GHD had received permission to collect a sample of the product observed in the loading rack stand pipe in August 2018; however, upon gauging the pipe, it was determined that the pipe was now filled with water and only 0.01 feet of oil (heavy sheen) remained present on top of the water. This product was sampled for fingerprint analysis and Pace Analytical Energy Services, LLC (Pace) provide an interpretation of the results. Pace interpreted that the product sample contained a three-part mixture of diesel-like boiling range product, a residual range petroleum product, and the enrichment of two organic acid compounds suggests a non-petroleum product source as well. Pace also stated that the enrichment of C0 and C1 fluoranthenes and pyrenes suggest that the oil may be a used form. No lead was detected in the sample.

GHD also received permission to sample the product observed within the H-3 sump, which was originally observed in 2018. Observed conditions included an approximate six-inch layer of leaves, debris, oil, and water within the sump, with an approximate 1/8 inch layer of oil floating on the surface. This oil was collected for fingerprint analysis and Pace also provide an interpretation of the

results. The interpretation states that the product contained residual range petroleum that has a lubricating oil type quality. A discussion of the results is provided in section 4.3.1. The most recent laboratory reports are included in Appendix H.

Lastly, GHD identified a steel surface plate labeled “gasoline,” which was located on the north-central portion of the Property, east of the tank farm concrete berm and west of the on-Property house. This location was historically covered by a street sweeper and was not previously identified by GHD. GHD removed the surface plate and observed a rusted 4-inch pipe with a plug, which GHD was unable to remove. A representative of Coles indicated that they thought Ecology was aware of this feature and it had been reported years ago; however, this feature is not identified or discussed in the available historical documents.

4.2 Soil

A total of 165 soil samples have been collected for laboratory analysis. Soil samples were collected from borings advanced in 1985, 1986, 2008, 2010, 2015, and 2018, and during the installation of wells MW-1 through MW-3 in 2008, wells MW-4 through MW-10 in 2015, and wells MW-11 through MW-15 in 2018. The approximate sample depths were from the Site’s surface to 30 feet bgs.

A detailed summary of previous Site investigations is provided as Appendix B. Figure 4 presents the locations of all soil samples collected during the investigation activities conducted at the Site. Figures 10 through 17 present TPHg, TPHd, TPHo, and benzene concentrations above the MTCA Method A screening levels in soil from the surface to 6 feet bgs, and deeper than 6 feet bgs. A summary of all soil sample locations submitted for analyses, including the date of the sample, depth, consultant performing sampling, and analytical methods and results are presented on Table 1.

The USEPA conducted soil sampling at four locations in 1985 in the western, previously unpaved, portion of the former tank farm. TCE, PCE, and lead were detected in these samples collected from the surface and/or from 2 to 3 feet bgs at concentrations above their current MTCA Method A screening level.

In 1986, the USEPA collected additional soil samples from a total of seven locations. Three samples were collected within the area of the tank farm that had previously been unpaved, two samples were collected east of the concrete berm around the former tank farm, one sample was collected north of the Property for a background location, and one sample was collected from a waste oil pile, located east of the former tank farm area. Benzene, toluene, xylenes, PCE, and benzo(a)pyrene were detected at concentrations above their current MTCA Method A screening levels in the surficial and/or 5 foot bgs samples collected within the western portion of the former tank farm. Benzo(a)pyrene was also detected above the current MTCA Method A screening level in the surficial sample collected east of the former tank farm, under the loading rack canopy. Lastly, PCE was detected in the surficial sample of the waste oil pile above the current MTCA Method A screening level.

In 2008, Coles advanced ten soil borings (HP-1 through HP-10) and installed three permanent groundwater monitoring wells (MW-1 through MW-3). Well MW-1 was installed east of the loading rack canopy, well MW-2 was installed north of the former tank farm, just north of the northern Property boundary, and well MW-3 was installed south of the warehouse building. The soil borings were advanced within the former tank farm (HP-1 through HP-5), within the warehouse building (HP-

6 through HP-8), to the northwest of the shop building (HP-9), and north of the loading rack canopy (HP-10). TPHg, TPHd, TPHo, BTEX, naphthalenes, PCE, PAHs, PCBs, and/or lead exceedances above MTCA Method A screening levels were identified in each well and soil boring at depths ranging from 1 to 15 feet bgs, with the exception of HP-9 and HP-10. Additionally, the laboratory method reporting limits (MRLs) for benzene, PCE, cis-1,2-Dichloroethene (DCE), 1,2,4-trichlorobenzene, and benzo(a)pyrene were reported above the current MTCA Method A screening levels in several of the soil samples.

In February 2010, Coles advanced five soil borings (EC-01 through EC-05) at the request of Ecology. Borings EC-01 through EC-03 were advanced within the former tank farm, boring EC-04 was advanced to the northwest of the warehouse building, and boring EC-05 was advanced to the south of the warehouse building. TPHg, TPHd, TPHo, toluene, ethylbenzene, xylenes, and/or benzo(a)pyrene exceedances above MTCA Method A screening levels were identified in borings EC-01 through EB-04 at depths ranging from 2 to 8 feet bgs. Additionally, the laboratory MRLs were above the MTCA Method A screening levels for benzene and PCE.

In August 2010, Coles completed one hand auger boring (HA-1) to 5 feet bgs in the eastern portion of the former tank farm. Soil samples were collected every foot and analyzed for TPHg, which was detected at concentrations exceeding the MTCA Method A screening level in each sample. One of the samples collected from HA-1 was submitted to a laboratory for forensic interpretation; the exact depth is not specified in the available documents. The analytical results reportedly concluded that gasoline, diesel, and oil were present in soil from HA-1; however, the gasoline had reportedly undergone extensive degradation and diesel had undergone substantial biological degradation. Six organo-metallic compounds that are former additives to gasoline were also included in the analysis. Of those additives, tetraethyl lead (TEL) and methylcyclopentadienyl manganese tricarbonyl (MMT) were detected above their respective laboratory MRLs.

In 2015, Coles advanced eleven soil borings (HP-11 through HP-21) and installed seven additional permanent groundwater monitoring wells (MW-4 through MW-10). Borings were advanced north, east, south, and southwest of the warehouse building, HP-14, HP-17, HP-11 and HP-12, and HP-20, respectively, within the warehouse building (HP-13), northwest of the northern Property boundary (HP-15), and within the footprint of the loading rack canopy (HP-16). The remaining borings were advanced north of the Property (HP-18), along the northern Property boundary, north of the loading rack canopy (HP-19), and in the northeastern corner of the former tank farm area (HP-21). The monitoring wells were installed in the southeastern corner of the Property (MW-4), along the western Property boundary (MW-5), in the north adjoining Bozarth Avenue ROW (MW-6 and MW-7), in the south adjoining alley (MW-8), and within the former tank farm (MW-9 and MW-10). Exceedances of TPHg, TPHd, TPHo, BTEX, total naphthalenes, lead, cPAHs, and/or PCBs were identified above MTCA Method A screening levels in soil collected from borings HP-12 through HP-16 and HP-21, and wells MW-5, MW-9, and MW-10. The impacted soil was identified at depths ranging from the surface to 20 feet bgs.

In 2018, TPHg, TPHd, TPHo, and BTEX soil impacts exceeding the MTCA Method A screening levels were detected in MW-14, MW-15, and soil borings SB-1 through SB-4 at depths ranging from 5 to 15 feet bgs. Additionally, 1,2,4-trichlorobenzene was detected at a concentration above the MTCA Method B screening level in MW-15 at 10 feet bgs. The laboratory MRLs were above the

MTCA Method A or B screening levels for several VOCs in samples collected from MW-14 and MW-15 at 10 and 15 feet bgs.

The vertical extent of impacted soil is fully defined and the lateral extent of impacted soil is defined to the north by MW-13, MW-7, 1986 Sample #6, HP-18, HP-10, and HP-19, to the south by HP-9, HP-17, MW-8, EC-05, HP-20, and to the west by MW-11 and MW-12. TPHg, TPHd, and VOC impacted soil is not fully defined to the east. Additionally, a benzene exceedance was detected in HP-12 at 19.5 to 20 feet bgs; however, benzene was not detected above the laboratory MRL in the samples collected from this boring at 4, 9, and 15 feet bgs.

Laboratory analytical data are presented in Table 1 and the most recent laboratory reports are included in Appendix H.

4.3 Groundwater

The locations of all monitoring wells installed at the Site are presented on Figure 2. The groundwater contour and chemical concentration maps for May 2016, August 2018, and February 2019 are provided as Figures 7, 8, and 9, respectively. Figure 9 also presents the estimated extents of TPHg, TPHd, TPHo, and benzene concentrations in groundwater relative to the MTCA Method A screening levels. A summary of historical groundwater conditions is provided in Table 2 and monitoring well construction details are provided in Table 3.

In September 2008, three permanent groundwater monitoring wells, MW-1 through MW-3, were installed at the Property. Groundwater samples were not collected until January 2009, at which time exceedances of TPHg, TPHd, TPHo, benzene, ethylbenzene, xylenes, 1,1-DCA, 1,3,5-trimethylbenzene, naphthalene, and/or arsenic were detected above the MTCA Method A screening levels. Additionally, vinyl chloride was detected at a concentration above the MTCA Method A screening level in MW-2, and the laboratory MRLs in the remaining two wells were also above the MTCA Method A screening levels. Lastly, the laboratory MRLs for benzo(a)pyrene were above the MTCA Method A screening level in MW-2 and MW-3.

Grab groundwater samples were collected from borings HP-1 through HP-10, which were also advanced in September 2008. Petroleum impacts exceeding MTCA Method A screening levels were also identified in these grab groundwater samples in the vicinity of former AST farm, within the warehouse building, and north of the warehouse building, near the H-2 sump and a former fuel oil AST. Grab groundwater samples collected from borings HP-9 and HP-10, located northeast of the shop building and north of the loading rack canopy, respectively, did not have detections of TPHg, TPHd, and TPHo above their respective laboratory MRLs or benzene above the MTCA Method A screening level.

Wells MW-1 through MW-3 were sampled in February 2010. Exceedances of TPHg, benzene, ethylbenzene, xylenes, 1,1-DCA, 1,3,5-trimethylbenzene, and/or naphthalenes above MTCA Method A screening levels were detected in MW-2 and MW-3, and the laboratory MRL for TPHd was above the MTCA Method A screening level in each well. Vinyl chloride was also detected at a concentration above the MTCA Method A screening level in MW-2, and the laboratory MRLs in the remaining two wells were also above the MTCA Method A screening levels.

In May 2015, grab groundwater samples were collected from borings HP-11 through HP-21. TPHg, TPHd, TPHo, BTEX, naphthalene, 1,1-DCE, 1,3,5-trimethylbenzene and/or naphthalenes were

detected above their respective MTCA Method A or B screening levels in borings HP-13 through HP-15 (located within the warehouse building, in the vicinity of a former fuel AST north of the warehouse building, and northwest of the Property), HP-20 (in the southwestern portion of the Property), and HP-21 (in the northeastern portion of the former tank farm). An exceedance of PCBs was also detected in the grab sample collected from HP-21.The laboratory MRLs for PCE, TCE, and/or vinyl chloride were above the MTCA Method A screening levels in each boring.

Additionally in May 2015, to further assess groundwater quality at the Site, permanent groundwater monitoring wells MW-4 through MW-10 were installed. A groundwater monitoring event was conducted by Coles in August 2015 at which time TPHg, TPHd, TPHo, benzene, xylenes, and/or 1,3,5-trimethylbenzene were detected above their respective MTCA Method A screening levels in wells MW-1, MW-2, MW-3, MW-5, MW-9, and/or MW-10. The laboratory MLRs for vinyl chloride, naphthalene, PCE, TCE, cis-1,2-DCE, 1,1-DCA, and 1,4-dichlorobenzene were reported above their respective MTCA Method A or B screening levels for each well.

In February 2016, Coles conducted another groundwater monitoring event. Concentrations of TPHg, TPHd, benzene, and/or naphthalenes were detected above their respective MTCA Method A screening levels in wells MW-1, MW-2, MW-3, MW-5, and MW-9. The laboratory MRLs for vinyl chloride, benzo(a)pyrene, and/or PCBs were also reported at concentrations above their respective MTCA Method A or B screening levels in each well. Additionally, approximately 5.15 feet of SPH was measured by Coles in MW-10, and a groundwater sample was collected. Concentrations of TPHg, TPHd, TPHo, BTEX, 1,3,5-trimethylbenzene, naphthalenes, benzo(a)pyrene, and PCBs were detected above their respective MTCA Method A screening levels, and the laboratory MRLs for PCE, TCE, cis-1,2-DCE, 1,1-DCA, 1,4-dichlorobenzene were also reported at concentrations above their respective MTCA Method A or B screening levels.

Due to the presence of SPH in MW-10, GHD subsequently conducted a groundwater monitoring event in May 2016. Concentrations of TPHg, TPHd, TPHo, and/or benzene above their respective MTCA Method A screening levels were detected in wells MW-1, MW-2, MW-3, and MW-9. Additionally, the laboratory MRL for vinyl chloride was above the MTCA Method A screening level in MW-2, MW-5, MW-6, and MW-9. GHD measured approximately 2.83 feet of SPH in well MW-10, and due to the presence of SPH, groundwater was not analyzed for the constituents of potential concern (COPCs), but fingerprinting analysis was performed. A discussion is provided in Section 4.3.1.

To further delineate the on-Site groundwater plume, GHD installed five additional permanent groundwater monitoring wells (MW-11 through MW-15) in August 2018. GHD conducted a groundwater monitoring event in August 2018 of the Site's entire well network. Concentrations of TPHg, TPHd, TPHo, benzene, ethylbenzene, xylenes, naphthalene, 1,1-DCA, and/or 1,3,5-trimethylbenzene were detected above their respective MTCA Method A or B screening levels in MW-1, MW-2, MW-3, MW-9, and MW-13 through MW-15. Approximately 1.43 feet of SPH was measured in MW-10; therefore, a groundwater sample was not collected. Lastly, the laboratory MRL was above the MTCA Method A screening level for vinyl chloride in MW-2, MW-5, and MW-12 through MW-15.

During the August 2018 field activities, a grab groundwater sample was also collected from boring SB-4, which was advanced to the north of the Property, directly down-gradient of MW-10. Low levels

of TPHg, TPHd, toluene, ethylbenzene, xylenes, and 1,3,5-trimethylbenzene were detected; however, no COPCs were detected above their respective MTCA screening levels.

In February 2019, a groundwater monitoring event of the Site's entire well network was performed by GHD. Concentrations of TPHg, TPHd, and/or benzene were detected above their respective MTCA Method A screening levels in MW-1, MW-2, MW-3, MW-5, MW-9, MW-14, and/or MW-15. Additionally, 1,3,5-trimethylbenzene and naphthalene were detected in MW-15 at concentrations above their respective MTCA Method A screening levels, and the laboratory MRL for vinyl chloride was also above the MTCA Method A screening level. Fingerprinting analysis was performed on the measured SPH in well MW-10 and Pace provide an interpretation of the results. A discussion is provided in Section 4.3.1.

The lateral extent of the groundwater plume is defined to the north by MW-6 and MW-7, to the south by MW-4 and MW-8, and to the west by MW-11 and MW-12. The plume has migrated off-Property to the north; however, as stated above, the northern extent has been delineated. The lateral extent of the groundwater plume is not defined to the east of MW-1.

4.3.1 Fuel Fingerprint Analyses

Fuel fingerprint analysis has been conducted on two SPH samples from MW-10, collected in May 2016 and February 2019. The laboratory reports and interpretation for these two samples are included in Appendix H.

The 2016 fingerprinting results performed by Shell's research laboratory indicated that the sample contained hydrocarbons primarily in the C7 to C14 carbon range. This range can include heavily weathered gasoline, aromatic and mineral spirit type solvents. The types of detected compounds (primarily xylenes and aliphatics, n-octane to n-tetradecane range) indicate the presence of hydrocarbon type solvents and not fuels. These hydrocarbons are too heavy for gasoline and too narrow and light range for kerosene. No lead was detected in the sample and gasoline before 1970 contained lead. Unleaded gasoline is defined as less than 0.05 grams of lead per gallon of gasoline or 13 parts per million.

The 2019 fingerprinting results performed by Pace indicated that the sample contained a predominantly light distillate petroleum product that resembled a Naphtha feedstock more so than any other light distillate fuel product. Additionally, the enrichment of C0-C1 two to three ringed PAHs, and the generally non-depleted state of n-paraffins in the sample, suggested that the product may be somewhat "fresher." This product did have a detection of tetramethyl lead; however, Pace stated that assuming a moderate subsurface weathering regime on-Site, it is plausible that the petroleum may have experienced a residence time in the environment of 0-8 years. No operations involving recycled oil or other petroleum products have occurred on the Site in the last eight years. Tetramethyl lead is not typically detected without the presence of other alkyl compounds. In addition, the analytical method used (electron capture detection) has the potential to result in false positives due to co-eluting compounds.

4.4 Surface Water

No surface water has been sampled as there has been no indication that surface water has been impacted by the release at the Site.

4.5 Sediment

No indication of surface water impact has been identified in association with the Site; therefore, no sediment sampling has been conducted.

4.6 Soil Vapor

A soil vapor assessment has not been conducted at the Site. Based on the depth and distribution of contaminants at the Site, soil vapor requires further evaluation. Soil vapor will be reevaluated following future cleanup action, if necessary.

4.7 History of Contaminant Releases

Petroleum impacted soil and groundwater have been identified throughout the former tank farm area, to the north and northwest of the Property boundary, within the footprint and exterior vicinity of the warehouse building, and in the vicinity of the loading rack. By 1919, The Property operated as a lumber mill. In 1928, the Property was sold to Washington Refinery Co. and from at least 1931 through 1969, the Property operated as a Shell wholesale petroleum plant. From 1969 through 1976, the Property was sold to several private individuals who reportedly continued to operate the Property as a bulk fuel terminal. By the late 1970s, the Property operated as a used oil recycling facility, until those operations ceased in 2002.

Shell historically stored leaded gasoline in the former on-Site ASTs, located on the northwestern portion of the Property, and operated a former oil drum platform and associated fill stand, and grease warehouse on the southwest portion of the Property. A former outbuilding, located southeast of the former grease warehouse, was used to store chemicals and petroleum products. Based on a review of historical records, former Shell terminal infrastructure was limited to the western half of the Property.

Several features were added to the Property after Shell operations ceased, including the former loading rack, several former ASTs located in the eastern portion of the former tank farm area, the former unlined sump on the northwestern portion of the Property, several existing sumps and the apparent gasoline fill port located north of the former loading rack. Products FPI reportedly received at this Property as part of their oil recycling business included PCB-contaminated transformer and waste oil, spent Tarr solvent, and the waste oil that was processed at the facility contained up to six percent benzene. Additionally, one drum was observed leaking and labeled “waste gasoline” during FPI operations at the Site. Lastly, heavily stained soil has been observed beneath the elevated floor of the warehouse building.

During previous Site investigation activities, product has been observed within the existing sumps and the loading rack stand pipe. Analysis of the observed product in the loading rack stand pipe suggested a non-petroleum product source that may be in a used oil form. Additionally, no lead was detected in the samples. Analysis of the product in the H-3 sump indicates it has a lubricating oil type quality.

Additionally, fingerprint analysis of the SPH collected from MW-10 in 2016 indicates the presence of a hydrocarbon range that can include heavily weathered gasoline, and aromatic and mineral spirit type solvents. The types of detected compounds indicate the presence of hydrocarbon type solvents

and not fuels. No lead was detected in the sample and gasoline before 1970 contained lead. The 2019 fingerprinting results performed by Pace indicated that the sample contained a predominantly light distillate petroleum product that may be somewhat “fresher.” This product did have a detection of tetramethyl lead; however, Pace stated that assuming a moderate subsurface weathering regime on-Site, it is plausible that the petroleum may have experienced a residence time in the environment of 0-8 years.

In general, petroleum impacts to soil and groundwater have been identified within the vicinity of the former Shell terminal infrastructure footprint at the Site; however, impacts have also been identified up-gradient of the former Shell terminal infrastructure footprint in the eastern portion of the former tank farm area and in the vicinity of the former loading rack. Secondary contaminant impacts, including chlorinated solvents, PCBs, and cPAH impacts, have also been identified in the eastern portion of the former tank farm area, to the east of the tank farm area, and in the vicinity of the former loading rack.

5. Interim Actions

In early 1985, following a release of used oil from a former AST in the eastern portion of the former tank farm area, FPI reportedly excavated approximately 9 to 10 inches or 1 to 2 feet (the available records were inconsistent) of impacted soil across the tank farm area. Approximately 80 to 90 or 900 cubic yards of excavated soil (the records were not consistent) was removed. The extent of this excavation or associated soil sampling was not indicated in the available records. However, based on the subsequent sampling by the USEPA in April 1985, petroleum contaminated soil was left in-place.

In October 1985, an additional remedial excavation was reportedly completed in the western portion of the former tank farm. Approximately 10 cubic yards of soil was removed. The extent of this excavation or associated soil sampling was not indicated in the available records; however, based on the subsequent sampling by the USEPA in April 1986, petroleum contaminated soil was left in-place.

In 2005, six former product transfer lines, which were buried inside the concrete containment and connected the former tanks to the loading rack, were cleaned by inserting a pressure washer in one end and vacuuming out the water from the other end; this was done until the water cleared up. Additionally, sumps H-2, H-3, and H-4 were cleaned.

Beginning in February 2007, the remaining on-Property tanks were pumped out and cleaned. In April and May 2007, all the remaining ASTs, except the former electric cooker inside the warehouse building, were removed from the Site. The former electric cooker was removed by March 2008.

In early 2016, Coles performed a vacuum truck total fluids recovery event to remove the measured SPH from MW-10. According to the bill of lading, 46 gallons of fuel were removed and disposed at ORRCO’s Portland, Oregon facility. Due to incomplete information at the time of the extraction event, the concentration of petroleum in the extracted fluids is unknown.

6. Conceptual Model

Petroleum hydrocarbons were likely released to the subsurface sometime prior to 1985 and during a reported spill of several thousand gallons of used oil in March 1985 in the eastern portion of the former tank farm. Historical sources of contamination on-Site likely include the former ASTs, and historical operations that took place within the warehouse building and loading rack area. Additionally, poor waste storage practices were identified by Ecology and the USEPA during the 1980s and 1990s, which may have contributed to the identified subsurface impacts. The source of SPH in well MW-10 is currently unknown; however, SPH has not been measured in any other well at the Site. Therefore, it appears that the presence of SPH is limited to the immediate vicinity of MW-10. Limited excavation activities completed in 1985 and 1986 within the former tank farm area reportedly removed impacted soil; however, subsequent sampling identified impacts exceeding MTCA Method A screening levels in soil in this area. Soil containing hydrocarbon related impacts above the MTCA Method A screening levels remain under the majority of the western half of the Site from the surface to 17 feet bgs, and within the vicinity of the loading rack from the surface to 8.5 feet bgs. The presence of SPH in the stand pipe and heavy staining in the soil beneath the elevated warehouse floor indicates that on-site practices may be a continuing source of contamination beneath the Site and may have also contributed to contamination in the past.

The exterior portions of the Property appear to have been largely unpaved and exposed to infiltrating surface water from the time of Property developed until the mid-1970's to -1980s when the majority of the Property appears to have been paved. However, the land along the northwestern Property boundary remains unpaved. Subsurface soils at the Site consist of sand with varying amounts of silt, clay, and gravel, and silt and clay layers are also intermittently present throughout the Site. Groundwater is present beneath the Site ranging from approximately 5 and 14.5 feet bgs. Groundwater flow direction is predominantly to the northwest towards the Columbia River, with a gradient range of 0.002 to 0.004 foot per foot.

The Property is currently zoned for light industrial use, and future zoning is not anticipated to change. In accordance with MTCA, potential exposure pathways for human and environmental receptors based on the current and planned land use identified include the following:

- Human health protection from soil to groundwater (drinking water)
- Human health protection from direct soil contact
- Human health protection from groundwater (direct contact)
- Human health protection from soil vapor inhalation
- Human health protection from soil to surface water
- Human health protection from groundwater to surface water
- Terrestrial ecological protection

Based on information provided previously in this RI report, the following conclusions can be made:

- The soil to groundwater (drinking water) pathway is complete because the groundwater contains concentrations exceeding MTCA Method A screening levels, and the groundwater has the potential to be sourced for drinking purposes.

- The direct soil contact pathway is complete because soil concentrations exceeding MTCA Method A screening levels are present within the upper 15 feet of soil at the Site.
- The direct groundwater contact pathway is complete due to the shallow depth to groundwater.
- The vapor inhalation pathway is potentially complete due to the identified shallow soil impacts beneath the on-Site warehouse building, and the presence of shallow, impacted groundwater at the Site.
- The soil to surface water and groundwater to surface water pathways are incomplete due to the physical distance to the nearest surface water body.
- The terrestrial ecological pathways are incomplete based on the TEE, which resulted in an exclusion from further evaluation, but this pathway could become complete in the future if soil exposure is not managed.

Potential exposure pathways requiring additional evaluation include the following:

- Drinking water
- Direct contact with soil
- Direct contact with groundwater
- Vapor inhalation

Cleanup standards addressing the aforementioned pathways are discussed below.

7. Cleanup Standards

In accordance with MTCA, development of cleanup levels includes identifying potential exposure pathways for humans and environmental receptors based on the planned land use. The Property is currently zoned for light industrial use, and future zoning is not anticipated to change. COPCs for this Site include the compounds listed in MTCA 173-340-900 Table 830-1 *Required Testing for Petroleum Releases.*

7.1 Groundwater Cleanup Levels

Shallow groundwater in the vicinity of the Site is not classified for drinking water beneficial use for the City of Woodland, but could potentially be classified for future drinking water use. Therefore, MTCA Method A groundwater cleanup levels will be used. The point of compliance for this Site is defined as the point at which the groundwater cleanup level must be attained; thus, the point of compliance is the entire Site. MTCA Method A cleanup levels for groundwater are protective of the drinking water pathway, direct contact with groundwater pathway, and vapor inhalation pathway. MTCA Method B cleanup levels are appropriate for COCs which do not have an established Method A cleanup level. The groundwater cleanup levels are presented in Table 2.

7.2 Soil Cleanup Levels

Based on the potential potable use of groundwater beneath the Site, MTCA Method A soil cleanup levels will be used. MTCA Method A cleanup levels for soil are protective of the drinking water

pathway, direct contact with soil pathway, and the vapor inhalation pathway. The points of compliance for this Site are all soils throughout the Site. MTCA Method B cleanup levels are appropriate for COCs which do not have an established Method A cleanup level. The soil cleanup levels are presented in Table 1.

7.3 Indoor Air Cleanup Levels

MTCA Method B cleanup levels for indoor air samples are appropriate for the Site.

8. Areas Requiring Future Management

8.1 Constituents of Concern

GHD evaluated COPCs based on the compounds listed in MTCA 173-340-900 Table 830-1 *Required Testing for Petroleum Releases.* Soil and groundwater at the Site has been sampled for TPHg, TPHd, TPHo, VOCs, PAHs, PCBs, and/or RCRA 8 metals (arsenic, barium, cadmium, chromium, lead, selenium, silver, and mercury).

Based on the results of environmental activities conducted at the Site, the constituents of concern (COCs) requiring future management are TPHg, TPHd, TPHo, BTEX, naphthalenes, PCE, TCE, 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,1,2,2-tetrachloroethane, lead, cPAHs, and PCBs in soil, and TPHg, TPHd, TPHo, BTEX, naphthalenes, 1,3,5-trimethylbenzene, 1,1-DCA, vinyl chloride, PCBs, cPAHs, lead, and arsenic in groundwater.

8.2 Soil Requiring Future Management

Current soil conditions of the primary COCs, TPHg, TPHd, TPHo, and benzene, are depicted on Figures 10 through 17. Based on the information included in this RI, soil samples collected throughout the former tank farm area, to the northwest of the Property boundary, within the footprint and exterior vicinity of the warehouse building, and in the vicinity of the loading rack exceed MTCA Method A or B cleanup levels. The identified impacted soil ranges in depth from the surface to 17 feet bgs. Therefore, soil requiring future management is present within the majority of the western and central portions of the Property, and to the northwest of the Property boundary.

An exceedance of benzene in saturated soil was identified in boring HP-12, located south of the Property, at a depth of 19.5 to 20 feet bgs. However, soil samples collected from this boring at depths ranging from 3.5 to 15 feet bgs did not have detections of benzene above the laboratory MRLs. Additionally, a grab groundwater sample collected from this boring did not identify benzene above the MTCA Method A cleanup level. Lastly, groundwater sampled from nearby well MW-8 has not had a detection of benzene above the laboratory MDLs since its installation in 2015. Therefore, based on the absence of benzene impacts to shallow soils in the vicinity of HP-12, the detected benzene at 19.5 to 20 feet appears to be anomalous. Lastly, the absence of benzene exceedances in groundwater in the vicinity empirically demonstrates that the residual soil concentration above the MTCA Method A cleanup level is not adversely affecting groundwater and does not require future management.

8.3 Groundwater Requiring Future Management

Current groundwater conditions are depicted on Figures 7 through 9. Based on the information included in this RI, groundwater within the vicinity of the warehouse building, loading rack, throughout the former tank farm area, and to the north of the Property currently contain petroleum hydrocarbon concentrations above MTCA Method A cleanup levels. Additionally, approximately 1.43 to 5.15 feet of SPH has been measured in MW-10 beginning in February 2016. Therefore, groundwater requiring future management is present within the majority of the western and central portions of the Property, and to the northwest of the Property boundary.

8.4 Soil Vapor Requiring Future Management

Based on a review of previous subsurface investigations at the Site, the soil vapor intrusion pathway at the Site represents a data gap. Shallow petroleum-impacted soil and groundwater are present within the footprint of the warehouse building and within approximately 20 to 25 feet of the on-Property house and shop building. The shallow petroleum-impacted soil and groundwater is also present within approximately 35 to 85 feet of the south and north adjoining property buildings. Additionally, SPH is present within at least 40 feet of on-Property buildings and within 100 feet of adjoining property buildings. Based on the current and proposed mixed-use of the Property and adjoining properties as residential and light industrial, the soil vapor intrusion pathway at the Site requires further evaluation.

9. Recommendations

Based on the previous section, the extent and types of contaminants have been adequately defined and characterized at the Site. Upon Ecology's approval of this RI Report, a feasibility study will be generated to evaluate appropriate cleanup alternatives at the Site. This should include a disproportionate cost analysis to determine the most beneficial and cost effective approach as defined in MTCA (WAC 173-340-350 through -360).

10. References

Cowlitz County. Assessor Records. Accessed February and March 2019

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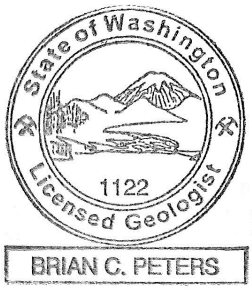
All of Which is Respectfully Submitted,

GHD

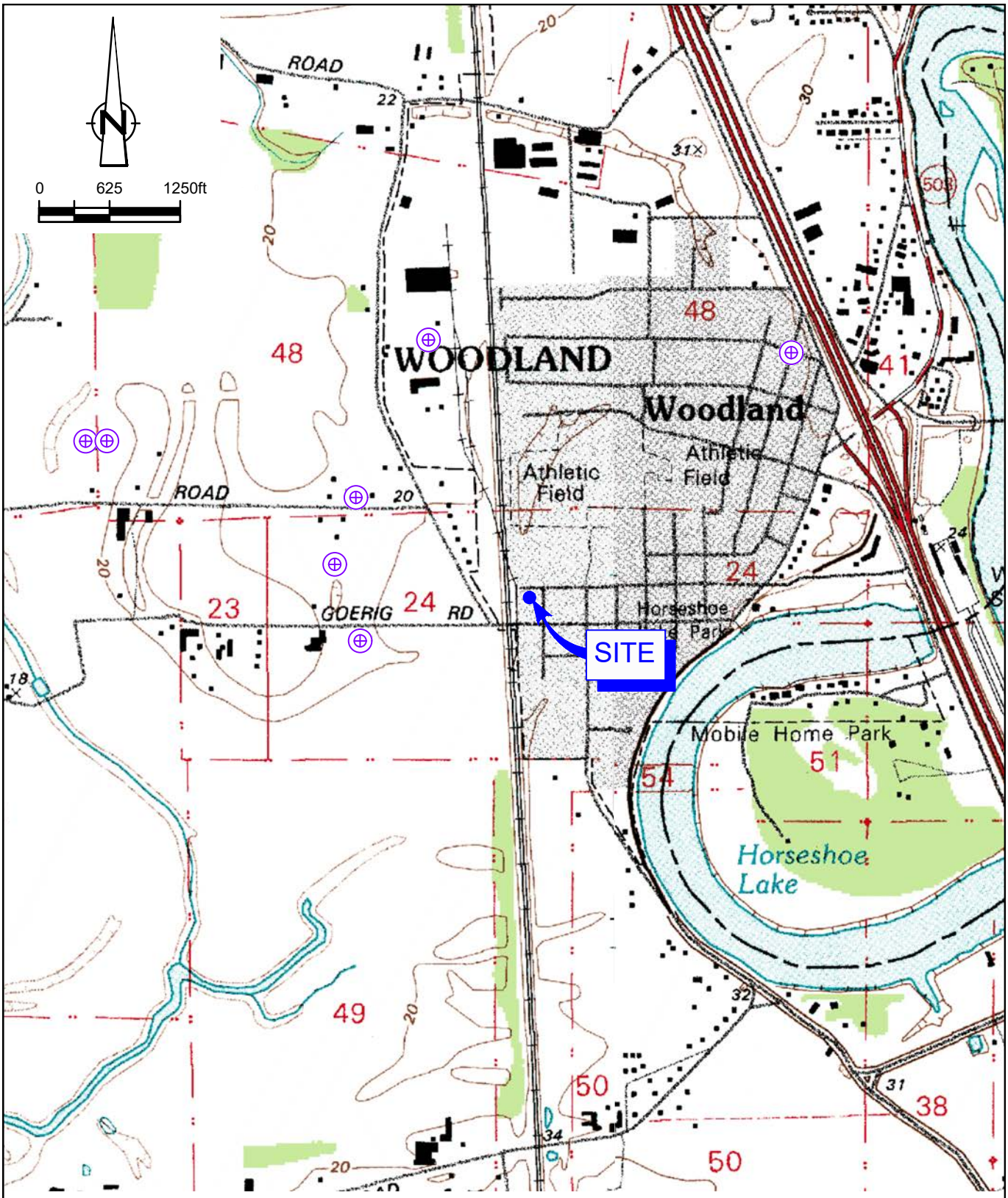
Jeff Gaarder

Brian Peters, LG



Ecology acknowledges that GHD Services Inc. has certified that this report was prepared by a Licensed Geologist registered in the State of Washington. The supplemental information provided by Ecology is not intended to impugn the statements, opinions, or conclusions of that Licensed Geologist.

Figures



SOURCE: USGS QUADRANGLE MAPS: DEER ISLAND AND WOODLAND, WA.

LEGEND

⊕ WATER SUPPLY WELLS (APPROXIMATE LOCATIONS)

figure 1

VICINITY MAP
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

GHD

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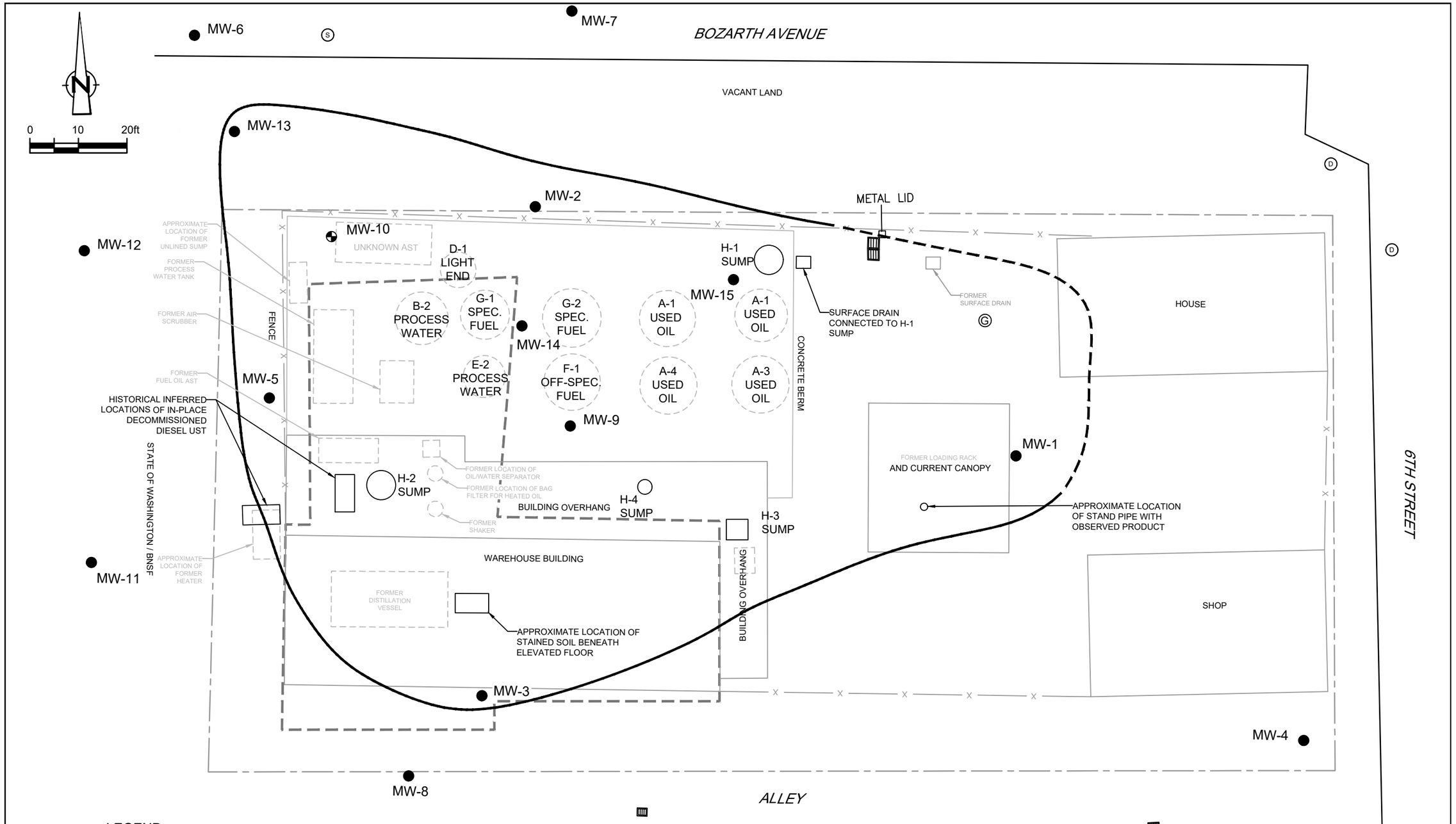

LEGEND

- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- APPROXIMATE LOCATION OF FORMER ABOVEGROUND STORAGE TANK
- STORMWATER MANHOLE
- SANITARY MANHOLE
- APPROXIMATE LOCATION OF GASOLINE SURFACE LID
- FENCE LINE
- PROPERTY BOUNDARY LINE
- STORMWATER CATCH BASIN
- MODEL TOXICS CONTROL ACT (MTCA) SITE BOUNDARY, DASHED WHERE INFERRED
- APPROXIMATE EXTENT OF FORMER SHELL FOOTPRINT

SOURCE: COLES & ASSOCIATES LLC (2010), PRC ENVIRONMENTAL MANAGEMENT, INC. (1996) AND VARIOUS ECOLOGY AND EPA DOCUMENTS FROM THE 1980'S. COLES & ASSOCIATES LLC FIGURE 5 SITE DIAGRAM OF FUEL PROCESSORS DATED 5/15/13 & HISTORICAL AERIAL PHOTO SHOWING LOCATION OF THE FPI PROPERTY AT 704 BOZARTH AVE., DATED 7/7/10.

figure 2

SITE PLAN
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

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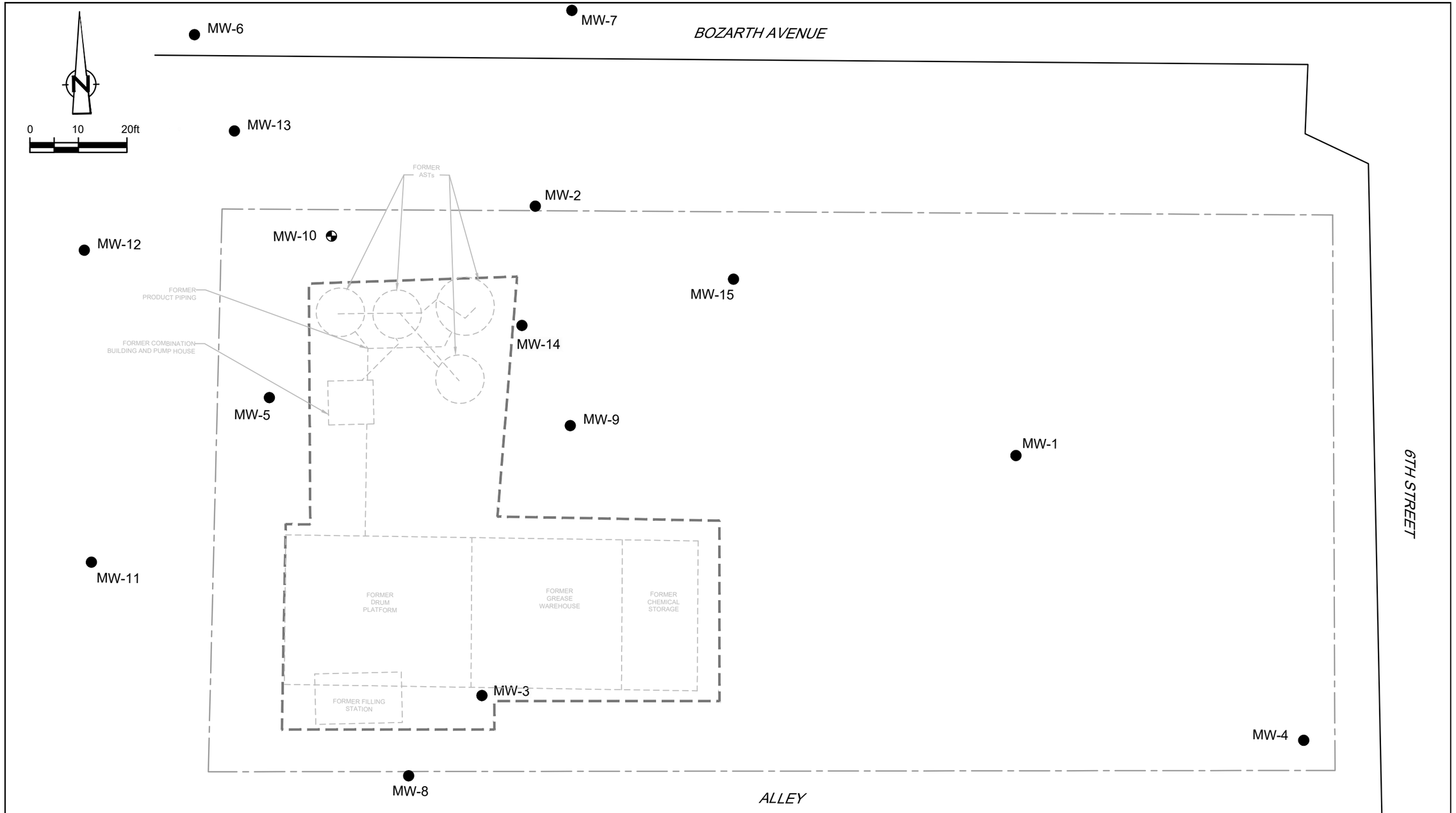

SOURCE: COLES & ASSOCIATES LLC (2010), PRC ENVIRONMENTAL MANAGEMENT, INC. (1996) AND VARIOUS ECOLOGY AND EPA DOCUMENTS FROM THE 1980'S. COLES & ASSOCIATES LLC FIGURE 5 SITE DIAGRAM OF FUEL PROCESSORS DATED 5/15/13 & HISTORICAL AERIAL PHOTO SHOWING LOCATION OF THE FPI PROPERTY AT 704 BOZARTH AVE., DATED 7/7/10.

figure 2A

FORMER SHELL CONFIGURATION, PRE-1969
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

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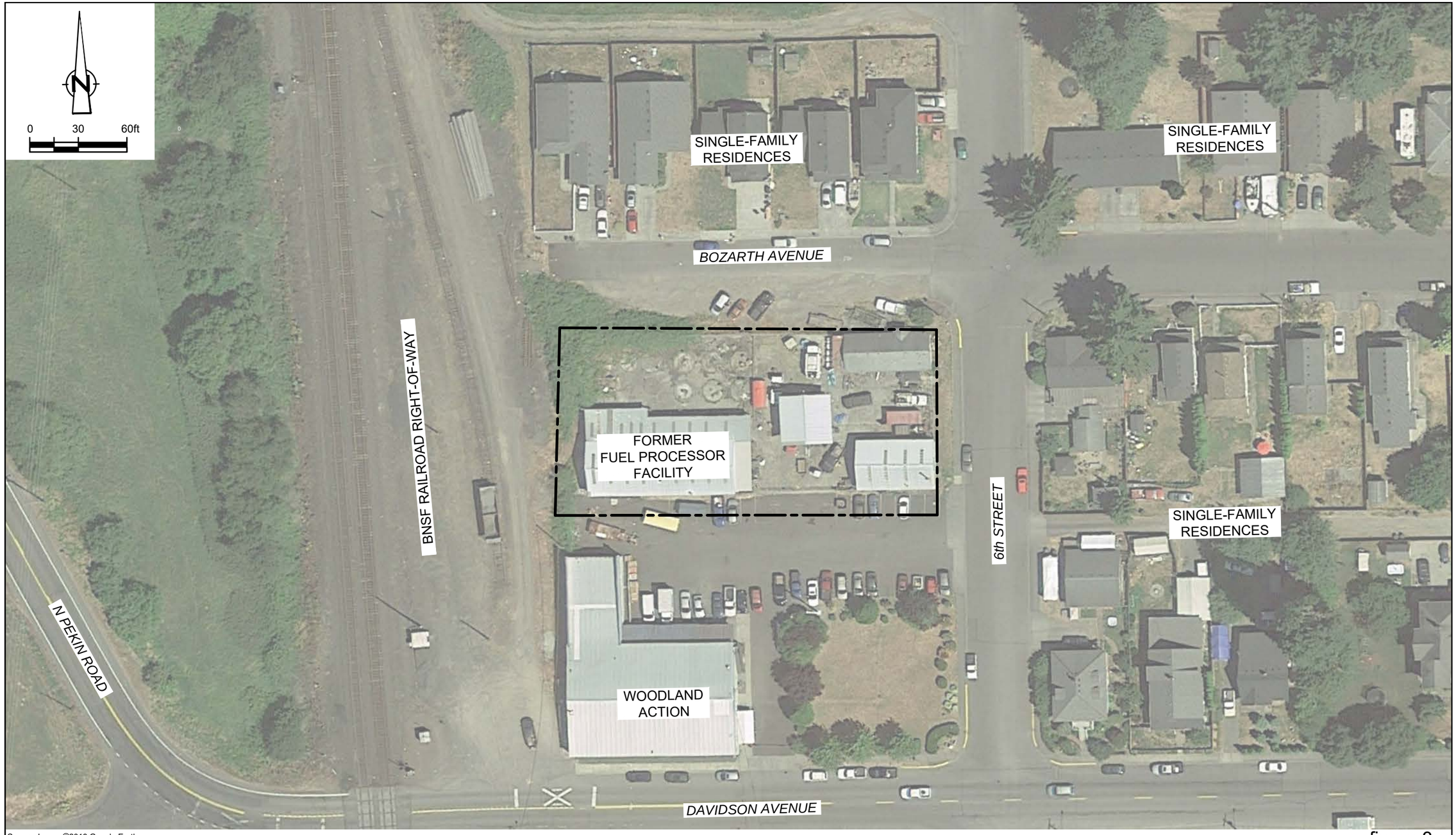


Source: Image ©2018 Google Earth.

LEGEND

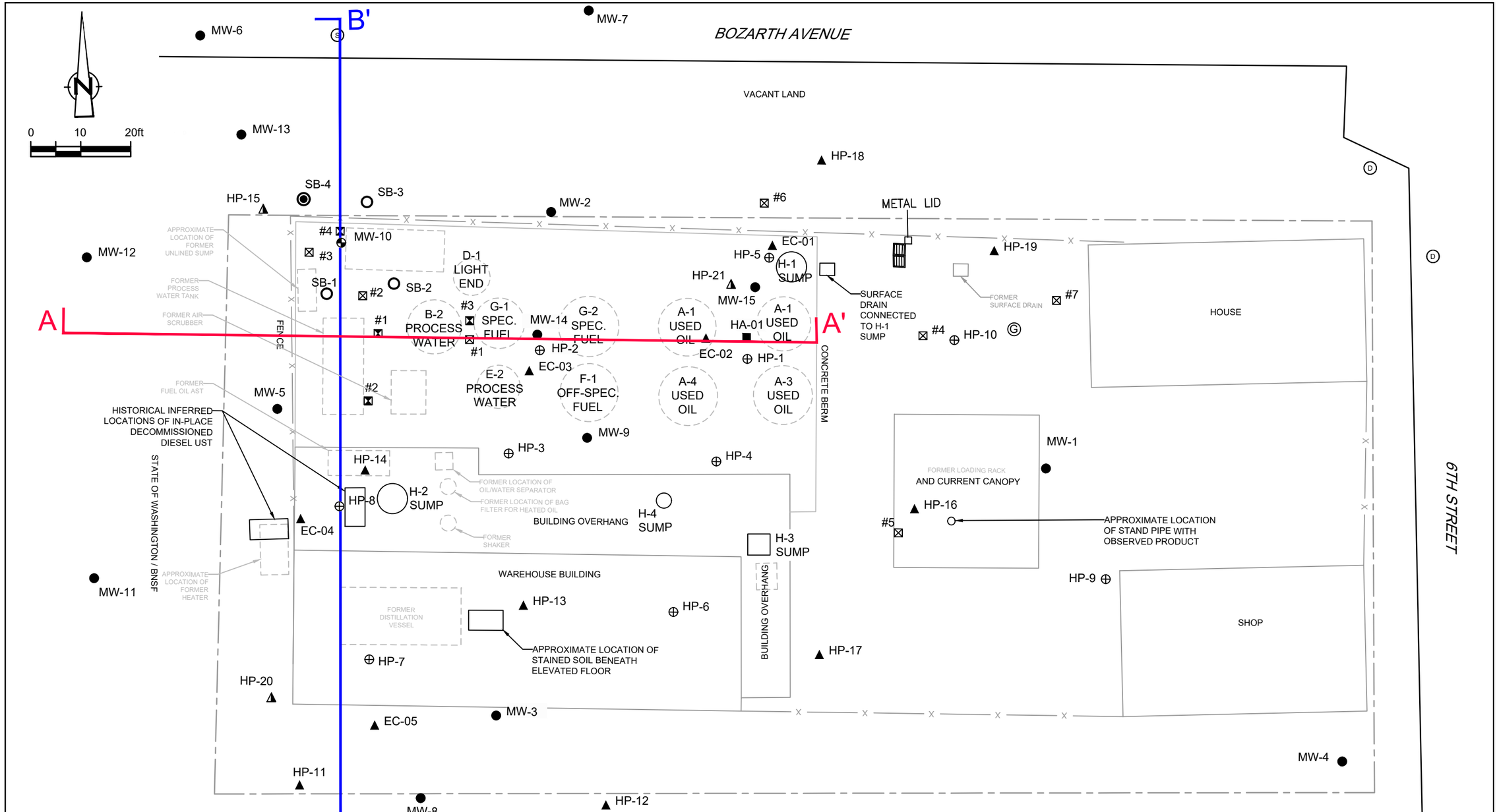
SUBJECT SITE BOUNDARY

figure 3

AREA MAP
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

GHD

060866-18.04(005)GN-SO002 APR 1, 2019



LEGEND

- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- HYDROPROBE LOCATION
- PROBE LOCATION
- HAND AUGER LOCATION
- DEEP PROBE LOCATION
- SOIL BORING LOCATION
- DEEP SOIL BORING LOCATION
- ASSUMED LOCATION OF SOIL SAMPLE COLLECTED ON 16 APRIL 1985 FOR RFA
- ASSUMED LOCATION OF SOIL SAMPLE COLLECTED ON 02 APRIL 1986 FOR RFA
- APPROXIMATE LOCATION OF FORMER ABOVEGROUND STORAGE TANK
- STORMWATER MANHOLE
- SANITARY MANHOLE
- APPROXIMATE LOCATION OF GASOLINE SURFACE LID
- FENCE LINE
- PROPERTY BOUNDARY LINE
- STORMWATER CATCH BASIN

SOURCE: COLES & ASSOCIATES LLC (2010), PRC ENVIRONMENTAL MANAGEMENT, INC. (1996) AND VARIOUS ECOLOGY AND EPA DOCUMENTS FROM THE 1980'S. COLES & ASSOCIATES LLC FIGURE 5 SITE DIAGRAM OF FUEL PROCESSORS DATED 5/15/13.

figure 4

SITE INVESTIGATION MAP
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

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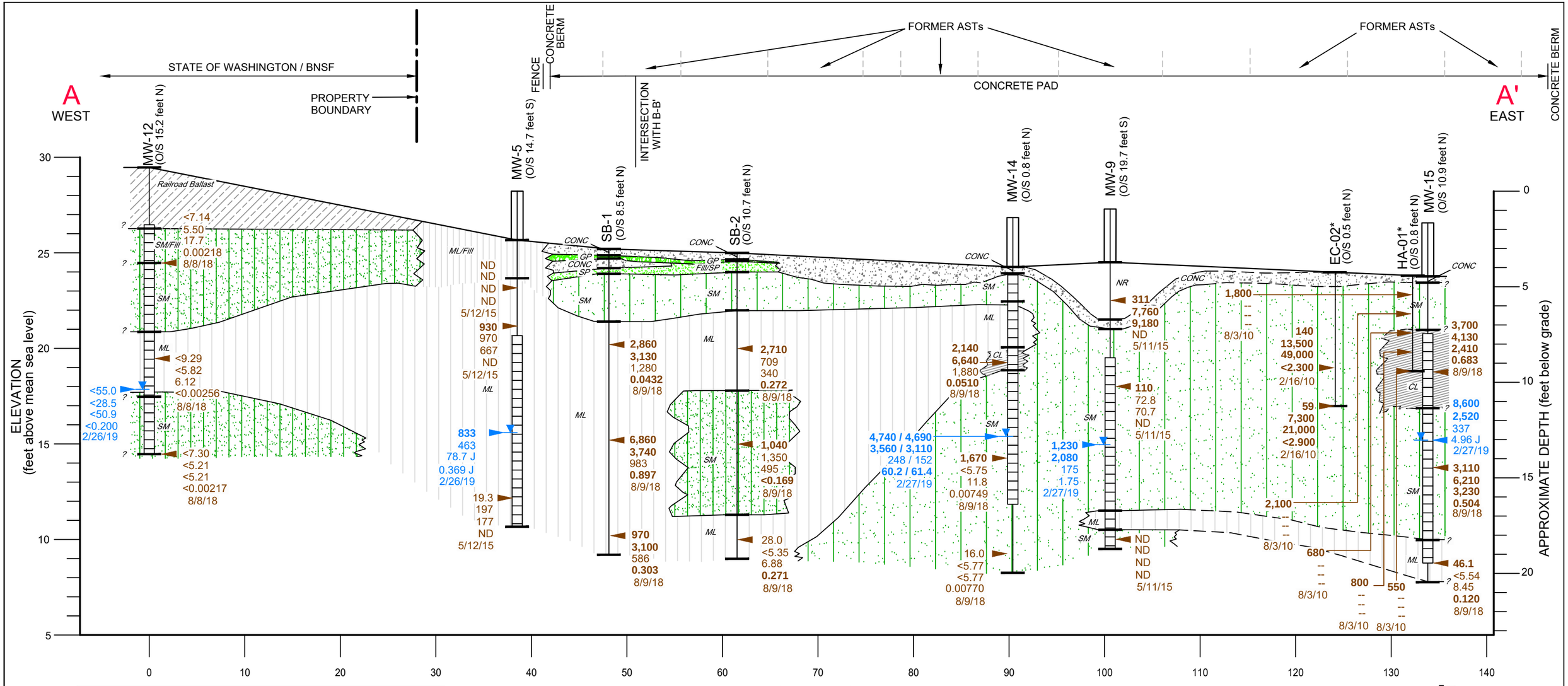
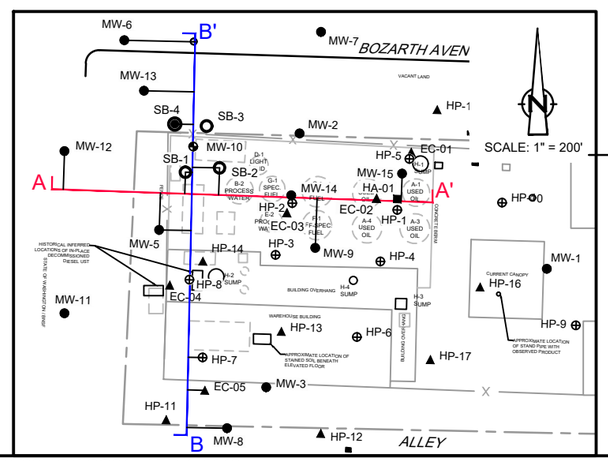




LEGEND

- WELL DESIGNATION
- WELL CASING STICK-UP
- GROUND SURFACE (OFFSET)
- GROUNDWATER MONITORING WELL
- STRATIGRAPHIC BOUNDARY
- SM — TYPICAL SOIL CLASSIFICATION
- SCREENED INTERVAL
- BOTTOM OF BORING
- GROUNDWATER DEPTH

- APPROXIMATE SAMPLE LOCATION
- TPHg / TPHd / TPHo / BENZENE / DATE — HYDROCARBON CONCENTRATIONS IN SOIL IN MILLIGRAMS PER KILOGRAM (mg/kg)
- APPROXIMATE GROUNDWATER SAMPLE LOCATION
- TPHg / TPHd / TPHo / BENZENE / DATE — HYDROCARBON CONCENTRATIONS IN GROUNDWATER IN MICROGRAMS PER LITER (µg/L)

- *NR* - NO RECOVERY
- *CONC* - CONCRETE
- *ML* - INORGANIC SILTS, VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS, CLAYEY SILTS WITH SLIGHT PLASTICITY
- *CL* - INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
- *SM* - SILTY SANDS, SAND-SILT MIXTURES
- *SP* - POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
- *GP* - POORLY-GRADED GRAVELS AND GRAVEL-SAND MIXTURES

VERTICAL SCALE EXAGGERATION: 2X

Scale (ft) 0 5 10

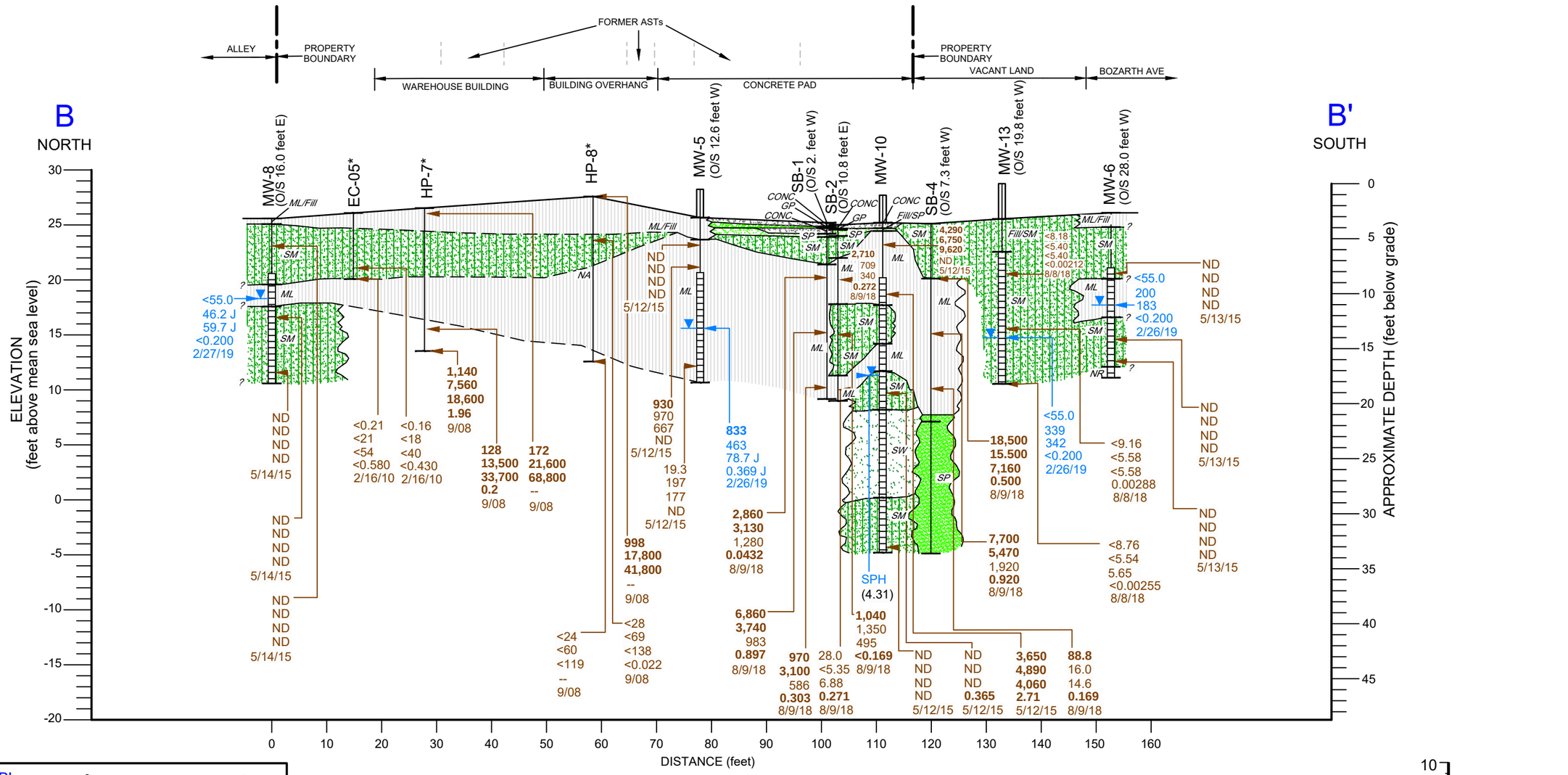
Notes:

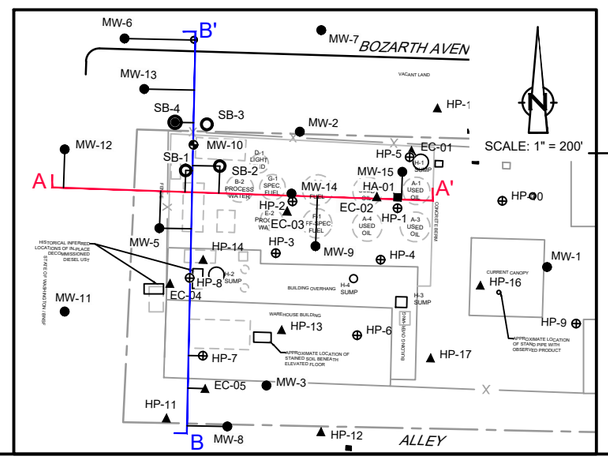
- TPHg = Total petroleum hydrocarbons (TPH) as gasoline analyzed by NWTPH---Gx
- TPHd = TPH as diesel, analyzed by NWTPH---Dx
- TPHo = TPH as oil, analyze by NWTPH-Dx
- Concentrations in bold type indicate the analyte was detected above the Model Toxics Control Act MTCA A cleanup level.
- < = Not detected at or above stated reporting limits
- ND = Not detected above laboratory reporting limits
- -- = Not analyzed
- J = Result is less than the reporting limit, but greater than or equal to the method detection limit, and the concentration is an approximate value.
- SPH = separate phase hydrocarbons
- Contact dashed where inferred
- *Boring logs were not available for review, lithology inferred based on nearby boring/wells; total depth is inferred.

figure 5

GEOLOGIC CROSS SECTION A-A'
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

GHD





LEGEND

- WELL DESIGNATION
- WELL CASING STICK-UP
- GROUND SURFACE (OFFSET)
- GROUNDWATER MONITORING WELL
- STRATIGRAPHIC BOUNDARY
- *SM* — TYPICAL SOIL CLASSIFICATION
- SCREENED INTERVAL
- BOTTOM OF BORING
- GROUNDWATER DEPTH

- APPROXIMATE SAMPLE LOCATION
- TPHg / TPHd / TPHo / BENZENE / NAPHTHALENES — HYDROCARBON CONCENTRATIONS IN SOIL IN MILLIGRAMS PER KILOGRAM (mg/kg)
- APPROXIMATE GROUNDWATER SAMPLE LOCATION
- TPHg / TPHd / TPHo / BENZENE / DATE — HYDROCARBON CONCENTRATIONS IN GROUNDWATER IN MICROGRAMS PER LITER (µg/L)

- *CONC* - CONCRETE
- *ML* - INORGANIC SILTS, VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS, CLAYEY SILTS WITH SLIGHT PLASTICITY
- *SM* - SILTY SANDS, SAND-SILT MIXTURES
- *SP* - POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
- *SW* - WELL-GRADED SAND, GRAVELLY SANDS, LITTLE OR NO FINES
- *GP* - POORLY-GRADED GRAVELS AND GRAVEL-SAND MIXTURES

VERTICAL SCALE EXAGGERATION: 2X

Scale (ft) 0 10 20

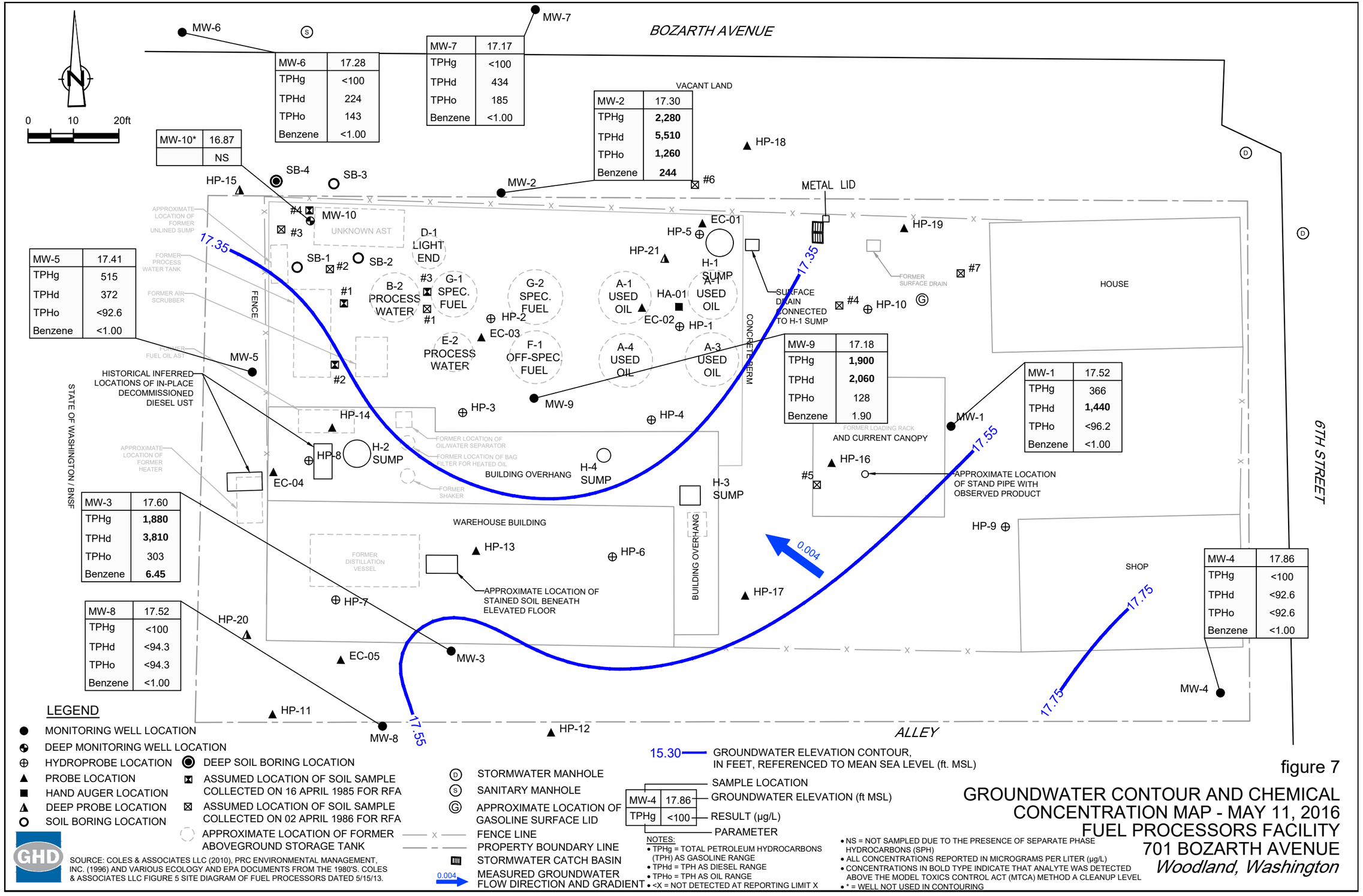
Notes:

- TPHg = Total petroleum hydrocarbons (TPH) as gasoline analyzed by NWTPH---Gx
- TPHd = TPH as diesel, analyzed by NWTPH---Dx
- TPHo = TPH as oil, analyze by NWTPH-Dx
- Concentrations in bold type indicate the analyte was detected above the Model Toxics Control Act MTCA A cleanup level.
- < = Not detected at or above stated reporting limits
- ND = Not detected above laboratory reporting limits
- -- = Not analyzed
- J = Result is less than the reporting limit, but greater than or equal to the method detection limit, and the concentration is an approximate value.
- SPH = separate phase hydrocarbons
- Contact dashed where inferred
- *Boring logs were not available for review, lithology inferred based on nearby boring/wells; total depth is inferred.

figure 6

GEOLOGIC CROSS SECTION B-B'
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

GHD



LEGEND

- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- HYDROPROBE LOCATION
- PROBE LOCATION
- HAND AUGER LOCATION
- DEEP PROBE LOCATION
- SOIL BORING LOCATION
- DEEP SOIL BORING LOCATION
- ASSUMED LOCATION OF SOIL SAMPLE COLLECTED ON 16 APRIL 1985 FOR RFA
- ASSUMED LOCATION OF SOIL SAMPLE COLLECTED ON 02 APRIL 1986 FOR RFA
- APPROXIMATE LOCATION OF FORMER ABOVEGROUND STORAGE TANK
- STORMWATER MANHOLE
- SANITARY MANHOLE
- APPROXIMATE LOCATION OF GASOLINE SURFACE LID
- FENCE LINE
- PROPERTY BOUNDARY LINE
- STORMWATER CATCH BASIN
- MEASURED GROUNDWATER FLOW DIRECTION AND GRADIENT
- 15.30 GROUNDWATER ELEVATION CONTOUR, IN FEET, REFERENCED TO MEAN SEA LEVEL (ft. MSL)

MW-4 17.86 — SAMPLE LOCATION; GROUNDWATER ELEVATION (ft MSL)
TPHg <100 — RESULT (µg/L); PARAMETER

SOURCE: COLES & ASSOCIATES LLC (2010), PRC ENVIRONMENTAL MANAGEMENT, INC. (1996) AND VARIOUS ECOLOGY AND EPA DOCUMENTS FROM THE 1980'S. COLES & ASSOCIATES LLC FIGURE 5 SITE DIAGRAM OF FUEL PROCESSORS DATED 5/15/13.

NOTES:
- TPHg = TOTAL PETROLEUM HYDROCARBONS (TPH) AS GASOLINE RANGE
- TPHd = TPH AS DIESEL RANGE
- TPHo = TPH AS OIL RANGE
- <X = NOT DETECTED AT REPORTING LIMIT X
- NS = NOT SAMPLED DUE TO THE PRESENCE OF SEPARATE PHASE HYDROCARBONS (SPH)
- ALL CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER (µg/L)
- CONCENTRATIONS IN BOLD TYPE INDICATE THAT ANALYTE WAS DETECTED ABOVE THE MODEL TOXICS CONTROL ACT (MTCA) METHOD A CLEANUP LEVEL
- * = WELL NOT USED IN CONTOURING

figure 7

GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP - MAY 11, 2016
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

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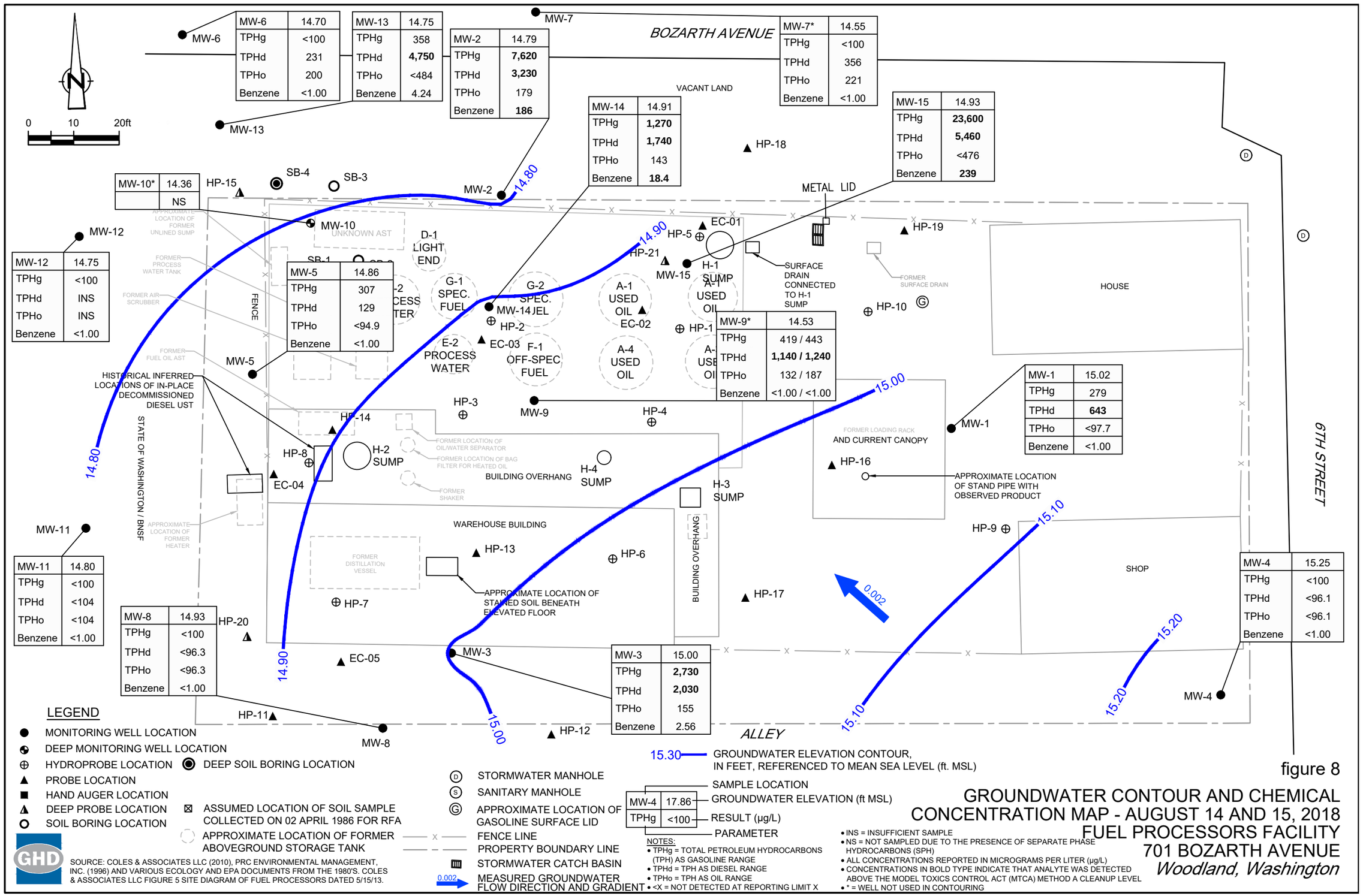

figure 8

GROUNDWATER CONTOUR AND CHEMICAL CONCENTRATION MAP - AUGUST 14 AND 15, 2018
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

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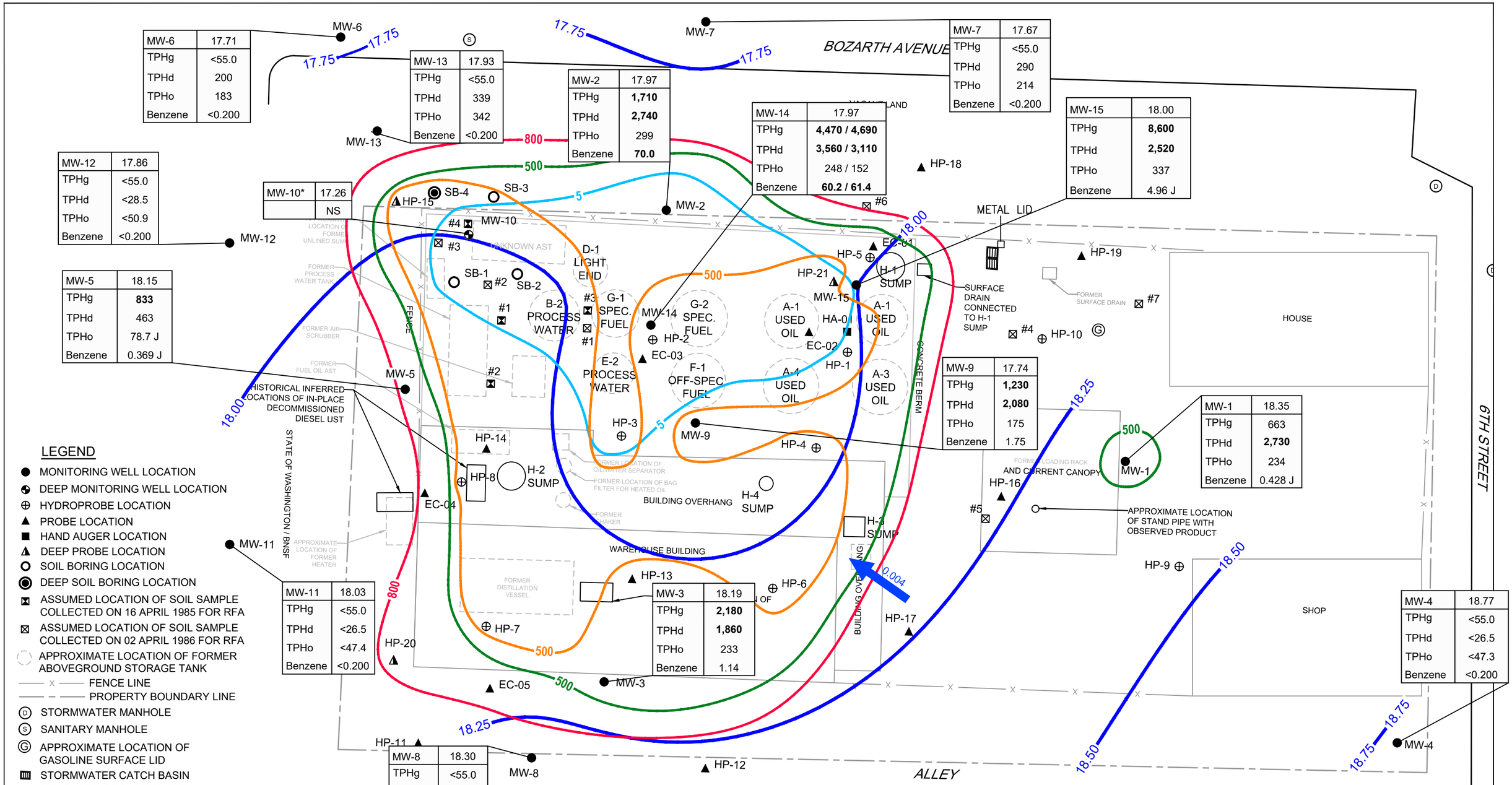

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Data Source COLES & ASSOCIATES LLC (2010), PRC ENVIRONMENTAL MANAGEMENT, INC. (1996) AND VARIOUS ECOLOGY AND EPA DOCUMENTS FROM THE 1980'S. COLES & ASSOCIATES LLC FIGURE 5 SITE DIAGRAM OF FUEL PROCESSORS DATED 5/15/13.

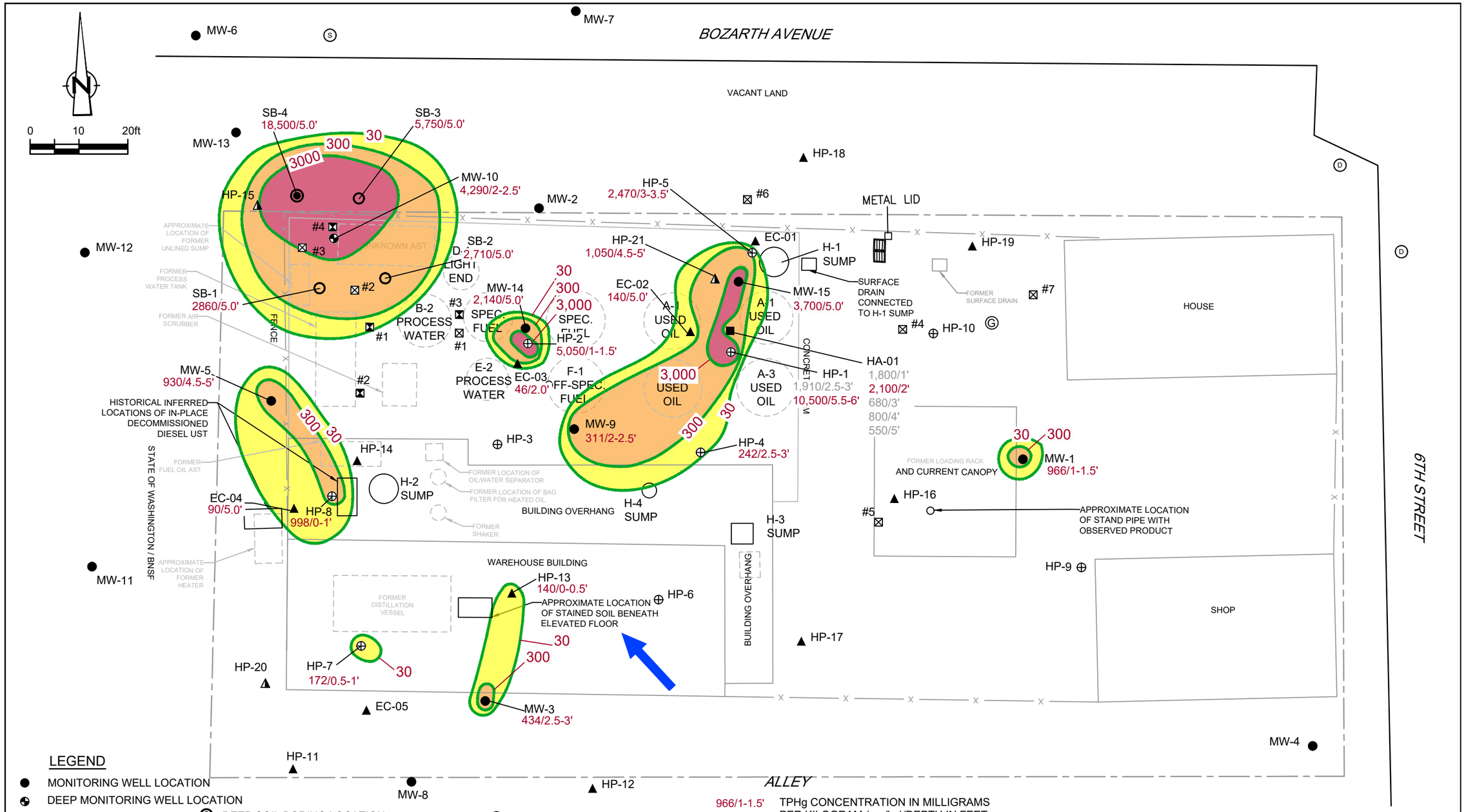

figure 10

TPHg IN SOIL ISOCONCENTRATION CONTOUR MAP 0 TO 6 FEET BGS
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

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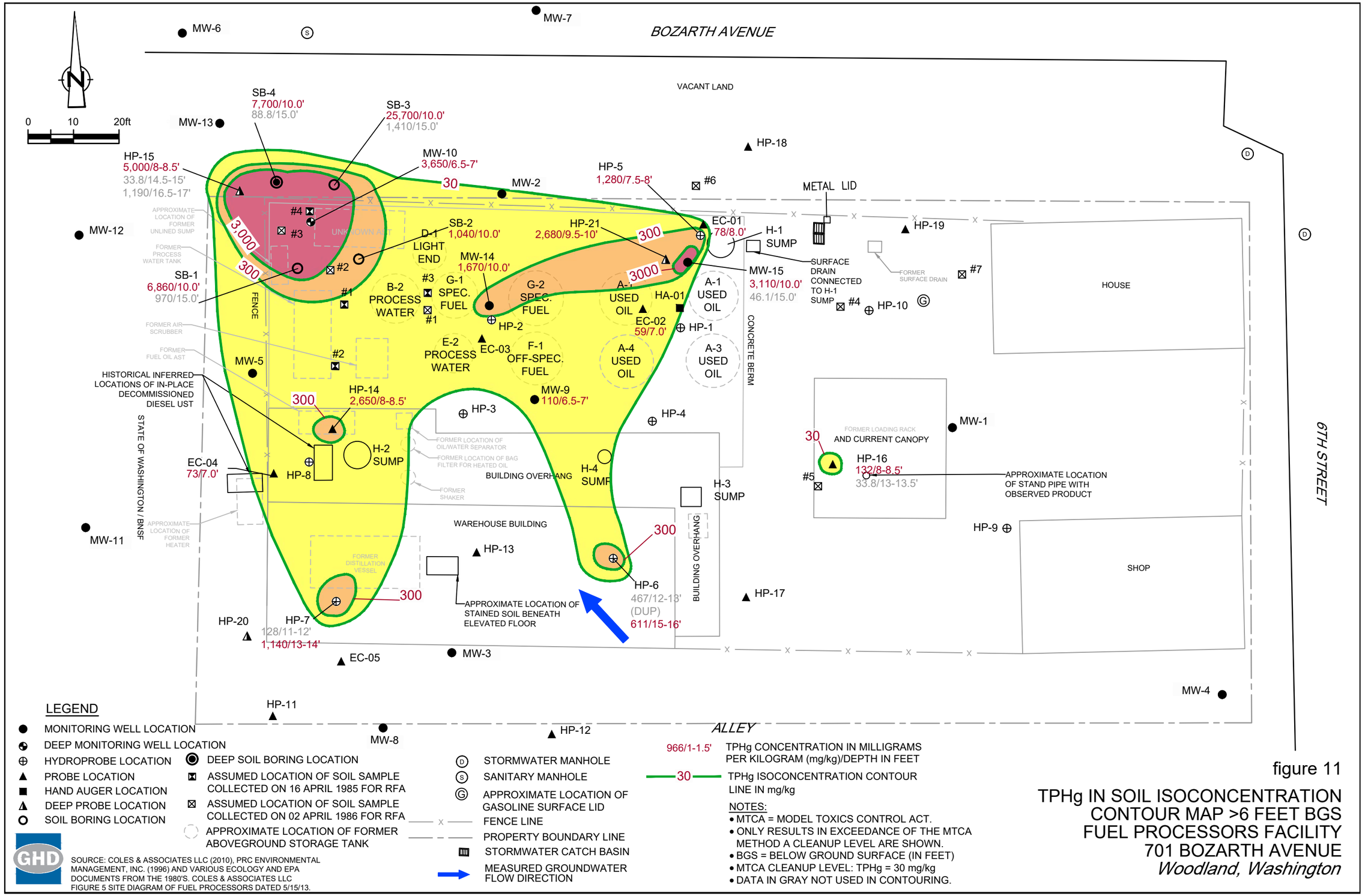

LEGEND

- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- HYDROPROBE LOCATION
- PROBE LOCATION
- HAND AUGER LOCATION
- DEEP PROBE LOCATION
- SOIL BORING LOCATION
- DEEP SOIL BORING LOCATION
- ASSUMED LOCATION OF SOIL SAMPLE COLLECTED ON 16 APRIL 1985 FOR RFA
- ASSUMED LOCATION OF SOIL SAMPLE COLLECTED ON 02 APRIL 1986 FOR RFA
- APPROXIMATE LOCATION OF FORMER ABOVEGROUND STORAGE TANK
- STORMWATER MANHOLE
- SANITARY MANHOLE
- APPROXIMATE LOCATION OF GASOLINE SURFACE LID
- FENCE LINE
- PROPERTY BOUNDARY LINE
- STORMWATER CATCH BASIN
- MEASURED GROUNDWATER FLOW DIRECTION
- 966/1-1.5' TPHg CONCENTRATION IN MILLIGRAMS PER KILOGRAM (mg/kg)/DEPTH IN FEET
- 30 TPHg ISOCONCENTRATION CONTOUR LINE IN mg/kg

NOTES:

- MTCA = MODEL TOXICS CONTROL ACT.
- ONLY RESULTS IN EXCEEDANCE OF THE MTCA METHOD A CLEANUP LEVEL ARE SHOWN.
- BGS = BELOW GROUND SURFACE (IN FEET)
- MTCA CLEANUP LEVEL: TPHg = 30 mg/kg
- DATA IN GRAY NOT USED IN CONTOURING.

SOURCE: COLES & ASSOCIATES LLC (2010), PRC ENVIRONMENTAL MANAGEMENT, INC. (1996) AND VARIOUS ECOLOGY AND EPA DOCUMENTS FROM THE 1980'S. COLES & ASSOCIATES LLC FIGURE 5 SITE DIAGRAM OF FUEL PROCESSORS DATED 5/15/13.

figure 11

TPHg IN SOIL ISOCONCENTRATION CONTOUR MAP >6 FEET BGS
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

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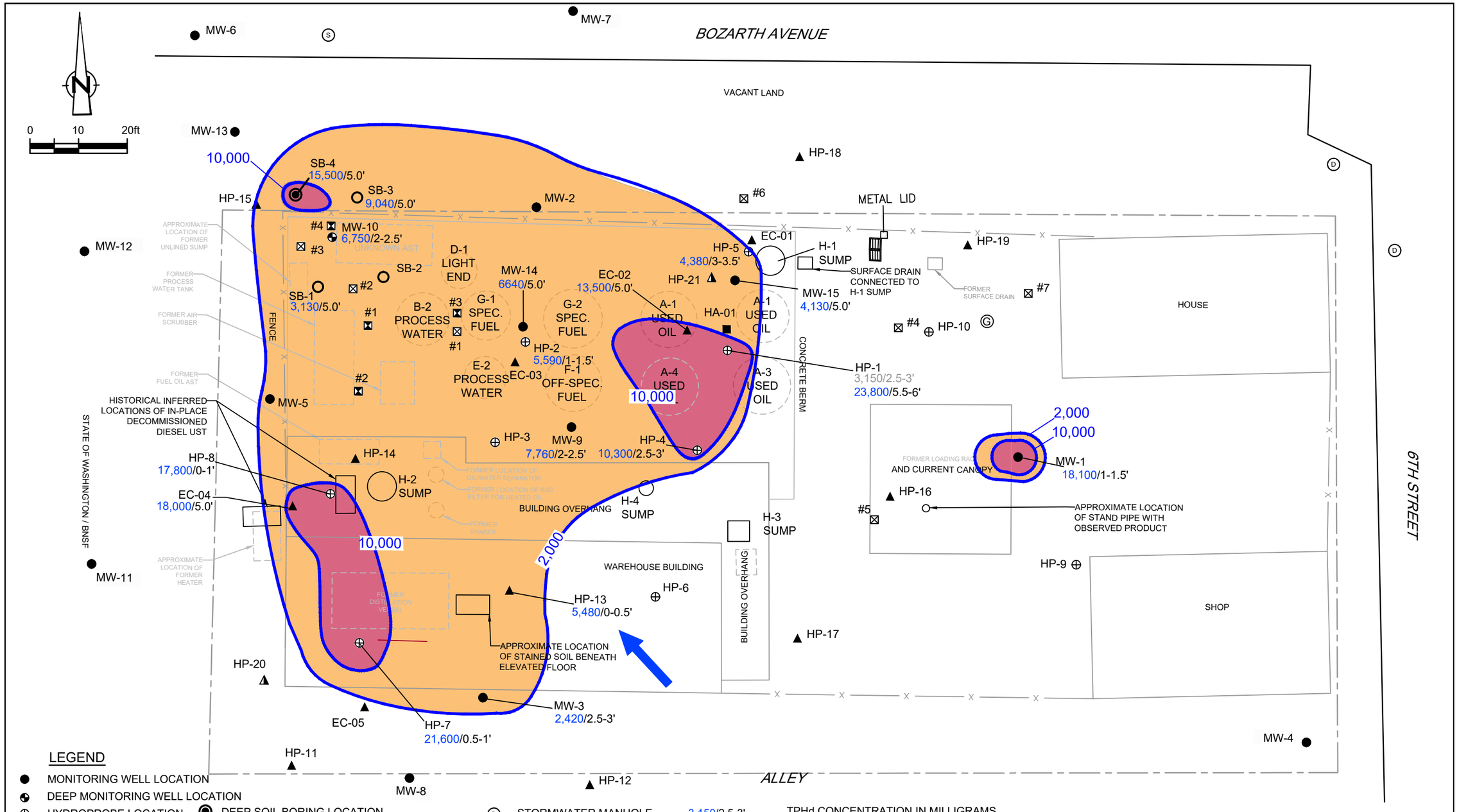

LEGEND

- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- HYDROPROBE LOCATION
- PROBE LOCATION
- HAND AUGER LOCATION
- DEEP PROBE LOCATION
- SOIL BORING LOCATION
- DEEP SOIL BORING LOCATION
- ASSUMED LOCATION OF SOIL SAMPLE COLLECTED ON 16 APRIL 1985 FOR RFA
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- STORMWATER MANHOLE
- SANITARY MANHOLE
- APPROXIMATE LOCATION OF GASOLINE SURFACE LID
- FENCE LINE
- PROPERTY BOUNDARY LINE
- STORMWATER CATCH BASIN
- MEASURED GROUNDWATER FLOW DIRECTION
- 3,150/2.5-3' — TPHd CONCENTRATION IN MILLIGRAMS PER KILOGRAM (mg/kg)/DEPTH IN FEET
- 2,000 — TPHd ISOCONCENTRATION CONTOUR LINE IN mg/kg

SOURCE: COLES & ASSOCIATES LLC (2010), PRC ENVIRONMENTAL MANAGEMENT, INC. (1996) AND VARIOUS ECOLOGY AND EPA DOCUMENTS FROM THE 1980'S. COLES & ASSOCIATES LLC FIGURE 5 SITE DIAGRAM OF FUEL PROCESSORS DATED 5/15/13.

NOTES:
- MTCA = MODEL TOXICS CONTROL ACT.
- ONLY RESULTS IN EXCEEDANCE OF THE MTCA METHOD A CLEANUP LEVEL ARE SHOWN.
- BGS = BELOW GROUND SURFACE (IN FEET)
- MTCA CLEANUP LEVEL: TPHd = 2,000 mg/kg
- DATA IN GRAY NOT USED IN CONTOURING.

figure 12

TPHd IN SOIL ISOCONCENTRATION CONTOUR MAP 0 TO 6 FEET BGS
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

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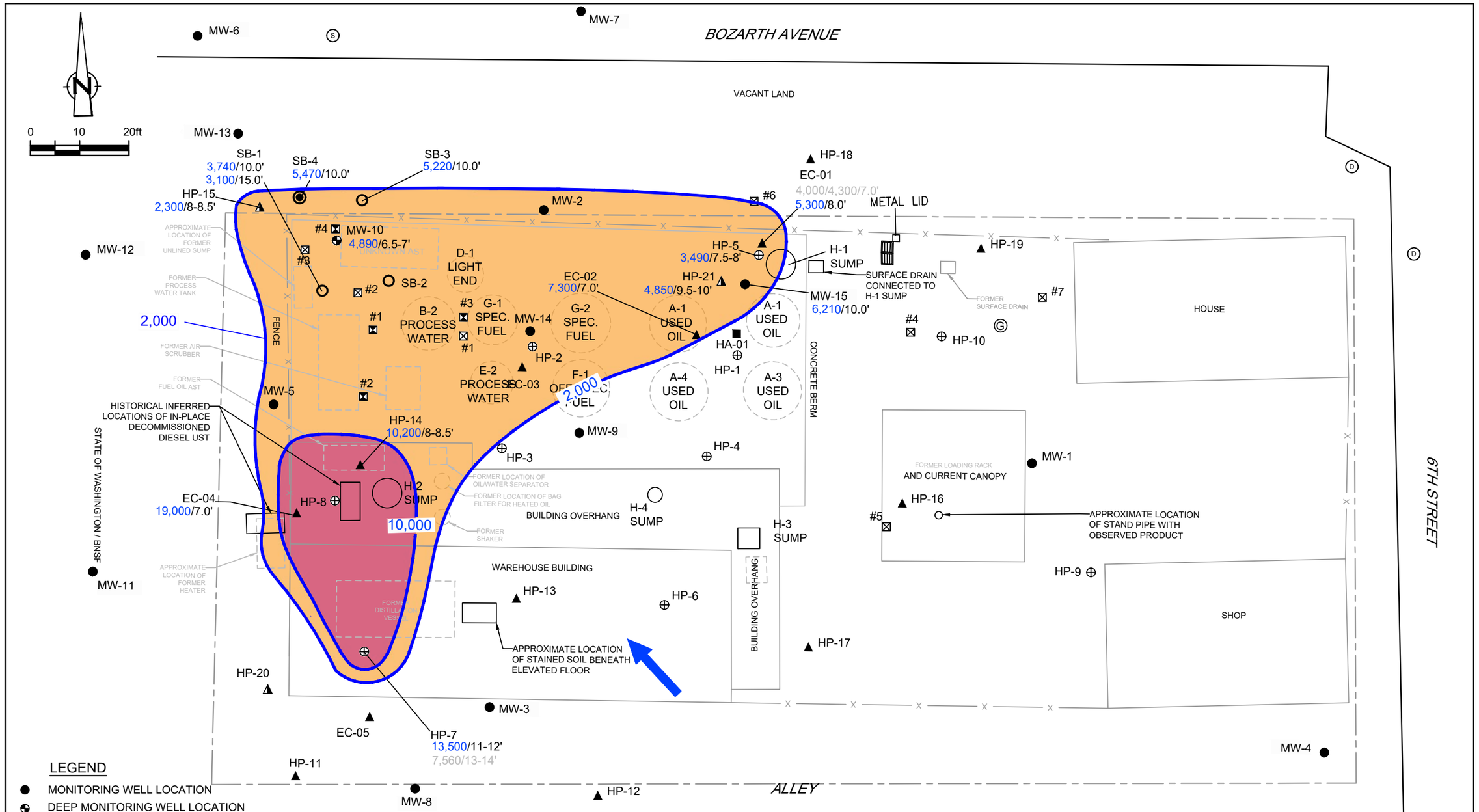

LEGEND

- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- HYDROPROBE LOCATION
- PROBE LOCATION
- HAND AUGER LOCATION
- DEEP PROBE LOCATION
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- SANITARY MANHOLE
- APPROXIMATE LOCATION OF GASOLINE SURFACE LID
- FENCE LINE
- PROPERTY BOUNDARY LINE
- STORMWATER CATCH BASIN
- MEASURED GROUNDWATER FLOW DIRECTION
- 3,490/7.5-8' TPHd CONCENTRATION IN MILLIGRAMS PER KILOGRAM (mg/kg)/DEPTH IN FEET
- 2,000 TPHd ISOCONCENTRATION CONTOUR LINE IN mg/kg

SOURCE: COLES & ASSOCIATES LLC (2010), PRC ENVIRONMENTAL MANAGEMENT, INC. (1996) AND VARIOUS ECOLOGY AND EPA DOCUMENTS FROM THE 1980'S. COLES & ASSOCIATES LLC FIGURE 5 SITE DIAGRAM OF FUEL PROCESSORS DATED 5/15/13.

NOTES:

- MTCA = MODEL TOXICS CONTROL ACT.
- ONLY RESULTS IN EXCEEDANCE OF THE MTCA METHOD A CLEANUP LEVEL ARE SHOWN.
- BGS = BELOW GROUND SURFACE (IN FEET)
- MTCA CLEANUP LEVEL: TPHd = 2,000 mg/kg
- DATA IN GRAY NOT USED IN CONTOURING.

figure 13

TPHd IN SOIL ISOCONCENTRATION CONTOUR MAP - >6 FEET BGS

FUEL PROCESSORS FACILITY

701 BOZARTH AVENUE

Woodland, Washington

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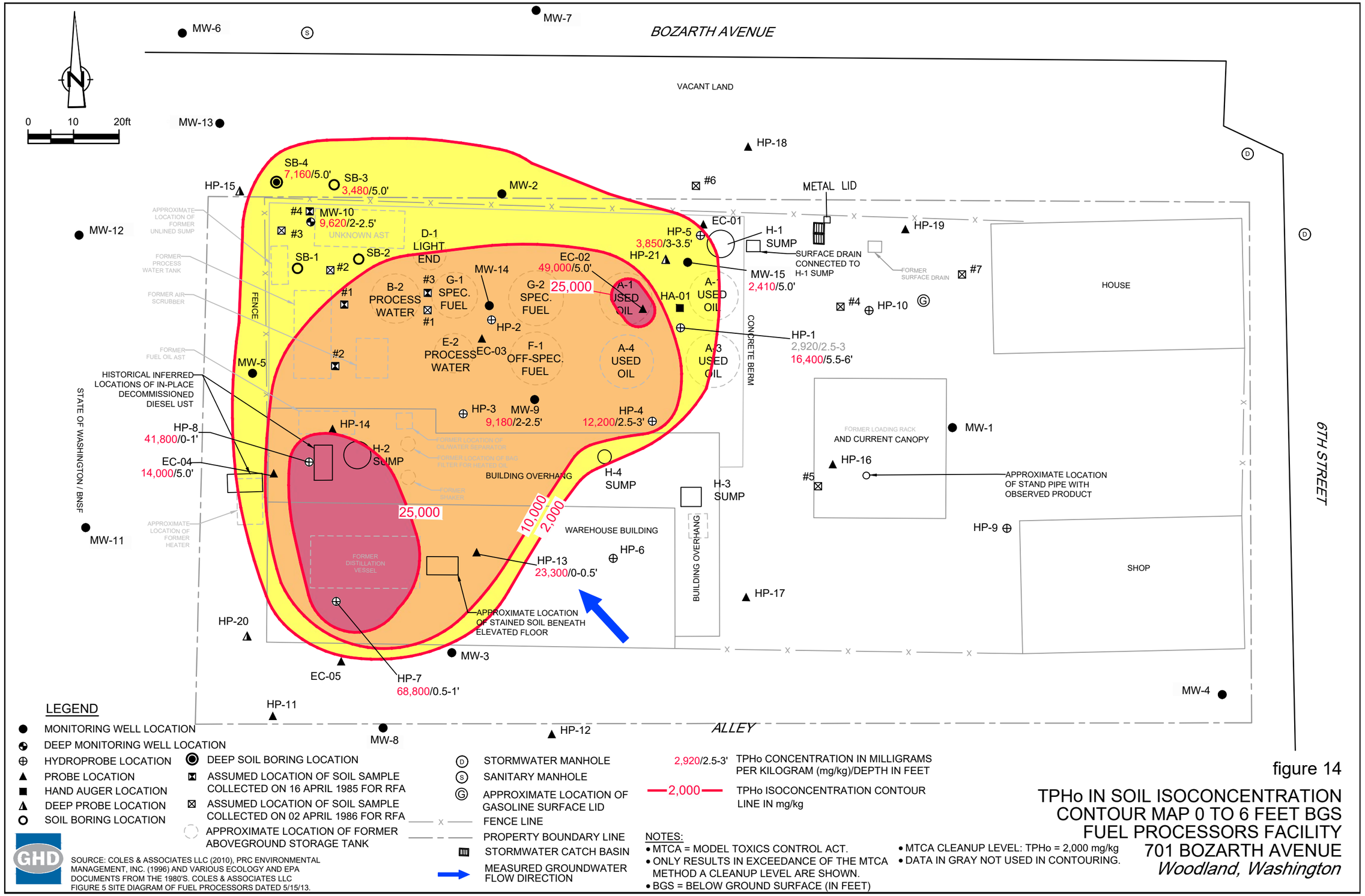

figure 14

TPHo IN SOIL ISOCONCENTRATION CONTOUR MAP 0 TO 6 FEET BGS
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

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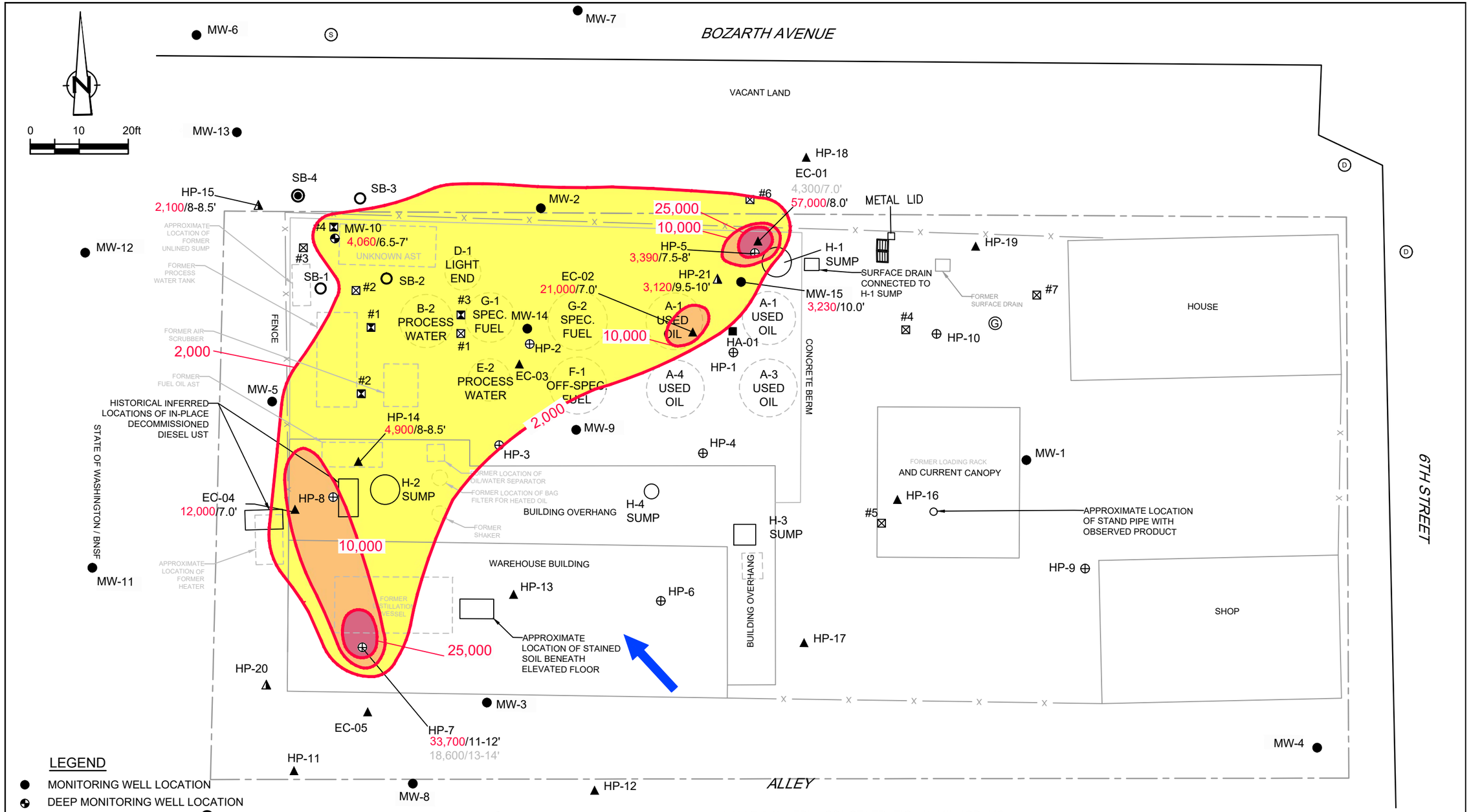

LEGEND

- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- HYDROPROBE LOCATION
- PROBE LOCATION
- HAND AUGER LOCATION
- DEEP PROBE LOCATION
- SOIL BORING LOCATION
- DEEP SOIL BORING LOCATION
- ASSUMED LOCATION OF SOIL SAMPLE COLLECTED ON 16 APRIL 1985 FOR RFA
- ASSUMED LOCATION OF SOIL SAMPLE COLLECTED ON 02 APRIL 1986 FOR RFA
- APPROXIMATE LOCATION OF FORMER ABOVEGROUND STORAGE TANK
- STORMWATER MANHOLE
- SANITARY MANHOLE
- APPROXIMATE LOCATION OF GASOLINE SURFACE LID
- FENCE LINE
- PROPERTY BOUNDARY LINE
- STORMWATER CATCH BASIN
- MEASURED GROUNDWATER FLOW DIRECTION

3,390/7.5-8' TPHo CONCENTRATION IN MILLIGRAMS PER KILOGRAM (mg/kg)/DEPTH IN FEET

2,000 TPHo ISOCONCENTRATION CONTOUR LINE IN mg/kg

NOTES:
- MTCA = MODEL TOXICS CONTROL ACT.
- ONLY RESULTS IN EXCEEDANCE OF THE MTCA METHOD A CLEANUP LEVEL ARE SHOWN.
- BGS = BELOW GROUND SURFACE (IN FEET)
- MTCA CLEANUP LEVEL: TPHo = 2,000 mg/kg
- DATA IN GRAY NOT USED IN CONTOURING.

SOURCE: COLES & ASSOCIATES LLC (2010), PRC ENVIRONMENTAL MANAGEMENT, INC. (1996) AND VARIOUS ECOLOGY AND EPA DOCUMENTS FROM THE 1980'S. COLES & ASSOCIATES LLC FIGURE 5 SITE DIAGRAM OF FUEL PROCESSORS DATED 5/15/13.

figure 15

TPHo IN SOIL ISOCONCENTRATION CONTOUR MAP - >6 FEET BGS
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

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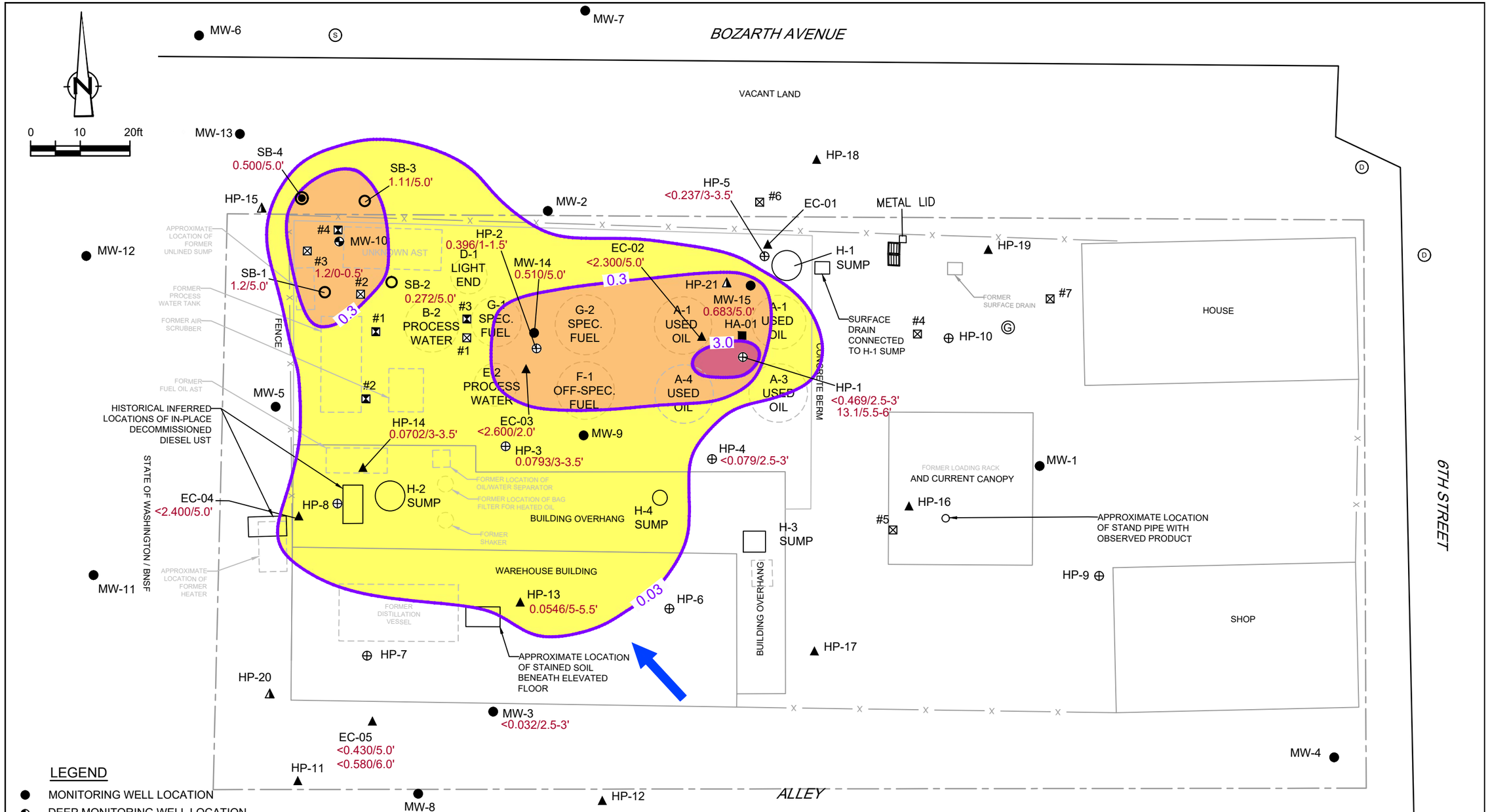

LEGEND

- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- HYDROPROBE LOCATION
- PROBE LOCATION
- HAND AUGER LOCATION
- DEEP PROBE LOCATION
- SOIL BORING LOCATION
- DEEP SOIL BORING LOCATION
- ASSUMED LOCATION OF SOIL SAMPLE COLLECTED ON 16 APRIL 1985 FOR RFA
- ASSUMED LOCATION OF SOIL SAMPLE COLLECTED ON 02 APRIL 1986 FOR RFA
- APPROXIMATE LOCATION OF FORMER ABOVEGROUND STORAGE TANK
- STORMWATER MANHOLE
- SANITARY MANHOLE
- APPROXIMATE LOCATION OF GASOLINE SURFACE LID
- FENCE LINE
- PROPERTY BOUNDARY LINE
- STORMWATER CATCH BASIN
- MEASURED GROUNDWATER FLOW DIRECTION
- 1.2/0-0.5' BENZENE CONCENTRATION IN MILLIGRAMS PER KILOGRAM (mg/kg)/DEPTH IN FEET
- —3.0— BENZENE ISOCONCENTRATION CONTOUR LINE IN mg/kg

NOTES:
- MTCA = MODEL TOXICS CONTROL ACT.
- ONLY RESULTS IN EXCEEDANCE OF THE MTCA METHOD A CLEANUP LEVEL ARE SHOWN.
- BGS = BELOW GROUND SURFACE (IN FEET)
- MTCA CLEANUP LEVEL: BENZENE = 0.03 mg/kg

SOURCE: COLES & ASSOCIATES LLC (2010), PRC ENVIRONMENTAL MANAGEMENT, INC. (1996) AND VARIOUS ECOLOGY AND EPA DOCUMENTS FROM THE 1980'S. COLES & ASSOCIATES LLC FIGURE 5 SITE DIAGRAM OF FUEL PROCESSORS DATED 5/15/13.

figure 16

BENZENE IN SOIL ISOCONCENTRATION CONTOUR MAP 0 TO 6 FEET BGS
FUEL PROCESSORS FACILITY
701 BOZARTH AVENUE
Woodland, Washington

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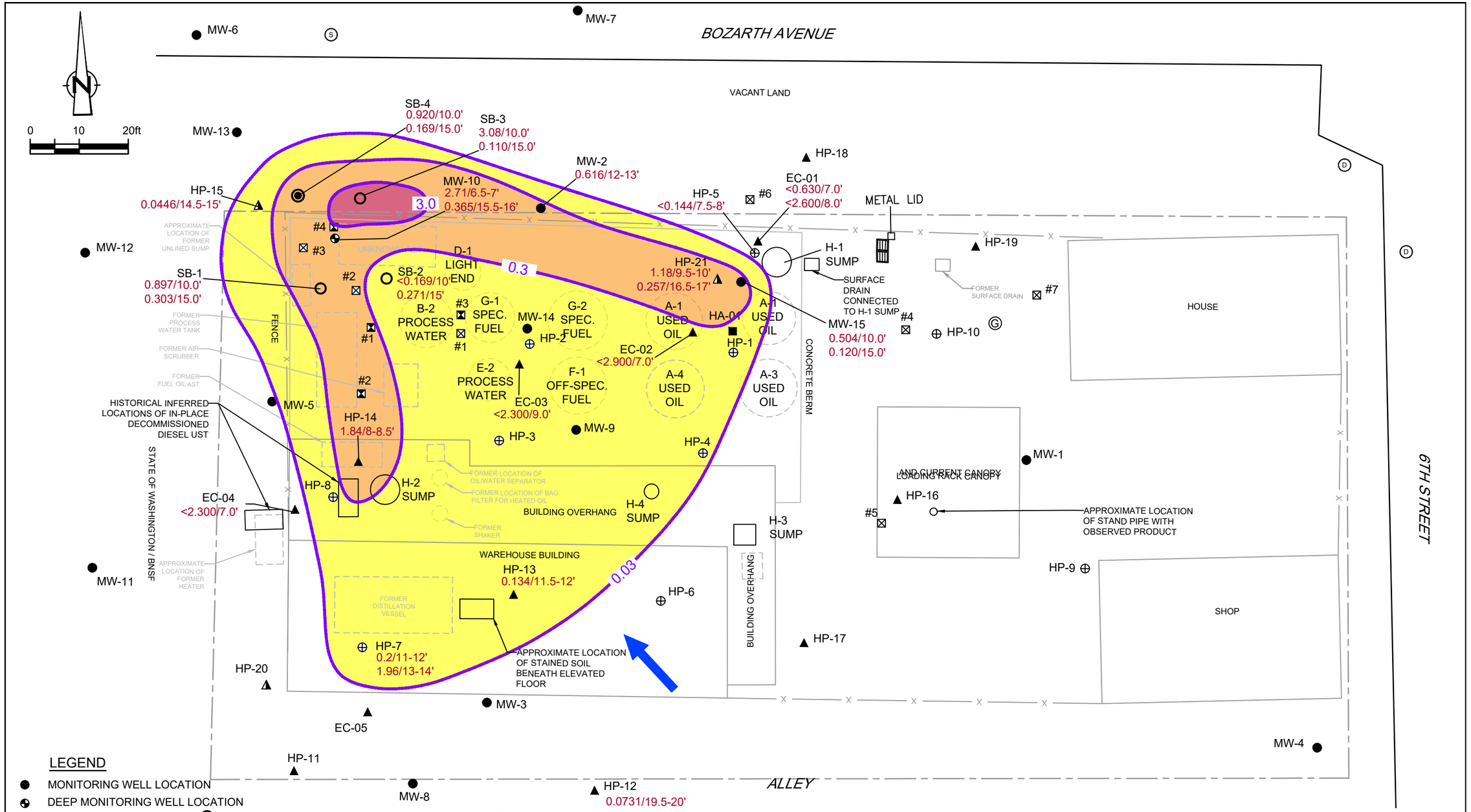

LEGEND

- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- HYDROPROBE LOCATION
- PROBE LOCATION
- HAND AUGER LOCATION
- DEEP PROBE LOCATION
- SOIL BORING LOCATION
- DEEP SOIL BORING LOCATION
- ASSUMED LOCATION OF SOIL SAMPLE COLLECTED ON 16 APRIL 1985 FOR RFA
- ASSUMED LOCATION OF SOIL SAMPLE COLLECTED ON 02 APRIL 1986 FOR RFA
- APPROXIMATE LOCATION OF FORMER ABOVEGROUND STORAGE TANK
- STORMWATER MANHOLE
- SANITARY MANHOLE
- APPROXIMATE LOCATION OF GASOLINE SURFACE LID
- FENCE LINE
- PROPERTY BOUNDARY LINE
- STORMWATER CATCH BASIN
- MEASURED GROUNDWATER FLOW DIRECTION
- 0.134/11.5-12' BENZENE CONCENTRATION IN MILLIGRAMS PER KILOGRAM (mg/kg)/DEPTH IN FEET
- 3.0 BENZENE ISOCONCENTRATION CONTOUR LINE IN mg/kg

SOURCE: COLES & ASSOCIATES LLC (2010), PRC ENVIRONMENTAL MANAGEMENT, INC. (1996) AND VARIOUS ECOLOGY AND EPA DOCUMENTS FROM THE 1980'S. COLES & ASSOCIATES LLC FIGURE 5 SITE DIAGRAM OF FUEL PROCESSORS DATED 5/15/13.

NOTES:
- MTCA = MODEL TOXICS CONTROL ACT.
- ONLY RESULTS IN EXCEEDANCE OF THE MTCA METHOD A CLEANUP LEVEL ARE SHOWN.
- BGS = BELOW GROUND SURFACE (IN FEET)
- MTCA CLEANUP LEVEL: BENZENE = 0.03 mg/kg

figure 17

BENZENE IN SOIL ISOCONCENTRATION CONTOUR MAP >6 FEET BGS FUEL PROCESSORS FACILITY 701 BOZARTH AVENUE *Woodland, Washington*

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Tables

Table 1

Summary of Soil Analytical Data
Fuel Processors Facility
701 Bozarth Avenue
Woodland, Washington

				Hydrocarbons			Volatile Organic Compounds														Naphthalenes							
Sample ID	**Consultant**	**Date**	**Sample Depth**	**TPHg**	**TPHd**	**TPHo**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**TCE**	**PCE**	**cis-1,2-DCE**	**1,1-DCA**	**1,1,2,2-tetrachloroethane**	**1,3,5-Trimethylbenzene**	**1,2,4-Trichlorobenzene**	**1,2-Dichlorobenzene**	**1,4-Dichlorobenzene**	**Vinyl Chloride**	**Naphthalene**	**1-Methyl-naphthalene**	**2-Methyl-naphthalene**	**Total Naphthalenes**	**Lead**	**benzo(a)pyrene**	**Total cPAHs - TEF**	**PCBs**
Model Toxics Control Act Method A Cleanup Level				30/100	2000	2000	0.03	7	6	9	0.03	0.05	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	5	250	0.1	0.1	1
Model Toxics Control Act Method B Cleanup Level (protective of GW - vadose zone soil)													0.08	0.0501	0.00123	NE	0.563	7.03	1.24	0.00167								
Model Toxics Control Act Method B Cleanup Level (protective of GW - saturated soil)													0.00515	0.00246	0.00008	NE	0.0294	0.399	0.0677	0.0000885								
			ft bgs	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*
#1 - Transfer Rack - surface	*EPA*	04/1985	Surface	---	---	---	---	---	---	---	**<0.1**	**0.1 J**	---	<0.100	---	---	---	---	---	---	---	---	---	---	77.3	---	---	---
#1 - Transfer Rack - 2-3	*EPA*	04/1985	2-3	---	---	---	---	---	---	---	<0.01	0.01	---	<0.010	---	---	---	---	---	---	---	---	---	---	89.5	---	---	---
#2 - Raw Heating Tank - surface	*EPA*	04/1985	Surface	---	---	---	---	---	---	---	**<0.1**	**0.14**	---	<0.100	---	---	---	---	---	---	---	---	---	---	132	---	---	---
#2 - Raw Heating Tank - 2-3	*EPA*	04/1985	2-3	---	---	---	---	---	---	---	**0.1 J**	**0.33**	---	<0.100	---	---	---	---	---	---	---	---	---	---	44.6	---	---	---
#3 - Vertical Storage Tank - surface	*EPA*	04/1985	Surface	---	---	---	---	---	---	---	**0.1 J**	**0.235**	---	<0.100	---	---	---	---	---	---	---	---	---	---	**371**	---	---	---
#3 - Vertical Storage Tank - 2-3	*EPA*	04/1985	2-3	---	---	---	---	---	---	---	**0.049**	**0.064**	---	<0.010	---	---	---	---	---	---	---	---	---	---	**1,388**	---	---	---
#4 - Empty Transfer Tank - surface	*EPA*	04/1985	Surface	---	---	---	---	---	---	---	**7.04**	**2.34**	---	<0.100	---	---	---	---	---	---	---	---	---	---	211	---	---	---
#1 - West of Tank Farm - surface	*EPA*	4/2/1986	0-0.5	---	---	---	<0.011	0.001 J	<0.011	<0.011	---	0.0023 J	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.200**	---	---
#1 - West of Tank Farm - 5	*EPA*	4/2/1986	5	---	---	---	<0.0092	<0.0092	<0.0092	<0.0092	---	0.028	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.200**	---	---
#2 - West of Tank Farm - surface	*EPA*	4/2/1986	0-0.5	---	---	---	<0.0095	0.001 J	<0.0095	<0.0095	---	**3.4**	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.300**	---	---
#2 - West of Tank Farm - 5	*EPA*	4/2/1986	5	---	---	---	0.0012 J	0.0011 J	<0.010	<0.010	---	<0.010	---	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---
#3 - North of Former Sump - surface	*EPA*	4/2/1986	0-0.5	---	---	---	**1.2**	**30**	1.8	**74**	---	**83**	---	---	---	---	---	---	---	---	---	---	---	---	---	0.100	---	---
#3 - North of Former Sump - 5	*EPA*	4/2/1986	5	---	---	---	<0.0085	<0.0085	<0.0085	<0.0085	---	**0.25**	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.030	---	---
#4 - North of Loading Rack - surface	*EPA*	4/2/1986	0-0.5	---	---	---	<0.0091	<0.0091	<0.0091	<0.0091	---	0.0031 J	---	---	---	---	---	---	---	---	---	---	---	---	---	0.003	---	---
#4 - North of Loading Rack - 5	*EPA*	4/2/1986	5	---	---	---	<0.0098	<0.0098	<0.0098	<0.0098	---	<0.0098	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.002	---	---
#5 - South of Loading Rack - surface	*EPA*	4/2/1986	0-0.5	---	---	---	<0.0078	0.0017 J	<0.0078	<0.0038	---	0.011	---	---	---	---	---	---	---	---	---	---	---	---	---	**0.400**	---	---
#5 - South of Loading Rack - 5	*EPA*	4/2/1986	5	---	---	---	<0.0089	<0.0089	<0.0089	<0.0089	---	<0.0089	---	---	---	---	---	---	---	---	---	---	---	---	---	0.060	---	---
#6 - Background - surface	*EPA*	4/2/1986	0-0.5	---	---	---	<0.0093	<0.0093	<0.0093	<0.0093	---	<0.0093	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.001	---	---
#7 - Waste Pile - surface	*EPA*	4/2/1986	0-0.5	---	---	---	<0.0087	0.68	<0.0087	<0.0087	---	**0.68**	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.050	---	---
MW-1-1	Coles & Associates, LLC	09/2008	1-1.5	**966**	**18,100**	<1,230	<0.03	<0.236	2.69	1.18	---	**<0.059**	<0.059	---	---	1.280	<0.236	<0.059	<0.059	NA	8.5	---	---	---	---	<0.082	0.010	<0.016
MW-1-5.5	Coles & Associates, LLC	09/2008	5.5-6	<27	173	<77	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	1.36	---	---	---
MW-1-14	Coles & Associates, LLC	09/2008	14-15	<22	54.8	<82	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
MW-2-3	Coles & Associates, LLC	09/2008	3-3.5	<22	<53	<105	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	<0.016
MW-2-6	Coles & Associates, LLC	09/2008	6-6.5	<21	<55	<111	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
MW-2-12	Coles & Associates, LLC	09/2008	12-13	<29	<73	<145	**0.616**	<0.193	0.935	0.268	---	<0.048	**<0.048**	---	---	<0.097	**<0.193**	<0.048	<0.048	NA	<0.483	---	---	---	---	---	---	---
MW-3-2.5	Coles & Associates, LLC	09/2008	2.5-3	**434**	**2,420**	103	<0.032	<0.255	0.261	0.546	---	**<0.064**	<0.064	---	---	0.803	<0.255	<0.064	<0.064	NA	1.78	---	---	---	3.67	<0.039	0	---
MW-3-5	Coles & Associates, LLC	09/2008	5-5.5	<21	<53	<106	<0.022	<0.174	<0.044	<0.131	---	<0.044	<0.044	---	---	<0.087	<0.044	<0.001	<0.001	NA	<0.436	---	---	---	---	---	---	---
MW-3-13.5	Coles & Associates, LLC	09/2008	13.5-14	<22	<56	<113	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-1-2.5	Coles & Associates, LLC	09/2008	2.5-3	**1,910**	**3,150**	**2,920**	**<0.469**	<3.75	**14.2**	**104.2**	---	**<0.938**	**<0.938**	---	---	24.4	<3.75	<0.938	<0.938	NA	**16.0**	---	---	---	---	---	---	---
HP-1-5.5	Coles & Associates, LLC	09/2008	5.5-6	**10,500**	**23,800**	**16,400**	**13.1**	**391**	**155**	**837**	---	**0.443**	**<0.369**	---	---	111.0	**2.64**	**2.69**	**1.16**	NA	**113.0**	---	---	---	8.15	**0.477**	**0.550**	0.614
HP-1-14	Coles & Associates, LLC	09/2008	14-15	<27	<67	<135	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-2-1	Coles & Associates, LLC	09/2008	1-1.5	**5,050**	**5,590**	1,280	**0.396**	5.6	**44.3**	**323.5**	---	**<0.405**	**<0.405**	---	---	73.9	**<1.62**	<1.21	<0.405	NA	**48.3**	---	---	---	16	**<0.118**	0.016	<0.20
HP-2-7.5	Coles & Associates, LLC	09/2008	7.5-8	15.5	<52	<104	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-2-14.5	Coles & Associates, LLC	09/2008	14.5-15	<24	<60	<121	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-3-3	Coles & Associates, LLC	09/2008	3-3.5	7.58	124	241	**0.0793**	<0.673	0.0576	0.33	---	<0.042	<0.042	---	---	<0.084	<0.167	<0.042	<0.042	NA	<0.417	---	---	---	---	---	---	---
HP-3-7.5	Coles & Associates, LLC	09/2008	7.5-8	<20	<51	<101	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-3-13.5	Coles & Associates, LLC	09/2008	13.5-14	<28	<69	<138	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-4-2.5	Coles & Associates, LLC	09/2008	2.5-3	**242**	**10,300**	**12,200**	**<0.079**	<0.63	1.79	**11.47**	---	**<0.157**	**<0.157**	---	---	3.41	**<0.630**	<0.157	<0.157	NA	**13.6**	---	---	---	4.54	**0.370**	**0.466**	0.126
HP-4-7	Coles & Associates, LLC	09/2008	7-7.5	9.73	<45	<89	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-4-14	Coles & Associates, LLC	09/2008	14-14.5	<29	<72	<144	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-5-3	Coles & Associates, LLC	09/2008	3-3.5	**2,470**	**4,380**	**3,850**	**<0.237**	<1.9	1.04	5.95	---	**<0.475**	**<0.288**	---	---	24.1	**<1.9**	<0.475	<0.475	NA	1.33	---	---	---	4	**<0.122**	0.0116	<0.022
HP-5-7.5	Coles & Associates, LLC	09/2008	7.5-8	**1,280**	**3,490**	**3,390**	**<0.144**	<0.001	<0.002	<0.003	---	NA	NA	---	---	<0.005	NA	<0.001	<0.001	NA	NA	---	---	---	---	---	---	---
HP-5-14	Coles & Associates, LLC	09/2008	14-14.5	<26	<66	<132	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-6-3.5	Coles & Associates, LLC	09/2008	3.5-4.5	<21	174	574	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-6-12	Coles & Associates, LLC	09/2008	12-13	20	603	499	<0.021	<0.168	0.858	0.13	---	<0.042	**<0.042**	---	---	0.119	**<0.168**	<0.042	<0.042	NA	<0.420	---	---	---	---	---	---	---
HP-6-12-DUP	Coles & Associates, LLC	09/2008	12-13	**467**	375	140	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-6-15	Coles & Associates, LLC	09/2008	15-16	**611**	<58	<116	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-7-0.5	Coles & Associates, LLC	09/2008	0.5-1	**172**	**21,600**	**68,800**	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	**7.76**	---	---	---	**645**	**1.92**	**2.13**	**11.6**
HP-7-11	Coles & Associates, LLC	09/2008	11-12	**128**	**13,500**	**33,700**	**0.2**	<0.321	0.151	**14.35**	---	**<0.080**	**<0.080**	---	---	0.814	**0.489**	<0.080	<0.080	NA	<0.801	---	---	---	---	---	---	---
HP-7-13	Coles & Associates, LLC	09/2008	13-14	**1,140**	**7,560**	**18,600**	**1.96**	4.23	**9.58**	**57.60**	---	**0.0941**	**<0.078**	---	---	15.4	**5.15**	**0.933**	**0.274**	NA	**23.7**	---	---	---	---	---	---	---
HP-8-0	Coles & Associates, LLC	09/2008	0-1	**998**	**17,800**	**41,800**	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	**18.6**	---	---	---	116	**1.75**	**2.15**	<0.084
HP-8-4	Coles & Associates, LLC	09/2008	4-4.5	<28	<69	<138	<0.022	<0.173	0.064	0.625	---	<0.043	<0.043	---	---	0.404	<0.173	<0.043	<0.043	NA	0.473	---	---	---	---	---	---	---
HP-8-15	Coles & Associates, LLC	09/2008	15-16	<24	<60	<119	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---

Table 1

Summary of Soil Analytical Data
Fuel Processors Facility
701 Bozarth Avenue
Woodland, Washington

				Hydrocarbons			Volatile Organic Compounds														Naphthalenes								
Sample ID	**Consultant**	**Date**	**Sample Depth**	**TPHg**	**TPHd**	**TPHo**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**TCE**	**PCE**	**cis-1,2-DCE**	**1,1-DCA**	**1,1,2,2-tetrachloroethane**	**1,3,5-Trimethylbenzene**	**1,2,4-Trichlorobenzene**	**1,2-Dichlorobenzene**	**1,4-Dichlorobenzene**	**Vinyl Chloride**	**Naphthalene**	**1-Methyl-naphthalene**	**2-Methyl-naphthalene**	**Total Naphthalenes**	**Lead**	**benzo(a)pyrene**	**Total cPAHs - TEF**	**PCBs**
Model Toxics Control Act Method A Cleanup Level				30/100	2000	2000	0.03	7	6	9	0.03	0.05	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	5	250	0.1	0.1	1
Model Toxics Control Act Method B Cleanup Level (protective of GW - vadose zone soil)													0.08	0.0501	0.00123	NE	0.563	7.03	1.24	0.00167								
Model Toxics Control Act Method B Cleanup Level (protective of GW - saturated soil)													0.00515	0.00246	0.00008	NE	0.0294	0.399	0.0677	0.0000885								
			ft bgs	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*
HP-9-3	Coles & Associates, LLC	09/2008	3-3.5	<21	<53	<105	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-9-7	Coles & Associates, LLC	09/2008	7-8	<58	<58	<116	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-9-14	Coles & Associates, LLC	09/2008	14-15	<24	<60	<120	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-10-2.5	Coles & Associates, LLC	09/2008	2.5-3	<22	<55	<110	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
HP-10-8	Coles & Associates, LLC	09/2008	8-8.5	<28	<70	<139	<0.020	<0.162	<0.040	<0.121	---	<0.040	**<0.040**	---	---	<0.081	**<0.162**	<0.040	**<0.040**	NA	<0.405	---	---	---	---	---	---	---
HP-10-13.5	Coles & Associates, LLC	09/2008	13.5-14	<28	<70	<139	---	---	---	---	---	---	---	---	---	---	---	---	---	NA	---	---	---	---	---	---	---	---
																	---											
EC-01-7	Coles & Associates, LLC	2/16/2010	7.0	<2.3	**4,000**	**4,300**	**<0.630**	<0.630	<0.630	<1.93	---	**<0.630**	---	---	---	---	---	**---**	**---**	**---**	0.0588	0.560	1.140	1.759	6.55	0.0187	0.0277	---
EC-01-8	Coles & Associates, LLC	2/16/2010	8.0	**78**	**5,300**	**57,000**	**<2.600**	<2.600	<2.600	**89**	---	**<2.6**	---	---	---	---	---	**---**	**---**	**---**	2.470	3.740	6.280	**12.490**	15.8	**0.247**	**0.374**	---
EC-02-5	Coles & Associates, LLC	2/16/2010	5.0	**140**	**13,500**	**49,000**	**<2.300**	5.5	**19**	**212**	---	**<2.3**	---	---	---	---	---	**---**	**---**	**---**	0.129	1.480	2.610	4.219	23.9	**0.216**	**0.294**	---
EC-02-7	Coles & Associates, LLC	2/16/2010	7.0	**59**	**7,300**	**21,000**	**<2.900**	**68**	**30**	**178**	---	**<2.9**	---	---	---	---	---	**---**	**---**	**---**	1.430	6.950	4.470	**12.850**	5.75	0.0483	0.0917	---
EC-03-2	Coles & Associates, LLC	2/16/2010	2.0	**46**	1,040	1,400	**<2.600**	<2.600	**6.1**	**67**	---	**<2.6**	---	---	---	---	---	**---**	**---**	**---**	0.200	0.854	1.360	2.414	7.54	0.0362	0.0540	---
EC-03-9	Coles & Associates, LLC	2/16/2010	9.0	<1.7	800	1,300	**<2.300**	<2.300	<2.3	<6.9	---	**<2.3**	---	---	---	---	---	**---**	**---**	**---**	0.038	0.324	0.543	0.905	1.82	0.0026	0.00474	---
EC-04-5	Coles & Associates, LLC	2/16/2010	5.0	**90**	**18,000**	**14,000**	**<2.400**	<2.400	1.7	**19**	---	**<2.4**	---	---	---	---	---	**---**	**---**	**---**	0.178	5.170	6.530	**11.878**	3.48	**0.264**	**0.362**	---
EC-04-7	Coles & Associates, LLC	2/16/2010	7.0	**73**	**19,000**	**12,000**	**<2.300**	<2.300	5.6	**25**	---	**<2.3**	---	---	---	---	---	**---**	**---**	**---**	0.190	4.110	5.560	**9.860**	2.67	0.0463	**0.103**	---
EC-05-5	Coles & Associates, LLC	2/16/2010	5.0	<0.16	<18	<40	**<0.430**	<0.430	<0.43	<1.29	---	**<0.430**	---	---	---	---	---	**---**	**---**	**---**	0.033	0.068	0.122	0.222	1.39	<0.00499	0.0003	---
EC-05-6	Coles & Associates, LLC	2/16/2010	6.0	<0.21	<21	<54	**<0.580**	<0.580	<0.58	<1.78	---	**<0.580**	---	---	---	---	---	**---**	**---**	**---**	0.00556	0.0123	0.0232	0.041	2.88	<0.00509	ND	---
HA-01-1	Coles & Associates, LLC	8/3/2010	1	**1,800**	---	---	---	---	---	---	---	---	---	**---**	**---**	---	---	---	---	---	---	---	---	---	---	---	---	---
HA-01-2	Coles & Associates, LLC	8/3/2010	2	**2,100**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
HA-01-3	Coles & Associates, LLC	8/3/2010	3	**680**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
HA-01-4	Coles & Associates, LLC	8/3/2010	4	**800**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
HA-01-5	Coles & Associates, LLC	8/3/2010	5	**550**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
HP-11-01 @ 3.5 -4	Coles & Associates, LLC	5/15/2015	3.5-4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.79	ND	---	ND
HP-11-02 @ 8-8.5	Coles & Associates, LLC	5/15/2015	8-8.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.78	ND	---	ND
HP-11-03 @ 11.5-12	Coles & Associates, LLC	5/15/2015	11.5-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.98	ND	---	ND
HP-12-01 @ 3.5-4	Coles & Associates, LLC	5/15/2015	3.5-4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.83	ND	---	ND
HP-12-02 @ 8.5-9	Coles & Associates, LLC	5/15/2015	8.5-9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.81	ND	---	ND
HP-12-03 @ 14.5-15	Coles & Associates, LLC	5/15/2015	14.5-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.21	ND	---	ND
HP-12-04 @ 19.5-20	Coles & Associates, LLC	5/15/2015	19.5-20	ND	ND	51.5	**0.0731**	ND	ND	0.3021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.18	ND	---	ND
HP-13-01 @ 0-0.5	Coles & Associates, LLC	5/14/2015	0-0.5	**140**	**5,480**	**23,300**	ND	ND	0.461	2.2662	ND	ND	ND	ND	ND	2.3	0.426	0.0425	ND	ND	2.07	21	35.9	**58.97**	99.6	ND	---	**17.9**
HP-13-02 @ 5-5.5	Coles & Associates, LLC	5/14/2015	5-5.5	ND	75	70.9	**0.0546**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.169	0.309	0.478	1.42	ND	---	ND
HP-13-03 @ 11.5-12	Coles & Associates, LLC	5/14/2015	11.5-12	ND	ND	ND	**0.134**	ND	0.0416	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0305	0.0672	0.0977	2.59	ND	---	ND
HP-13-Surface Sludge	Coles & Associates, LLC	5/14/2015	Surface	**977**	**50,900**	**367,000**	ND	ND	1.98	**25.3**	ND	ND	ND	ND	ND	8.55	ND	ND	ND	ND	21.5	75.7	99.6	**196.8**	**2,590**	**22.1**	**30.12**	ND
HP-14-01 @ 3-3.5	Coles & Associates, LLC	5/12/2015	3-3.5	ND	338	109	**0.0702**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.721	0.977	1.698	19.8	ND	---	ND
HP-14-02 @ 8-8.5	Coles & Associates, LLC	5/12/2015	8-8.5	**2,650**	**10,200**	**4,900**	**1.84**	ND	**6.71**	**66.975**	ND	ND	ND	ND	ND	30.4	ND	0.737	ND	ND	21.6	24	33.4	**79**	6.09	ND	---	0.1
HP-14-03 @ 12.5-13	Coles & Associates, LLC	5/13/2015	12.5-13	ND	368	198	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.034	0.401	0.494	0.929	1.82	ND	---	ND
HP-15-01 @ 6.5-7	Coles & Associates, LLC	5/13/2015	6.5-7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.56	ND	---	ND
HP-15-02 @ 8-8.5	Coles & Associates, LLC	5/13/2015	8-8.5	**5,000**	**2,300**	**2,100**	ND	ND	**7.98**	**37.6**	ND	ND	ND	ND	ND	74.3	ND	1.07	0.438	ND	27.1	10.7	16.3	**54.1**	3.15	ND	---	ND
HP-15-03 @ 14.5-15	Coles & Associates, LLC	5/13/2015	14.5-15	**33.8**	ND	ND	**0.0446**	ND	0.256	0.1645	ND	ND	ND	ND	ND	0.123	ND	0.0496	ND	ND	0.576	0.0871	0.125	0.7881	3.65	ND	---	ND
HP-15-04 @ 16.5-17	Coles & Associates, LLC	5/13/2015	16.5-17	**1,190**	246	296	ND	ND	2.72	0.4143	ND	ND	ND	ND	ND	0.508	ND	ND	ND	ND	3.85	2.1	3.07	**9.02**	1.92	ND	---	ND
HP-15-05 @ 29.5-30	Coles & Associates, LLC	5/13/2015	29.5-30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.55	ND	---	ND
HP-16-01 @ 3-3.5	Coles & Associates, LLC	5/14/2015	3-3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0814	0.0815	0.1629	1.38	ND	---	ND
HP-16-02 @ 8-8.5	Coles & Associates, LLC	5/14/2015	8-8.5	**132**	190	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.456	0.657	1.113	4.2	ND	---	ND
HP-16-03 @ 13-13.5	Coles & Associates, LLC	5/14/2015	13-13.5	**33.8**	68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.215	0.312	0.527	4.05	ND	---	ND
HP-16-04 @ 17-17.5	Coles & Associates, LLC	5/15/2015	17-17.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0341	0.0551	0.0892	2.51	ND	---	ND
HP-17-01 @ 3-3.5	Coles & Associates, LLC	5/14/2015	3-3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.82	ND	---	ND
HP-17-02 @ 9-9.5	Coles & Associates, LLC	5/14/2015	9-9.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND	---	ND
HP-17-03 @ 14.5-15	Coles & Associates, LLC	5/14/2015	14.5-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.43	ND	---	ND
HP-18-01 @ 4-4.5	Coles & Associates, LLC	5/13/2015	4-4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.44	ND	---	ND
HP-18-02 @ 7.5-8	Coles & Associates, LLC	5/13/2015	7.5-8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	ND	---	ND
HP-18-03 @ 12.5-13	Coles & Associates, LLC	5/13/2015	12.5-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.013	0.0132	0.0262	3.24	ND	---	ND
HP-19-01 @ 3.5-4	Coles & Associates, LLC	5/14/2015	3.5-4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.56	ND	---	ND
HP-19-02 @ 8.5-9	Coles & Associates, LLC	5/14/2015	8.5-9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.82	ND	---	ND
HP-19-03 @ 14.5-15	Coles & Associates, LLC	5/14/2015	14.5-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.54	ND	---	ND

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Summary of Soil Analytical Data
Fuel Processors Facility
701 Bozarth Avenue
Woodland, Washington

				Hydrocarbons			Volatile Organic Compounds													Naphthalenes							
Sample ID	**Consultant**	**Date**	**Sample Depth**	**TPHg**	**TPHd**	**TPHo**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**TCE**	**PCE**	**cis-1,2-DCE**	**1,1-DCA**	**1,1,2,2-tetrachloroethane**	**1,3,5-Trimethylbenzene**	**1,2,4-Trichlorobenzene**	**1,2-Dichlorobenzene**	**1,4-Dichlorobenzene**	**Vinyl Chloride**	**Naphthalene**	**1-Methyl-naphthalene**	**2-Methyl-naphthalene**	**Total Naphthalenes**	**Lead**	**benzo(a) pyrene**	**Total cPAHs - TEF**	**PCBs**
Model Toxics Control Act Method A Cleanup Level				30/100	2000	2000	0.03	7	6	9	0.03	0.05	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	5	250	0.1	0.1	1
Model Toxics Control Act Method B Cleanup Level (protective of GW - vadose zone soil)													0.08	0.0501	0.00123	NE	0.563	7.03	1.24	0.00167								
Model Toxics Control Act Method B Cleanup Level (protective of GW - saturated soil)													0.00515	0.00246	0.00008	NE	0.0294	0.399	0.0677	0.0000885								
			ft bgs	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*
HP-20-01 @ 1.5-2	Coles & Associates, LLC	5/12/2015	1.5-2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.3	ND	---	ND
HP-20-02 @ 6.5-7	Coles & Associates, LLC	5/12/2015	6.5-7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.64	ND	---	ND
HP-20-03 @ 16.5-17	Coles & Associates, LLC	5/12/2015	16.5-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.51	ND	---	ND
HP-20-04 @ 24.5-25	Coles & Associates, LLC	5/12/2015	24.5-25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.675	ND	---	ND
HP-20-05 @ 29.5-30	Coles & Associates, LLC	5/12/2015	29.5-30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.565	ND	---	ND
HP-21-01 @ 4.5-5	Coles & Associates, LLC	5/11/2015	4.5-5	**1,050**	843	723	ND	ND	**12.1**	**41.77**	ND	ND	ND	ND	ND	17.8	ND	0.414	ND	ND	9.24	4.98	7.72	**21.94**	4.83	ND	---	0.0242
HP-21-02 @ 9.5-10	Coles & Associates, LLC	5/11/2015	9.5-10	**2,680**	**4,850**	**3,120**	**1.18**	**121**	**55**	**99.89**	ND	ND	ND	ND	ND	27.9	ND	0.722	0.284	ND	21.2	13.3	21.4	**55.9**	2.45	0.0522	0.063	0.262
HP-21-03 @ 16.5-17	Coles & Associates, LLC	5/11/2015	16.5-17	20.8	ND	ND	**0.257**	ND	0.772	**102.39**	ND	ND	ND	ND	ND	0.393	ND	ND	ND	ND	0.482	0.484	0.0626	1.0286	2.94	ND	---	ND
HP-21-04 @ 24.5-25	Coles & Associates, LLC	5/11/2015	24.5-25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56	ND	---	ND
HP-21-05 @ 29.5-30	Coles & Associates, LLC	5/11/2015	29.5-30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.47	ND	---	ND
MW-04-01 @ 3.5-4	Coles & Associates, LLC	5/11/2015	3.5-4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.76	ND	---	ND
MW-04-02 @ 8.5-9	Coles & Associates, LLC	5/11/2015	8.5-9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.41	ND	---	ND
MW-04-03 @ 14.5-15	Coles & Associates, LLC	5/11/2015	14.5-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.54	ND	---	ND
MW-05-01 @ 2.5-3	Coles & Associates, LLC	5/12/2015	2.5-3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.80	ND	---	ND
MW-05-02 @ 4.5-5	Coles & Associates, LLC	5/12/2015	4.5-5	**930**	970	667	ND	ND	1.22	3.432	ND	ND	ND	**0.4**	6.65	ND	ND	ND	ND	ND	ND	6.2	11.6	**17.8**	2.07	ND	---	ND
MW-05-03 @ 13.5-14	Coles & Associates, LLC	5/12/2015	13.5-14	19.3	197	177	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.193	0.373	0.566	1.61	ND	---	ND
MW-06-01 @ 5.5-6	Coles & Associates, LLC	5/13/2015	5.5-6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24.7	ND	---	ND
MW-06-02 @ 11.5-12	Coles & Associates, LLC	5/13/2015	11.5-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.79	ND	---	ND
MW-06-03 @ 13.5-14	Coles & Associates, LLC	5/13/2015	13.5-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.74	ND	---	ND
MW-07-01 @ 6.5-7	Coles & Associates, LLC	5/13/2015	6.5-7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.54	ND	---	ND
MW-07-02 @ 9-9.5	Coles & Associates, LLC	5/13/2015	9-9.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.85	ND	---	ND
MW-07-03 @ 13.5-14	Coles & Associates, LLC	5/13/2015	13.5-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.22	ND	---	ND
MW-08-01 @ 2.5-3	Coles & Associates, LLC	5/14/2015	2.5-3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.05	ND	---	ND
MW-08-02 @ 9-9.5	Coles & Associates, LLC	5/14/2015	9-9.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.78	ND	---	ND
MW-08-03 @ 14-14.5	Coles & Associates, LLC	5/14/2015	14-14.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.15	ND	---	ND
MW-09-01 @ 2-2.5	Coles & Associates, LLC	5/11/2015	2-2.5	**311**	**7,760**	**9,180**	ND	ND	0.882	0.78	ND	ND	ND	ND	ND	1.44	ND	ND	ND	ND	7.55	19	24.4	**50.95**	5.22	**0.161**	**0.197**	0.0726
MW-09-02 @ 6.5-7	Coles & Associates, LLC	5/11/2015	6.5-7	**110**	72.8	70.7	ND	ND	ND	0.197	ND	ND	ND	ND	ND	0.719	ND	ND	ND	ND	ND	0.133	0.19	0.323	2.47	ND	---	ND
MW-09-03 @ 14.5-15	Coles & Associates, LLC	5/11/2015	14.5-15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.035	0.0521	0.0871	2.34	ND	---	ND
MW-10-01 @ 2-2.5	Coles & Associates, LLC	5/12/2015	2-2.5	**4,290**	**6,750**	**9,620**	ND	6.79	**24.3**	**140.07**	ND	ND	ND	ND	**0.675**	83.9	ND	2.03	ND	ND	107	96.5	146	**349.5**	15.60	ND	---	0.1909
MW-10-02 @ 6.5-7	Coles & Associates, LLC	5/12/2015	6.5-7	**3,650**	**4,890**	**4,060**	**2.71**	**128**	**61.5**	**338**	ND	ND	ND	ND	ND	64.4	ND	2.13	0.576	ND	107	76.8	127	**310.8**	7.22	ND	---	0.1402
MW-10-03 @ 15.5-16	Coles & Associates, LLC	5/12/2015	15.5-16	ND	ND	ND	**0.365**	ND	0.199	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.101	0.0564	0.0843	0.2417	2.27	ND	---	ND
MW-10-05 @ 29.5-30	Coles & Associates, LLC	5/12/2015	29.5-30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.54	ND	---	ND
S-060866-8818-DT-MW-11 5.0	GHD	8/8/2018	5.0	13.9	<4.73	<4.73	<0.00222	<0.00222	<0.00222	<0.00666	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8818-DT-MW-11 10.0	GHD	8/8/2018	10.0	<7.96	<5.30	5.61	<0.00299	<0.00299	<0.00299	<0.00897	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8818-DT-MW-11 15.0	GHD	8/8/2018	15.0	<7.49	<5.19	6.08	<0.00235	<0.00235	<0.00235	<0.00705	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8818-DT-MW-12 5.0	GHD	8/8/2018	5.0	<7.14	5.50	17.7	0.00218	<0.00205	<0.00205	<0.00614	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8818-DT-MW-12 10.0	GHD	8/8/2018	10.0	<9.29	<5.82	6.12	<0.00256	<0.00256	<0.00256	<0.00769	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8818-DT-MW-12 15.0	GHD	8/8/2018	15.0	<7.30	<5.21	<5.21	<0.00217	<0.00217	<0.00217	<0.00651	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8818-DT-MW-13 5.0	GHD	8/8/2018	5.0	<8.18	<5.40	<5.40	<0.00212	<0.00212	<0.00212	<0.00637	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8818-DT-MW-13 10.0	GHD	8/8/2018	10.0	<9.16	<5.58	<5.58	0.00288	<0.00241	<0.00241	<0.00724	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8818-DT-MW-13 15.0	GHD	8/8/2018	15.0	<8.76	<5.54	5.65	<0.00255	<0.00255	<0.00255	<0.00764	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8918-DT-MW-14 5.0	GHD	8/9/2018	5.0	**2,140**	**6,640**	1,880	**0.0510**	0.0449	3.67	0.566	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8918-DT-MW-14 10.0	GHD	8/9/2018	10.0	**1,670**	<5.75	11.8	0.00749	0.00424	0.00720	0.199	<0.00242	<0.00242	<0.00242	<0.00242	**<0.00242**	0.0354	0.119	<0.00242	<0.00242	**<0.00242**	<0.00604	**---**	**---**	**---**	**---**	**---**	**---**	**---**
S-060866-8918-DT-MW-14 15.0	GHD	8/9/2018	15.0	16.0	<5.77	<5.77	0.00770	<0.00248	<0.00248	<0.00745	<0.00248	<0.00248	<0.00248	<0.00248	**<0.00248**	<0.00248	<0.00248	<0.00248	<0.00248	**<0.00248**	<0.00621	**---**	**---**	**---**	**---**	**---**	**---**	**---**

Table 1

Summary of Soil Analytical Data
Fuel Processors Facility
701 Bozarth Avenue
Woodland, Washington

				Hydrocarbons			Volatile Organic Compounds													Naphthalenes							
Sample ID	**Consultant**	**Date**	**Sample Depth**	**TPHg**	**TPHd**	**TPHo**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**TCE**	**PCE**	**cis-1,2-DCE**	**1,1-DCA**	**1,1,2,2-tetrachloroethane**	**1,3,5-Trimethylbenzene**	**1,2,4-Trichlorobenzene**	**1,2-Dichlorobenzene**	**1,4-Dichlorobenzene**	**Vinyl Chloride**	**Naphthalene**	**1-Methyl-naphthalene**	**2-Methyl-naphthalene**	**Total Naphthalenes**	**Lead**	**benzo(a) pyrene**	**Total cPAHs - TEF**	**PCBs**
Model Toxics Control Act Method A Cleanup Level				30/100	2000	2000	0.03	7	6	9	0.03	0.05	NE	NE	NE	NE	NE	NE	NE	NE		NE	NE	5	250	0.1	0.1	1
Model Toxics Control Act Method B Cleanup Level (protective of GW - vadose zone soil)													0.08	0.0501	0.00123	NE	0.563	7.03	1.24	0.00167								
Model Toxics Control Act Method B Cleanup Level (protective of GW - saturated soil)													0.00515	0.00246	0.00008	NE	0.0294	0.399	0.0677	0.0000885								
			ft bgs	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*	*mg/kg*
S-060866-8918-DT-MW-15 5.0	GHD	8/9/2018	5.0	**3,700**	**4,130**	**2,410**	**0.683**	0.695	**198**	**344**	---	---	---	---	---	---	---	---	---	---	---	**---**	**---**	**---**	**---**	**---**	**---**	**---**
S-060866-8918-DT-MW-15 10.0	GHD	8/9/2018	10.0	**3,110**	**6,210**	**3,230**	**0.504**	0.233	**80.9**	**288**	**<0.152**	**<0.152**	**<0.152**	**<0.152**	**<0.152**	65.3	**1.07**	1.23	0.538	**<0.152**	26.0	**---**	**---**	**---**	**---**	**---**	**---**	**---**
S-060866-8918-DT-MW15 15.0	GHD	8/9/2018	15.0	**46.1**	<5.54	8.45	**0.120**	<0.00233	0.931	2.17	<0.00233	<0.00233	<0.00233	<0.00233	**<0.00233**	0.152	<0.00233	0.00379	<0.00233	**<0.00233**	0.0502	**---**	**---**	**---**	**---**	**---**	**---**	**---**
S-060866-8918-DT-SB-1 5.0	GHD	8/9/2018	5.0	**2,860**	**3,130**	1,280	**0.0432**	0.0659	**21.7**	**125**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8918-DT-SB-1 10.0	GHD	8/9/2018	10.0	**6,860**	**3,740**	983	**0.897**	**112**	**74.1**	**462**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8918-DT-SB-1 15.0	GHD	8/9/2018	15.0	**970**	**3,100**	586	**0.303**	**34.1**	**16.7**	**115**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8918-DT-SB-2 5.0	GHD	8/9/2018	5.0	**2,710**	709	340	**0.272**	<0.185	**18.0**	**29.6**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8918-DT-SB-2 10.0	GHD	8/9/2018	10.0	**1,040**	1,350	495	**<0.169**	<0.169	**6.36**	**10.8**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8918-DT-SB-2 15.0	GHD	8/9/2018	15.0	28.0	<5.35	6.88	**0.271**	<0.00222	0.962	0.287	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8818-DT-SB-3 5.0	GHD	8/8/2018	5.0	**5,750**	**9,040**	**3,480**	**1.11**	**125**	**90.9**	**603**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8818-DT-SB-3 10.0	GHD	8/8/2018	10.0	**25,700**	**5,220**	1,430	**3.08**	**278**	**184**	**1040**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8818-DT-SB-3 15.0	GHD	8/8/2018	15.0	**1,410**	779	290	**0.110**	5.78	3.95	**28.9**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8918-DT-SB-4 5.0	GHD	8/9/2018	5.0	**18,500**	**15,500**	**7,160**	**0.500**	**75.4**	**153**	**1080**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8918-DT-SB-4 10.0	GHD	8/9/2018	10.0	**7,700**	**5,470**	1,920	**0.920**	**78.7**	**83.1**	**510**	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-060866-8918-DT-SB-4 15.0	GHD	8/9/2018	15.0	**88.8**	16.0	14.6	**0.169**	0.233	1.45	8.92	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:

Select analytes with concentrations detected above laboratory method reporting limits (MRL) and that have established cleanup levels per the Department of Ecology Cleanup Levels and are listed. Refer to the laboratory report for a full list of analytes.
Concentrations in bold type indicate the analyte was detected above the Model Toxics Control Act (MTCA) Method A cleanup level
All results in milligrams per kilogram (mg/kg) unless otherwise indicated.

bgs = below ground surface (in feet)
cPAHs = carcinogenic polycyclic aromatic hydrocarbons
DCA = Dichloroethane
DCE = Dichloroethene
J = estimated value
NA = Not available
ND = No detected at or above the laboratory reporting limit
NE - MTCA Method A cleanup level is not established
PCE = Tetrachloroethene
PCBs = Polychlorinated biphenyls
TCE = Trichloroethene
TEF = Toxicity equivalency factor
TPHg = Total petroleum hydrocarbons as gasoline
TPHd = Total petroleum hydrocarbons as diesel
TPHo = Total petroleum hydrocarbons as motor oil
<x = Not detected at laboratory reporting limit x
-- = Not analyzed or not available

Table 2

Summary of Groundwater Monitoring Data
Fuel Processors Facility
701 Bozarth Avenue
Woodland, Washington

						Hydrocarbons			Volatile Organic Compounds										Naphthalenes				Lead					
Sample ID	**Date**	**TOC**	**DTW**	**SPH Thickness**	**GWE**	**TPHg**	**TPHd**	**TPHo**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**PCE**	**TCE**	**cis-1,2-DCE**	**1,1-DCA**	**1,4-Dichlorobenzene**	**1,3,5-Trimethylbenzene**	**Vinyl Chloride**	**Naphthalene**	**1-Methylnaphthalene**	**2-Methylnapthalene**	**Total Naphthalene**	**Total**	**Dissolved**	**Arsenic**	**benzo(a) pyrene**	**total cPAHs - TEF**	**PCBs**
Model Toxics Control Act Method A Cleanup Level						800/1000	500	500	5	1,000	700	1,000	5	5	NE	NE	NE	NE	0.2	NE	NE	NE	160	15	15	5	0.1	0.1	0.1
Model Toxics Control Act Method B Non Cancer Cleanup Level															16	1,600	560	80											
Model Toxics Control Act Method B Cancer Cleanup Level																7.68	8.10												
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
HP-1	09/2008	---	---	---	---	**12,200**	**3,860**	**1,080**	**1,050**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HP-2	09/2008	---	---	---	---	**5,680**	---	<490	**384**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HP-3	09/2008	---	---	---	---	**2,370**	**5,180**	**1,810**	**190**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HP-4	09/2008	---	---	---	---	**4,240**	**3,920**	**643**	**78**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HP-5	09/2008	---	---	---	---	**35,500**	**4,840**	486	**297**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HP-6	09/2008	---	---	---	---	382	**1,480**	**3,470**	4.46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HP-7	09/2008	---	---	---	---	**4,820**	**12,200**	**35,900**	**66.3**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HP-8	09/2008	---	---	---	---	**3,840**	**3,880**	**4,120**	**19.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HP-9	09/2008	---	---	---	---	<100	<240	<480	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HP-10	09/2008	---	---	---	---	<100	<240	<470	0.72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HP-11	5/15/15	---	---	---	---	<100	<190	<381	<0.25	<1	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**<0.5**	<0.0784	<0.0784	<0.0784	ND	---	<0.2	---	<0.0392	ND	<0.0943
HP-12	5/15/15	---	---	---	---	479	<222	<444	0.44	<1	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**<0.5**	<0.324	1.52	0.119	1.639	---	<0.2	---	<0.0381	ND	<0.0952
HP-13	5/14/15	---	---	---	---	**3,980**	**7,550**	<444	**152**	<10	114	50	<5	<5	<5	<5	<5	20.7	**<5**	2.33	56	91.1	149.43	---	1.83	---	**<0.777**	ND	**<0.105**
HP-14	5/12/15	---	---	---	---	**3,390**	**8,550**	**5,980**	**66.6**	3.8	26.3	108.9	<0.5	<0.5	<0.5	1.45	<0.8	37	**<0.5**	36.3	54.6	65.8	156.7	---	0.244	---	0.0644	0.0794	**<0.104**
HP-15	5/13/15	---	---	---	---	**12,600**	**3,010**	**1,740**	**38**	<50	664	**1,030**	**<25**	**<25**	<25	<25	<25	**154**	**<25**	**243**	0.17	49.2	**292.37**	---	<0.2	---	<0.0377	ND	<0.099
HP-16	5/15/15	---	---	---	---	125	451	<435	1.07	12.5	1.96	9.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**<0.5**	2.57	54	57	113.57	---	<0.2	---	<0.0404	ND	<0.099
HP-17	5/14/15	---	---	---	---	<100	319	<396	<0.25	<1	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**<0.5**	<0.0762	<0.0762	<0.0762	ND	---	<0.2	---	<0.0381	ND	<0.099
HP-18	5/13/15	---	---	---	---	<100	<196	<392	<0.25	<1	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**<0.5**	<0.0755	<0.0755	<0.0755	ND	---	---	---	<0.0377	ND	<0.0962
HP-19	5/14/15	---	---	---	---	<100	<208	<417	<0.25	<1	<0.5	<1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	**<0.5**	<0.0833	<0.0833	<0.0833	ND	---	<0.2	---	<0.0419	ND	**<0.103**
HP-20	5/12/15	---	---	---	---	**863**	<198	408	**9.92**	1.46	<0.5	3.23	<0.5	<0.5	<0.5	1.04	1.25	1.26	**<0.5**	9.02	2.11	2.15	13.28	---	0.733	---	<0.0381	ND	<0.0971
HP-21	5/11/15	---	---	---	---	**53,000**	**6,760**	**6,970**	**453**	**11,800**	**1,490**	7900	<5	<5	12.5	**24**	<5	**316**	**<5**	331	43.3	64.1	**438.4**	---	<1	---	<0.0377	0.00663	**0.187**
GW-060866-8918-DT-SB-4	08/09/18	---	---	---	---	524	126	<104	<1.00	14.0	10.2	65.8	<1.00	<1.00	<1.00	<1.00	<1.00	10.7	**<1.00**	<5.00	---	---	---	---	---	---	---	---	---
MW-1	01/20/09	25.51	6.65	---	18.86	656	**1,740**	<485	0.700	<1.00	2.99	1.54	<0.500	<0.500	<0.500	<0.500	<0.500	1.69	**<0.500**	10.7	---	---	---	---	<1.00	**13.9**	<0.0377	ND	<0.0943
MW-1	06/08/09	25.51	7.56	---	17.95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-1	02/16/10	25.51	5.18	---	20.33	750	**<1,600**	<370	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**<1.0**	1.79J	68.3J	70.1J	140.19	0.20	0.109	---	<0.0098	ND	---
MW-1	08/04/15	25.51	---	---	14.88 [1]	763	**511**	<471	<0.250	<1.00	<0.500	<1.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	**<0.500**	<0.118	38.1	36.2	74.3	---	0.211	---	<0.0471	ND	<0.0625
MW-1	02/23/16	25.51	---	---	20.19 [1]	**1,350**	**1,240**	<388	0.490	<1.00	<0.500	<1.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	**<0.500**	<0.240	109	93.9	**202.9**	---	<0.200	---	<0.0385	ND	<0.0962
MW-1	05/11/16	25.51	7.99	---	17.52	366	**1,440**	<96.2	<1.00	<1.00	<1.00	<3.00	---	---	---	---	---	---	---	<5.00	---	---	---	---	<2.0	---	---	---	---
MW-1	02/27/19	25.51	7.16	---	18.35	663	**2,730**	234	0.428 J	0.496 J	0.299 J	0.581 J	<0.140	<0.200	<0.210	<0.240	<0.170	<0.170	<0.180	4.57 J	---	---	---	---	---	---	---	---	---
MW-2	01/20/09	25.15	7.31	---	17.84	**18,500**	**4,970**	**705**	**568**	59.4	**778**	**1,575**	<2.50	<2.50	5.95	**39.5**	2.75	**126**	**2.65**	**216**	---	---	---	---	<1.00	**23.9**	**<0.189**	ND	<0.0943
MW-2	06/08/09	25.15	8.55	---	16.60	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-2	02/16/10	25.15	6.13	---	19.02	**13,000**	**<6,400**	<370	**340**	94	**900**	**1,370**	<1.0	<1.0	1.5	**26**	4.2	**210**	**1.4**	**280**	49.7J	82.1	**411.8**	0.24	0.031	---	<0.0098	ND	---
MW-2	08/04/15	25.15	---	---	14.72 [1]	**24,400**	**1,360**	<488	**387**	<100	91.0	**3,590**	**<50.0**	**<50.0**	**<50.0**	**<50.0**	**<50.0**	**142**	**<50.0**	<0.476	33.5	33.0	66.5	---	<0.2	---	<0.0488	ND	<0.0556
MW-2	02/23/16	25.15	---	---	20.05 [1]	**4,390**	**683**	<388	**196**	<10.0	10.0	9.50	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	**<5.00**	<3.88	37.1	42.2	79.3	---	<0.200	---	**<1.94**	ND	**<0.101**
MW-2	05/11/16	25.15	7.85	---	17.30	**2,280**	**5,510**	**1,260**	**244**	2.6	9.09	16.1	<1.00	<1.00	<1.00	<1.00	1.67	2.78	**<1.00**	<1.92	28.0	30.6	58.6	---	<2.0	---	**<1.92**	ND	**<0.481**
MW-2	08/15/18	25.15	10.36	---	14.79	**7,620**	**3,230**	179	**186**	9.34	31.1	**1,620**	<1.00	<1.00	1.61	1.25	2.95	**95.3**	**<1.00**	<5.00	---	---	---	---	---	---	---	---	---
MW-2	02/26/19	25.15	7.18	---	17.97	**1,710**	**2,740**	299	**70.0**	2.60	1.43	12.3	<0.140	<0.200	0.448 J	<0.240	<0.170	4.38	<0.180	<0.210	---	---	---	---	---	---	---	---	---
MW-3	01/20/09	25.31	7.04	---	18.27	**19,400**	**4,020**	<480	**20.8**	11.2	647	**1,365**	NA	NA	<2.50	<2.50	<2.50	**128**	**<2.50**	**357**	---	---	---	---	2.43	**12.7**	**<0.187**	ND	<0.0952
MW-3	06/08/09	25.31	8.26	---	17.05	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-3	02/16/10	25.31	5.75	---	19.56	**6,200**	**<3,600**	<370	**11**	2.5	210	215	<1.0	<1.0	<1.0	<1.0	<1.0	26	**<1.0**	92	52.3	94.9	**239.2**	2.69	2.23	---	<0.0097	ND	---
MW-3	08/03/15	25.31	---	---	14.87 [1]	**6,330**	**1040**	<377	4.40	<10.0	86.1	19.6	<5.00	<5.00	<5.00	<5.00	<5.00	11.4	**<5.00**	12.4	62.1	68.2	142.7	---	<2.00	---	<0.0377	ND	<0.0952
MW-3	02/23/16	25.31	---	---	20.26 [1]	**4,780**	**837**	<388	2.40	<10.0	61.5	12.1	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	**<5.00**	20.2	42.6	47.2	110.0	---	1.81	---	<0.0385	ND	<0.0962
MW-3	05/11/16	25.31	7.71	---	17.60	**1,880**	**3,810**	303	**6.45**	1.58	26.5	5.37	---	---	---	---	---	---	---	23.9	---	---	---	---	<2.0	---	---	---	---
MW-3	08/14/18	25.31	10.31	---	15.00	**2,730**	**2,030**	155	2.56	<1.00	24.3	3.61	---	---	---	---	---	---	---	6.73	---	---	---	---	---	---	---	---	---
MW-3	02/27/19	25.31	7.12	---	18.19	**2,180**	**1,860**	233	1.14	0.686 J	22.8	1.93 J	<0.140	<0.200	<0.210	<0.240	<0.170	<0.170	<0.180	5.17	---	---	---	---	---	---	---	---	---
MW-4	08/03/15	25.66	---	---	15.09 [1]	<100	<189	<377	<0.250	<1.00	<0.500	<1.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	**<0.500**	<0.0762	<0.0762	<0.0762	ND	---	<2.00	---	<0.0381	ND	<0.0952
MW-4	02/23/16	25.66	---	---	20.39 [1]	<100	<194	<388	<0.200	<1.00	<0.500	<1.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	**<0.500**	<2.00	<0.0769	<0.0769	ND	---	<0.200	---	<0.0385	ND	<0.0952
MW-4	05/11/16	25.66	7.80	---	17.86	<100	<92.6	<92.6	<1.00	<1.00	<1.00	<3.00	---	---	---	---	---	---	---	<5.00	---	---	---	---	<2.0	---	---	---	---
MW-4	08/14/18	25.66	10.41	---	15.25	<100	<96.1	<96.1	<1.00	<1.00	<1.00	<3.00	---	---	---	---	---	---	---	<5.00	---	---	---	---	---	---	---	---	---
MW-4	02/27/19	25.66	6.89	---	18.77	<55.0	<26.5	<47.3	<0.200	<0.170	<0.190	<0.580	<0.140	<0.200	<0.210	<0.240	<0.170	<0.170	<0.180	2.50 J	---	---	---	---	---	---	---	---	---
MW-5	08/04/15	28.23	---	---	14.59 [1]	**1,060**	<230	<460	3.18	<1.00	2.98	14.18	<0.500	<0.500	0.700	<0.500	<0.500	4.12	**<0.500**	<0.253	1.69	2.29	3.98	---	<0.200	---	<0.0460	ND	<0.0784
MW-5	02/24/16	28.23	---	---	20.33 [1]	**1,620**	<194	<388	<0.200	<1.00	15.9	24.978	<0.500	<0.500	<0.500	<0.500	<0.500	16.4	**<0.500**	<0.0962	1.16	0.491	1.65	---	<0.200	---	<0.0385	ND	<0.0990
MW-5	05/11/16	28.23	10.82	---	17.41	515	372	<92.6	<1.00	<1.00	10.0	9.80	<1.00	<1.00	<1.00	<1.00	<1.00	6.63	**<1.00**	<2.00	<2.00	<2.00	ND	---	<2.0	---	**<2.00**	ND	**<0.481**
MW-5	08/14/18	28.23	13.37	---	14.86	307	129	<94.9	<1.00	<1.00	2.9	<3.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	**<1.00**	<5.00	---	---	---	---	---	---	---	---	---
MW-5	02/26/19	28.23	10.08	---	18.15	**833**	463	78.7 J	0.369 J	0.321 J	18.1	4.87	<0.140	<0.200	<0.210	<0.240	<0.170	12.3	<0.180	1.71 J	---	---	---	---	---	---	---	---	---
MW-6	08/04/15	25.79	---	---	14.61 [1]	<100	429	<385	<0.250	<1.00	<0.500	<1.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	**<0.500**	<0.0762	<0.0762	<0.0762	ND	---	<0.200	---	<0.0381	ND	<0.100
MW-6	02/23/16	25.79	---	---	20.01 [1]	<100	<194	<388	<0.200	<1.00	<0.500	<1.500	0.550	<0.500	<0.500	<0.500	<0.500	<1.00	**<0.500**	<0.0762	<0.0762	<0.0762	ND	---	<0.200	---	<0.0381	ND	<0.0962
MW-6	05/11/16	25.79	8.51	---	17.28	<100	224	143	<1.00	<1.00	<1.00	<3.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	**<1.00**	<2.00	<2.00	<2.00	<2.00	---	<2.0	---	**<2.00**	ND	---
MW-6	08/14/18	25.79	11.09	---	14.70	<100	231	200	<1.00	<1.00	<1.00	<3.00	---	---	---	---	---	---	---	<5.00	---	---	---	---	---	---	---	---	---
MW-6	02/26/19	25.79	8.08	---	17.71	<55.0	200	183	<0.200	<0.170	<0.190	<0.580	0.521 J	<0.200	<0.210	<0.240	<0.170	<0.170	<0.180	<0.210	---	---	---	---	---	---	---	---	---

Table 2

Summary of Groundwater Monitoring Data
Fuel Processors Facility
701 Bozarth Avenue
Woodland, Washington

						Hydrocarbons			Volatile Organic Compounds										Naphthalenes				Lead					
Sample ID	**Date**	**TOC**	**DTW**	**SPH Thickness**	**GWE**	**TPHg**	**TPHd**	**TPHo**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**PCE**	**TCE**	**cis-1,2-DCE**	**1,1-DCA**	**1,4-Dichlorobenzene**	**1,3,5-Trimethylbenzene**	**Vinyl Chloride**	**Naphthalene**	**1-Methylnaphthalene**	**2-Methylnapthalene**	**Total Naphthalene**	**Total**	**Dissolved**	**Arsenic**	**benzo(a) pyrene**	**total cPAHs - TEF**	**PCBs**
Model Toxics Control Act Method A Cleanup Level						800/1000	500	500	5	1,000	700	1,000	5	5	NE	NE	NE	NE	0.2	NE	NE	NE	160	15	15	5	0.1	0.1	0.1
Model Toxics Control Act Method B Non Cancer Cleanup Level															16	1,600	560	80											
Model Toxics Control Act Method B Cancer Cleanup Level																7.68	8.10												
						ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-7	08/04/15	25.30	---	---	14.38 [1]	120	273	<500	<0.250	<1.00	<0.500	<1.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	**<0.500**	<0.100	<0.100	<0.100	ND	---	<0.200	---	<0.0500	ND	<0.0755
MW-7	02/23/16	25.30	---	---	19.77 [1]	<100	<190	<381	<0.200	<1.00	<0.500	<1.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	**<0.500**	<0.0769	<0.0769	<0.0769	ND	---	<0.200	---	<0.0385	ND	<0.0962
MW-7	05/11/16	25.30	8.13	---	17.17	<100	434	185	<1.00	<1.00	<1.00	<3.00	---	---	---	---	---	---	---	<5.00	---	---	---	---	<2.0	---	---	---	---
MW-7	08/15/18	25.30	10.75	---	14.55	<100	356	221	<1.00	<1.00	<1.00	<3.00	---	---	---	---	---	---	---	<5.00	---	---	---	---	---	---	---	---	---
MW-7	02/26/19	25.30	7.63	---	17.67	<55.0	290	214	<0.200	<0.170	<0.190	<0.580	<0.140	<0.200	<0.210	<0.240	<0.170	<0.170	<0.180	<0.210						---			
MW-8	08/03/15	25.25	---	---	14.89 [1]	<100	<189	<377	<0.250	<1.00	<0.500	<1.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	**<0.500**	<0.0777	<0.0777	<0.0777	ND	---	<2.00	---	<0.0388	ND	<0.0385
MW-8	02/23/16	25.25	---	---	20.29 [1]	<100	<192	<385	<0.200	<1.00	<0.500	<1.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	**<0.500**	<0.0769	<0.0769	<0.0769	ND	---	<0.200	---	<0.0385	ND	<0.0962
MW-8	05/11/16	25.25	7.73	---	17.52	<100	<94.3	<94.3	<1.00	<1.00	<1.00	<3.00	---	---	---	---	---	---	---	<5.00	---	---	---	---	<2.0	---	---	---	---
MW-8	08/14/18	25.25	10.32	---	14.93	<100	<96.3	<96.3	<1.00	<1.00	<1.00	<3.00	---	---	---	---	---	---	---	<5.00	---	---	---	---	---	---	---	---	---
MW-8	02/27/19	25.25	6.95	---	18.30	<55.0	46.2 J	59.7 J	<0.200	<0.170	<0.190	<0.580	<0.140	<0.200	<0.210	<0.240	<0.170	<0.170	<0.180	<0.210	---	---	---	---	---	---	---	---	---
MW-9	08/04/15	27.29	---	---	14.32 [1]	**1,990**	**821**	<385	3.55	2.35	0.67	39.2	<0.500	<0.500	<0.500	<0.500	<0.500	15.9	**<0.500**	<0.212	13.3	25.5	38.8	---	<0.200	---	<0.0385	ND	**<0.103**
MW-9	02/24/16	27.29	---	---	19.72 [1]	**4,560**	**841**	<385	3.30	3.32	1.87	127.4	<0.500	<0.500	<0.500	<0.500	<0.500	54.0	**<0.500**	<0.243	0.280	<0.0777	0.280	---	<0.2	---	<0.0388	ND	<0.0962
MW-9	05/11/16	27.29	10.11	---	17.18	**1,900**	**2,060**	128	1.90	1.92	<1.00	41.6	<1.00	<1.00	<1.00	<1.00	<1.00	42.8	**<1.00**	<5.00	---	---	---	---	<2.0	---	---	---	---
MW-9	08/15/18	27.29	12.76	---	14.53	419	**1,140**	132	<1.00	1.23	<1.00	7.83	---	---	---	---	---	---	---	<5.00	---	---	---	---	---	---	---	---	---
MW-9 [2]	08/15/18	27.29	12.76	---	14.53	443	**1,240**	187	<1.00	1.24	<1.00	8.08	---	---	---	---	---	---	---	<5.00	---	---	---	---	---	---	---	---	---
MW-9	02/27/19	27.29	9.55	---	17.74	**1,230**	**2,080**	175	1.75	2.53	0.925 J	14.2	<0.140	<0.200	<0.210	<0.240	<0.170	12.1	<0.180	<0.210	---	---	---	---	---	---	---	---	---
MW-10	08/04/15	27.70	---	---	14.24 [1]	**2,210**	409	<381	**11.0**	155	28.2	181.7	<2.50	<2.50	<2.50	<2.50	<2.50	13.2	**<2.50**	10.3	2.20	2.47	14.97	---	<0.200	---	<0.0396	ND	<0.0962
MW-10	02/24/16	27.70	---	5.15	---	**55,700**	**13,300**	**14,000**	**170**	**5,230**	**952**	**5,900**	**<25.0**	**<25.0**	**<25.0**	**<25.0**	**<25.0**	**431**	**<25.0**	**486**	**184**	**297**	**967**	---	<0.2	---	**0.245**	**0.331**	**0.660**
MW-10	05/11/16	27.70	13.09	2.83	16.87 [3]	Not sampled due to presence of SPH																							
MW-10	08/15/18	27.70	14.48	1.43	14.36 [3]	Not sampled due to presence of SPH																							
MW-10	02/26/19	27.70	13.89	4.31	17.26 [3]	Not sampled due to presence of SPH																							
MW-11	08/14/18	28.39	13.59	---	14.80	<100	<104	<104	<1.00	<1.00	<1.00	<3.00	---	---	---	---	---	---	---	<5.00	---	---	---	---	---	---	---	---	---
MW-11	02/26/19	28.39	10.36	---	18.03	<55.0	<26.5	<47.4	<0.200	<0.170	<0.190	<0.580	<0.140	<0.200	<0.210	<0.240	<0.170	<0.170	<0.180	<0.210	---	---	---	---	---	---	---	---	---
MW-12	08/14/18	29.02	14.27	---	14.75	<100	INS	INS	<1.00	<1.00	<1.00	<3.00	2.70	<1.00	<1.00	<1.00	<1.00	<1.00	**<1.00**	<5.00	---	---	---	---	---	---	---	---	---
MW-12	02/26/19	29.02	11.16	---	17.86	<55.0	<28.5	<50.9	<0.200	0.214 J	<0.190	<0.580	<0.541 J	<0.200	<0.210	<0.240	<0.170	<0.170	<0.180	<0.210	---	---	---	---	---	---	---	---	---
MW-13	08/15/18	28.74	13.99	---	14.75	358	**4,750**	<484	4.24	<1.00	12.6	3.28	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	**<1.00**	<5.00	---	---	---	---	---	---	---	---	---
MW-13	02/26/19	28.74	10.81	---	17.93	<55.0	339	342	<0.200	0.204 J	<0.190	<0.580	0.427 J	<0.200	<0.210	<0.240	<0.170	<0.170	<0.180	<0.210	---	---	---	---	---	---	---	---	---
MW-14	08/15/18	26.84	11.93	---	14.91	**1,270**	**1,740**	143	**18.4**	4.03	5.00	44.4	<1.00	<1.00	<1.00	<1.00	<1.00	7.11	**<1.00**	7.09	---	---	---	---	---	---	---	---	---
MW-14	02/27/19	26.84	8.87	---	17.97	**4,740**	**3,560**	248	**60.2**	10.7	198	191	<0.140	0.224 J	0.710 J	<0.240	1.96	29.1	<0.180	117	---	---	---	---	---	---	---	---	---
MW-14 [2]	02/27/19	26.84	8.87	---	17.97	**4,690**	**3,110**	152	**61.4**	12.2	203	194	<0.140	<0.200	0.700 J	0.240	2.03	27.9	<0.180	119	---	---	---	---	---	---	---	---	---
MW-15	08/15/18	26.57	11.64	---	14.93	**23,600**	**5,460**	<476	**239**	31.4	**1,380**	**5,540**	<1.00	<1.00	5.89	**15.3**	3.49	**271**	**<1.00**	**250**	---	---	---	---	---	---	---	---	---
MW-15	02/27/19	26.57	8.57	---	18.00	**8,600**	**2,520**	337	4.96 J	4.24 J	330	884	<0.700	<1.00	<1.05	<1.20	<0.850	**317**	**<0.900**	**192**	---	---	---	---	---	---	---	---	---

Notes:

Select analytes with concentrations detected above laboratory method reporting limits (MRL) and that have established cleanup levels per the Department of Ecology Cleanup Levels and are listed. Refer to the laboratory report for a full list of analytes.
Concentrations in bold type indicate the analyte was detected above the Model Toxics Control Act (MTCA) Method A cleanup level.
All results in micrograms per liter (µg/L) unless otherwise indicated.

cPAHs = carcinogenic polycyclic aromatic hydrocarbons
DCA = Dichloroethane
DCE = Dichloroethene
DTW = Depth to Water in feet below top of well casing
GWE = Groundwater Elevation in feet above mean sea level.
INS = Insufficient sample
J = Result is less than the reporting limit, but greater than or equal to the method detection limit, and the concentration is an approximate value.
NA = not available
NE = MTCA Method A cleanup level is not established.
PCBs = Polychlorinated biphenyl
PCE = Tetrachloroethene
SPH = Separate phase hydrocarbon
TCE = Trichloroethene
TEF = Toxicity equivalency factor
TOC = Top of Casing in feet above mean sea level.
TPHg = Total petroleum hydrocarbons as gasoline
TPHd = Total petroleum hydrocarbons as diesel
TPHo = Total petroleum hydrocarbons as oil
<x = Not detected at laboratory reporting limit x
--- = Not analyzed
1 = Groundwater elevation based on an unknown benchmark.
2 = Sample was collected as a field duplicate.
3 = The groundwater elevation has been corrected based on the presence of SPH.

Table 3

Well Construction Details
Fuel Processors Facility
701 Bozarth Avenue
Woodland, Washington

Boring/Well I.D.	Installation Date	Boring Depth (feet bgs)	Casing Diameter (inches)	Casing Material	Screen Top (feet bgs)	Screen Bottom (feet bgs)	Screen Size (inches)	Filter Pack Top (feet bgs)	Filter Pack Bottom (feet bgs)	TOC Elevation (feet, amsl)	Surface Elevation (feet, amsl)
MW-1	09/2008	--	2	PVC	--	--	--	--	--	25.51	25.77
MW-2	09/2008	--	2	PVC	--	--	--	--	--	25.15	25.68
MW-3	09/2008	--	2	PVC	--	--	--	--	--	25.31	25.93
MW-4	05/11/15	15	2	PVC	5	15	0.010	--	--	25.66	25.99
MW-5	05/13/15	15	2	PVC	5	15	0.010	--	--	28.23	25.67
MW-6	05/13/15	15	2	PVC	5	15	0.010	--	--	25.79	26.09
MW-7	05/13/15	15	2	PVC	5	15	0.010	--	--	25.3	25.62
MW-8	05/13/15	15	2	PVC	5	15	0.010	--	--	25.25	25.58
MW-9	05/11/15	15	2	PVC	5	15	0.010	--	--	27.29	24.51
MW-10	05/12/15	30	2	PVC	5	30	0.010	--	--	27.70	25.2
MW-11	08/08/18	16	2	PVC	3	15	0.010	2	15.5	28.39	28.99
MW-12	08/08/18	15.4	2	PVC	3	15	0.010	2	15.4	29.02	29.47
MW-13	08/08/18	15	2	PVC	3	15	0.010	2	15	28.74	25.55
MW-14	08/09/18	15.5	2	PVC	3	15	0.010	2	15.5	26.84	24.26
MW-15	08/09/18	16	2	PVC	3	15	0.010	2	15.1	26.57	23.75

Abbreviations and Notes:

amsl = above mean sea level
bgs = below ground surface
TOC = Top of Casing
-- = not applicable or not available

Appendices

Appendix A
Environmental Document List

Appendix A Environmental Document List: 701 Bozarth Avenue Woodland, Washington

Title	Author	Date	Submitted to Ecology	
			Y/N	Date
ARRCOM-Woodland, Washington letter	Washington Department of Ecology (Ecology)	8/13/1982	Y	---
Site Reconnaissance and Soil Sampling to Determine Compliance Issues at the Fuel Processors Inc. (Arrcom) Site	United States Environmental Protection Agency (US EPA)	4/16/1985	Y	---
Sampling Results – Fuel Processors, Woodland, WA	US EPA	4/2/1986	Y	---
RCRA Facility Assessment for Fuel Processors, Inc.	US EPA	9/29/1986	Y	---
Inspection Report	Ecology	9/12/1991	Y	---
Closure Report for Fuel Processors, Inc.	Unknown	6/19/2007	Y	---
Final Model Toxics Control Act (MTCA) Agreed Order (AO) no. 5054 for the Fuel Processors Facility	Ecology	4/24/2008	Y	---
Interim Summary of the Subsurface Investigation at the Fuel Processors, Inc. Facility	Coles & Associates, LLC (Coles)	3/3/2009	Y	---
First Amendment of Agreed Order	Ecology	3/2011	Y	---
Initial Site Investigation	Coles	12/15/2011	Y	
First Amendment of Agreed Order	Ecology	3/2011	Y	---
Preliminary Evaluation of the Results from the May 2015 Phase II Subsurface Investigation at FPI's Woodland, Washington Site	Coles	8/19/2015	Y	
Fuel Processors, Inc. Woodland, Washington Site Data Packet for the First Monitoring Event After the May 2015 Site Investigation Activities	Coles	10/8/2015	Y	---
Fuel Processors, Inc. Woodland, Washington Site Data Packet for the Second Monitoring Event After the May 2015 Site Investigation Activities (Monitoring Event in First Quarter, February 2016)	Coles	3/30/2016	Y	---

Appendix B
Summary of Previous Investigations

Appendix B Summary of Previous Site Investigations and Remedial Activities

1982 Washington State Department of Ecology (Ecology) Correspondence: Ecology's August 1982 letter to Mr. Wally Drexler indicated that several drums of unknown waste, a large pile of sludge on an unspecified, adjoining property, and one below ground plant tank, plus shaker screen area with other oil sludge was left behind after the Woodland operation went bankrupt. The letter indicated that it was Mr. Drexler's responsibility to properly dispose of these materials. Ecology also sampled the sludge dumped on the adjoining property analyzed it for total silver, barium, chromium, cadmium, lead, and mercury. Silver was detected at 0.71 milligrams per kilogram (mg/kg), chromium was detected at 14 mg/kg, cadmium was detected at 15 mg/kg, and lead was detected at 250 mg/kg; barium and mercury were not detected above their laboratory method reporting limits. These metal concentrations indicated that this sludge was a non-hazardous waste, but would still need to be properly disposed of. Additional information is available in Ecology's *ARRCOM – Woodland, Washington* letter, dated August 13, 1982.

1985 Spill, Remedial Excavation, and Soil Assessment: In March 1985, it was reported that several thousand gallons of used oil spilled from a punctured tank or broken pipe, the records were inconsistent, in the eastern portion of the former tank farm (reportedly in the vicinity of sample locations HP-1, EC-02, and HA-01). This spill occurred on bare soil; therefore, subsequently, at an unknown date, Fuel Processors, Inc. (FPI) excavated approximately 9 to 10 inches of reportedly impacted soil across the tank farm area, totaling a reported 900 cubic yards of excavated soil. Soil sampling associated with this excavation was not indicated in the available records. Additionally, the actual documented extent of the excavation was not provided in the available EPA documents.

In April 1985, An EPA representative conducted a visual property inspection. It is indicated that spills in the paved portion of the former tank farm were channeled into a sump in the northeastern portion of the former tank farm. Waste that collected in this sump discharged into an oil/water separator (OWS); the location of this OWS is unknown. At the time of this inspection, "much oil' was present on the surface of the pad, assumed to be the paved portion of the former tank farm. Additionally, Mr. Briggs stated that he "flushed' the ground in the northwestern portion of the Site with water to remove some of the oil to a pit that was dug for this purpose. Waste oil that was collected reportedly discharged to an OWS; however, the location of this OWS is unknown. Oil pooled at the based on an unused tank was observed, and had reportedly been there since Mr. Briggs "arrived at the site." The exact location of this tank was not specified. Additional historical records indicate that water was ran across the soil surface in the tank farm, into an unlined sump. The oil layer was then skimmed off the water surface, while the remaining water seeped into the soil. The historical record indicated that this was believed to be a limited practice.

During the April 1985 inspection, soil samples were also collected from four locations in the western portion of the tank farm (Samples #1 through #4). The eastern portion of the tank farm was paved by this time and a concrete berm had been completed around the entire tank farm. The soil samples were collected from the surface and/or from a depth of 2 to 3 feet below ground surface (bgs), and were analyzed for arsenic, beryllium, barium, cadmium, chromium, copper, iron, lead, mercury, nickel, selenium, zinc, EP toxicity, volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and/or total organic carbon (TOC). Each sample, with the exception of the 2 to 3 foot bgs sample collected from Sample #1, near the transfer rank, had exceedances of trichloroethylene (TCE), tetrachloroethylene (PCE), 1,1,1-trichloroethane, and/or lead above the current MTCA Method A cleanup levels. The complete analytical report was not included in the available documents; therefore, it is unknown what the PCBs or TOC analytical results are for these soil samples. Additional information is available in Ecology's internal

correspondence and external correspondence with Coles, and EPA's *Site Reconnaissance and Soil Sampling to Determine Compliance Issues at the Fuel Processors Inc. (Arrcom) Site*, dated April 16, 1985.

1986 RCRA Facility Assessment: In April 1986, the EPA conducted a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) in 1986 for the Site. In this RFA, the former tank farm area was considered a SWMU. The RFA document indicated that the former tank farm was historically unpaved; therefore, waste oil or product spillage could seep into the soil if it wasn't immediately noticed. It was indicated during previous inspections and discussion with the Property owner that the soil in the former tank farm was oily and stained; however, the volume of released waste oil could not be determined. To recover some of the spilled oil in the unpaved northwestern portion of the tank farm, the Site owner would "run" water across the soil surface into an unlined sump. The soil was then skimmed off the water surface, while the wash water seeped into the soil. It is unknown how often this practice occurred. This document also discusses a shaker waste pile that was historically located north of the tank farm area. The waste pile was less than one cubic yard on March 25, 1985 and had been removed by April 1986.

During the April 1986 site visit, the EPA collected soil samples from seven locations at the property. This sampling event reportedly took place following a second remedial excavation; however, specifics regarding the extent or depth of this excavation were not provided in the available documents. The soil samples were collected from within the portion of the tank farm that had recently been paved (Samples #1 through #3), to the east of the former tank farm and north of the loading rack (Samples #4 and #5), and at a "background" location north of the Property (Sample #6). A sample was also collected from a waste oil pile located farther east of Sample #4, along the northern property boundary (Sample #7). Soil samples were collected from the surface and/or from approximately five feet bgs. The soil samples were analyzed for VOCs and polycyclic aromatic hydrocarbon (PAHs). Exceedances of PCE were detected in the surficial sample collected from Sample #2, both samples collected from Sample #3, and Sample #7 from the waste oil pile. Additionally, exceedances of PAHs were detected at location Sample #1, #2, and #5, and exceedances of benzene, toluene, and xylenes were detected in the surficial sample from Samples #3.

Additional information is available in EPA's *Site Reconnaissance and Soil Sampling to Determine Compliance Issues at the Fuel Processors Inc. (Arrcom) Site*, dated April 16, 1985, and in the EPA's *RCRA Facility Assessment for Fuel Processors, Inc.*, dated September 29, 1986.

***1991 Ecology Inspection Report*:** In 1991, the Property operated as a petroleum storage and processing plant, and Arrcom Oil, a previous owner of the Property, had submitted a RCRA Part A application in November 1980, and a revised application in 1981 that indicated the facility would store ignitable (D001), F003, and F005 waste. A notification was submitted for the Property in 1984 that indicated storage of D001 waste occurred at the Property. In 1985, a Notification of Dangerous Waste Activities was submitted that indicated the property was a treatment, storage, and disposal facility; however, a separate application was submitted that indicated W001 was the only waste stream to be stored or treated at the facility. The report also indicates that Annual Reports from Seattle City Light and Tacoma Public Utilities indicate that PCB-contaminated oils were received that the facility. An inspection conducted in 1988 noted that Fuel Processors did not maintain records of used oil shipments, laboratory analyses, or notification of used oil activities.

Ecology and EPA representatives conducted an inspection on August 28, 1991; however, the facility was closed at this time, so the inspection team completed a perimeter walk around the Property. During this

inspection, approximately 85 55-gallon drums were noted along the northern fence line. These drums were labeled “non-regulated waste” and Fort Lewis was listed as the generator. One of these drums had “bad drum” written on the label, and two of the drums were observed to be leaking. Approximately 11 85-gallon overpack drums were observed along the northern fence line and were labeled “non-hazardous waste.” One of these drums was observed to be leaking, and this particular drum had “waste gasoline” written on the side of the drum. Approximately 70 55-gallon drums were observed on the southeastern corner of the Property, and were labeled “non-regulated waste.” One polyethylene drum was observed within the tank farm area and was labeled as “corrosive.” Ecology and EPA representatives conducted a subsequent inspection on September 5, 1991 and met with Mr. Bill Briggs, the President of Fuel processors. Several 55- and 85-gallon drums were observed again along the northern fence line, some of which were labeled “waste gasoline.” Mr. Briggs stated that these drums contained oil sludge and tank bottoms from UST removal operations at US Army, Fort Lewis, which were to be sent to Fuel Processor’s Portland plant. Mr. Briggs also stated that the drums near the southeastern corner of the Property contained oil filters. During this inspection, evidence of oil spills were observed on the concrete floor beneath the 25,000-gallon tank used as a “cooker” within the warehouse building. Mr. Briggs also stated that no records were kept at the Property; therefore, the Ecology and EPA representatives traveled to the Fuel Processor’s Portland, Oregon plant to review applicable documents. Ecology and EPA representatives conducted a perimeter inspection on September 9, 1991, at which time the 85-gallon drums of “waste gasoline” were observed to be leaking, as they had originally been observed beginning on August 28, 1991. Additional information is available in Ecology’s *Inspection Report* for the Fuel Processors, Inc. Woodland, WA facility, dated September 12, 1991.

2008 Final Model Toxics Control Act (MTCA) Agreed Order: On April 24, 2008, Ecology, Fuel Processors, Inc., and Oil Re-Refining Co. (ORRCO) entered into an Agreed Order (AO) for the Site. The AO indicated that Shell Oil Company (Shell) operated a wholesale petroleum plant at the Site beginning in the 1930s, and in 1979, Arrcom, Inc., a used oil processing company owned by the Drexler family, operated a used-oil recycling facility at the Site. In 1982, Arrcom sold the Property to Mr. Warren Bingham, and Fuel Processor’s leased the Site from Mr. Bingham beginning in January 1985 and operated it as an oil recycling facility. Fuel Processors purchased the Property in April 1985, and until 1998, processed up to 25,000-gallons of waste oil per month. From 1998 to June 2002, Fuel Processors used the Site as an used oil transfer facility. As indicated above, the EPA conducted soil sampling at the Site in 1985 and 1986, and based on those results and other Site records, Ecology identified ten solid waste management units (SWMUs) and two areas of concern (AOC) at the Property. The AO indicated that all of the identified units were reported by Fuel Processors to be clean, closed, and removed from the Site as of June 2007. The AO also identified remedial actions that needed to occur at the Site, and an associated schedule. Additional information is available in Ecology’s *Agreed Order No. DE 5054*, dated April 28, 2008.

2008/2009 Subsurface Assessment: Coles conducted a site investigation in September 2008. Ten soil borings (HP-1 through HP-10) and three permanent groundwater monitoring wells (MW-1 through MW-3) were installed at the Site. Well MW-1 was installed east of the loading rack canopy, well MW-2 was installed north of the former tank farm, just north of the northern Property boundary, and well MW-3 was installed south of the warehouse building. The soil borings were advanced within the former tank farm (HP-1 through HP-5), within the warehouse building (HP-6 through HP-8), to the northwest of the shop building (HP-9), and north of the loading rack canopy (HP-10). Soil samples were collected from each boring and well, and analyzed for TPHg, TPHd, TPHo, VOCs, PAHs, PCBs, and/or RCRA 8 metals. TPHg, TPHd, TPHo, BTEX, naphthalenes, and PCE exceedances above MTCA Method A cleanup levels were identified in each soil boring, with the exception of HP-9 and HP-10. Additionally, exceedances of PAHs were detected in HP-1, HP-2, HP-4, HP-5, HP-7, and HP-8 and exceedances of PCBs, chromium,

and lead were detected in boring HP-7. TPHg, TPHd, benzene and PCE exceedances above MTCA Method A cleanup levels were identified in soil samples collected from each well and well MW-1 also had an exceedance of PAHs.

Grab groundwater samples were collected from each boring in September 2008 and groundwater samples were collected from each well in January 2009, and analyzed for TPHg, TPHd, TPHo, VOCs, and/or lead. TPHg, TPHd, TPHo, and/or BTEX exceedances above MTCA Method A cleanup levels were identified in the samples collected from borings HP-1 through HP-8 and each well. Based on the gauging of monitoring wells MW-1 through MW-3 in January 2009, Coles reported a groundwater flow direction of west-northwest. Additional information is available in Cole's *Interim Summary of the Subsurface Investigation at the Fuel Processors, Inc. Facility*, dated March 3, 2009 and Cole's *Initial Site Investigation*, dated December 15, 2011.

2010 Subsurface Assessment: Coles conducted a supplemental site investigation in February 2010, which consisted of the advancement of five soil borings (EC-01 through EC-05). Borings EC-01 through EC-03 were advanced within the former tank farm, boring EC-04 was advanced to the northwest of the warehouse building, and boring EC-05 was advanced to the south of the warehouse building. Soil samples were analyzed for TPHg, TPHd, TPHo, toluene, ethylbenzene, xylenes, PCE, PAHs, and/or lead. TPHg, TPhd, TPHo, BTEX, and/or benzo(a)pyrene exceedances above MTCA Method A cleanup levels were identified in borings EC-01 through EB-04. Additionally, the laboratory method reporting limits (MRLs) were above the MTCA Method A cleanup levels for benzene and PCE.

Coles also conducted a groundwater monitoring event in February 2010. Groundwater samples were analyzed for TPHg, TPhd, and TPHo, and exceedances of TPHg above MTCA Method A cleanup levels were identified in wells MW-2 and MW-3. Additionally, the laboratory MRL for TPHd was above the MTCA Method A cleanup level in each well.

Coles completed a hand auger boring (HA-1) to 5 feet bgs in the eastern portion of the former tank farm in August 2010. Soil samples were collected every foot and analyzed for TPHg, which was detected at concentrations exceeding the MTCA Method A cleanup level in each sample. One of the samples collected from HA-1, the exact depth is not specified in the available documents, was submitted to a laboratory for forensic interpretation. The analytical results reportedly concluded that gasoline, diesel, and oil were present in soil from HA-1; however, the gasoline had reportedly undergone extensive degradation and diesel had undergone substantial biological degradation. Cole's concluded that this information suggested that the petroleum impacts at the site were "old;" however, a specific age could not be established. Six organo-metallic compounds that are former additives to gasoline were also included in the analysis. Of those additives, tetraethyl lead (TEL) and methylcyclopentadienyl manganese tricarbonyl (MMT) were detected above their respective laboratory MRLs. Cole's indicated that the laboratory concluded that the level of organic lead was consistent with leaded gasoline that was manufactured prior to 1986. Additional information is available in Cole's *Initial Site Investigation*, dated December 15, 2011.

2011 First Amendment of Agreed Order: Based on credible evidence, Ecology issued a potentially liable person (PLP) status letter to Shell in November 2010, and by March 2011, Ecology's determination that Shell was a PLP for this Site was final. Therefore, Shell was added as a party to the AO as an "owner or operator" of the Site and the AO was modified. Additional information is available in Ecology's *First Amendment of Agreed Order No. DE 5054*.

2015 Additional Site Assessment: Coles completed an additional Site investigation in May 2015, which consisted of the advancement of borings HP-11 through HP-21 and the installation of permanent groundwater monitoring wells MW-4 through MW-10. Borings were advanced north, east, south, and west

of the warehouse building, HP-14, HP-17, HP-11 and HP-12, and HP-20, respectively, within the warehouse building (HP-13), northwest of the northern Property boundary (HP-15), and within the footprint of the loading rack canopy (HP-16). The remaining borings were advanced north of the Property (HP-18), along the northern Property boundary, north of the loading rack canopy (HP-19), and in the northeastern corner of the former tank farm area (HP-21). The monitoring wells were installed in the southeastern corner of the Property (MW-4), along the western Property boundary (MW-5), in the north adjoining Bozarth Avenue right-of-way (ROW; MW-6 and MW-7), in the south adjoining alley (MW-8), and within the former tank farm (MW-9 and MW-10).

Soil samples were collected from each boring and well, and analyzed for TPHg, TPHd, TPHo, VOCs, lead, cPAHs, and PCBs. Exceedances of TPHg, TPHd, TPHo, BTEX, total naphthalenes, lead, cPAHs, and/or PCBs were identified above MTCA Method A cleanup levels in soil collected from borings HP-12 through HP-16 and HP-21, and wells MW-5, MW-9, ad MW-10.

Grab groundwater samples were also collected from borings HP-11 through HP-21, and analyzed for TPHg, TPHd, TPHo, VOCs, and/or lead. Exceedances of TPHg, TPHd, TPHo, BTEX, naphthalene, 1,1-dichloroethene (1,1-DCE), 1,3,5-trimethylbenzene were identified above MTCA Method A cleanup levels in soil collected from borings HP-13 through HP-15, HP-20, and HP-21. Additional information is available in Cole's *Preliminary Evaluation of the Results from the May 2015 Phase II Subsurface Investigation at FPI's Woodland, Washington Site*, dated August 19, 2015.

2015 and 2016 Groundwater Sampling and Monitoring: Coles conducted groundwater sampling and monitoring events in August 2015 and February 2016. During the 3 years, the only samples with detections above MTCA Method A cleanup levels for TPH-D were collected from MW-3 in January 2007, April 2007 and January 2008. Exceedances of TPHg, TPHd, TPHo, BTEX, and/or 1,3,5-trimethylbenzene were identified in wells MW-1 through MW-3, MW-5, MW-9, and MW-10. Based on the gauging of monitoring wells in August 2015, Coles reported a groundwater flow direction of northwest.

Additionally, in February 2016, Coles reported observing separate phase hydrocarbons (SPH) floating on groundwater in well MW-10 at a thickness of 5.15 feet. Reportedly, Coles performed a vacuum truck total fluids recovery event in April or May 2016 to remove SPH from the well, however, no details of this event have been provided to Shell or GHD. Additional information is available in Cole's *Fuel Processors, Inc. Woodland, Washington Site Data Packet for the First Monitoring Event After the May 2015 Site Investigation Activities,* dated October 8, 2015, and Coles' *Fuel Processors, Inc. Woodland, Washington Site Data Packet for the Second Monitoring Event After the May 2015 Site Investigation Activities,* dated March 30, 2016.

Appendix C
Legal Description of Property, Present Owner and Operation, Known Past Owners and Operators

COWLITZ COUNTY TITLE CO.
1145 14th Avenue ■ Longview, Washington 98632
Phone: (206) 423-5330 Fax: (206) 423-5932 Night Owl Line: (206) 423-9916

"Service is the Difference"

CHAIN OF TITLE CERTIFICATE

ORDER NO.: 103309

BILL BRIGGS
PO BOX 1407
WOODLAND WA 98674

The Company hereby certifies to the Applicant that the following identified and attached documents constitute all of the designated documents requested in the Application for the following described property:

Lots 6, 7, 8 and 9, Block 2, Commercial Addition to the Town of Woodland, according to the Plat thereof recorded in Volume 3 of Plats, Page 76, records of Cowlitz County.

DESIGNATED DOCUMENTS:

AUDITOR'S FILE NUMBERS AND DOCUMENT DATES:

71997	Caroline Hopf to Washington Refining Co	February 16, 1928
413012	Washington Refining Co to Shell Oil Company, a Delaware Corp	December 29, 1953
693551	Shell to Marcus H. Deans + Irene M. Deans (Equipment)	August 19, 1969 — Underground Tanks
693557	Shell to " " " " " " Property	August 18, 1969
741104	Deans to Wheatley + Coover, a Co-Partnership	December 30, 1972
748549	John P Wheatley + Forest G Coover as Trustees for Wheatley + Coover to	June 14, 1973
792309	Ralph + Donna L Anderson to Jensen + Grove, Inc; Ralph V and Donna L Anderson	May 13, 1976
808190	Jensen + Grove, Inc to Herbert Jensen + Iris Jensen Back to	March 11, 1977
808191	John Wheatley + Coover to S.E. Ivers a married Woman; Forest Coover + John Wheatley	December 6, 1976
833436	Ivers + Drexler to Arrcom + Wally Drexler	May 19, 1978
833437	Fulfillment of Contract	May 23, 1978
858243	Hazel M Drexler to Wally Drexler	July 13, 1979
858703	Fulfillment of Contract	May 23, 1978
858704	Hazel M Drexler to Wally Drexler	July 13, 1979
866292	Arrcom to Warren W. Bingham	December 27, 1979
820113018	Arrcom to " " "	August 15, 1981
850325046	Real Estate Contract Warren W Bingham to Fuel Phoresmedic	March 14, 1985
860922034	Assignment of Contract to Warren W + Janita E Bingham	September 18, 1986

The certification provided by this Certificate is not valid, and the Company shall have no liability hereunder, unless:

a.) This Certificate is executed by an officer or other designated employee of the Company.

AGENTS OR OTHER PERSONS NOT DIRECTLY EMPLOYED BY THE COMPANY HAVE NO AUTHORITY TO BIND THE COMPANY UNDER THIS CERTIFICATE.

continued...

CHAIN OF TITLE CERTIFICATE

The Company hereby certifies to the Applicant that the following identified and attached documents constitute all of the designated documents requested in the Application for the following described property:

Lot 10, Block 2, Commercial Addition to the Town of Woodland, as recorded in Volume 3 of Plats, page 76, records of Cowlitz County, Washington.

DESIGNATED DOCUMENTS:

AUDITOR'S FILE NUMBERS AND DOCUMENT DATES:

244575	Behymer to Ray Behymer to Shuteffer	January 31, 1944
245391	Shuteffer to Clar Pease	March 30, 1944
251727		January 27, 1944
256353		November 1944
276642	Shuteffe to Bozarth.	August 30, 1946
278731	" " "	August 30, 1946
689993	Bozarth to Marcus H. Deans + Irene M. Deans	July 1, 1969
791676	Deans to Herbert H. Jensen + Ann B. Jensen.	April 23, 1976
791677	Wheatley + Cover to Herbert H Jansen + Ann B. Jensen.	April 28, 1976
808190		March 11, 1977
808191		December 6, 1976
833436		May 19, 1978
833437		May 23, 1978
858243		July 13, 1979
858703		May 23, 1978
858704		July 13, 1979
866292		December 27, 1979
820113018		August 15, 1981
850325046		March 14, 1985
860922034		September 18, 1986

The certification provided by this Certificate is not valid, and the Company shall have no liability hereunder, unless:

a.) This Certificate is executed by an officer or other designated employee of the Company

AGENTS OR OTHER PERSONS NOT DIRECTLY EMPLOYED BY THE COMPANY HAVE NO AUTHORITY TO BIND THE COMPANY UNDER THIS CERTIFICATE.

Effective Date: November 10, 1994

COWLITZ COUNTY TITLE COMPANY

JASON BLACK, TITLE OFFICER

JB/RS

DEED
Feb 16 54
Dec 29 53

no rev

413012
547-442

Washington Refining Company, a Washington Corpn
to
Shell Oil Company, a Delaware Corpn

Witnesseth: Whras, fp & sp (the owner of all the auth-d & outstandg capital stock of fp) hv adopted & executed a Plan of Liquidation approved by sp's Board of Dir at a meetg held on Dec 16, 1953 and by fp's stock-holders at a meetg held on Dec 17, 1953, which Plan of Liquidation provides in part as fos:

> "1. On Dec 17, 1953, Wash shall cease business and, not later than Dec 31, 1953, shall transfer, cvy & assign in complete liquidation all its ppty, assets, business & goodwill to Shell, in cons of (a) the surrender to Wash for redemption & cancellation of all the capital stock of Wash and (b) the dischge & cancellation by Shell of any & all sums due & pybl by Wash to Sheal, and upon the surrender of all of sd capital stock all of the same shall be deemed completely redeemed & cancelled & all such sums shall be deemed dischgd & cancelled."; and

Whras, at sd meetg of stockholders of fp held on Dec 17, 1953, the folg resolution with reference to sd Plat of Liquidation was adopted:

> "RESOLVED, That Monroe Watt & J L Wadlow, jointly & severally be, and they are hby appt'd Trustees to execute & adopt sd Plan of Liquidation & to conduct the winding up of the affairs of this Corpn, out of Crt, and to dissolve this Corpn.";

Now, thfore, fp in cons of the prems, does hby G B S assign, transfer and cvy to sp, its s and a, without covenants of titlel or warranty whatsoev, all of fp's ri, ti & int of ev kind & character (includg but not limited to, all estates in fee, reversions, remainders, estates for yrs, leaseholds, oil, gas & other mineral interests & leases, minerals, mineral ri's, rentals, surface ri's, franchides, licenses, options, ri's/w, easmts, servitudes & grants) now owned or clmd or hraft acq-d in, to, affectg or relating to lds sit-d in the Co of Cx, St of Wn, includg but without limitg the generality of the foregoing, all of fp's ri, ti & int in and to the lds descbd in the instru's & documents referred to in the schedule marked "Exhibit A" attached hrto & by this reference made a part hof, & any & all agreemts amendatory thof or supplmentl thrto;
TGW all & sing the fixtures & improvmts located on any & all of the abv mentioned lds & the ri's, easmts & appur belong-g or in anywise incident thrto;
TH & TH...

xcn ok

"EXHIBIT A"

Schedule attached to & made a part of a Dd dtd Dec 29, 1953 fm Wash Refing Co, a Wn corpn to Shell Oil Co, a Delaware Corpn.

Reference is hby made to those crtn instru's & documents which are recdd in the ofc of the Co Aud of the Co of Cx, St of Wn in the books & at the pg's listed below:

(Page numbers follow book numbers, separated by diagonal)

DEEDS:

280/105-106	#222110	9/83 Lse #2 X
280/107-108	#222111	10/83 Lse #2 X
164/329	#85324	24-25/10 CMD #2 X
145/385	#71997	6,7,8-9/2 Comm. - Sell ✓

cont'd

Cowlitz County

,

Print this property info

General Property Info

Parcel (click link for map)	50145
Property ID	3041669
Jurisdiction	WOODLAND
Acres	0.00
Current Assessment Year	**2018**
Abbreviated Prop Ref	147 (COMMERCIAL TO WOODLAND) -2 -10 24 -5N -1W
Section/Township/Range	24-5N-1W
Property Use	0 - 1.00 ACRE
Neighborhood	WOODLAND
Tax Code Area	900
Exemptions	Yes
Tax Code Area Levy Rates (Total Rate = 9.986636)	

Owner Info

Primary Owner	FUEL PROCESSORS INC
Address	C/O OIL RE-REFINING CO, INC
Address	4150 N SUTTLE RD
City, State, Zip	PORTLAND, OR 97217
Country	US

Property Details

Assessor's Office - Assessed Values

For assessed value questions please call (360) 577-3010

Assessment Year	Tax Payable Year	Land Value	Improvement Value	Total Assessed Value	Links to Notice of Valuation
2018	2019	$100	$00	$100	NOV for 2018
2018	2019	$100	$00	$100	NOV for 2018
2017	2018	$100	$00	$100	NOV for 2017
2016	2017	$100	$00	$100	NOV for 2016
2015	2016	$100	$00	$100	NOV for 2015
2014	2015	$100	$00	$100	NOV for 2014
2013	2014	$100	$00	$100	NOV for 2013

Treasurer's Office - Taxes and Assessments

For tax questions please call (360) 577-3060

Tax Year	Statement ID	Taxes	Assessments	Total Charges	Total Paid	Total Due	Links to Tax Statement
2019	43821	$0.00	$8.77	$8.77	$8.77	$0.00	Tax Statement for 2019
2018	173041669	$0.00	$4.96	$4.96	$4.96	$0.00	Tax Statement for 2018
2017	163041669	$0.00	$4.48	$4.48	$4.48	$0.00	Tax Statement for 2017
2016	153041669	$1.14	$3.48	$4.62	$4.62	$0.00	Tax Statement for 2016
2015	143041669	$0.00	$3.46	$3.46	$3.46	$0.00	Tax Statement for 2015

Any total due listed in red may indicate delinquent amount(s) that may also include

Tax Year	Statement ID	Taxes	Assessments	Total Charges	Total Paid	Total Due	Links to Tax Statement
2014	133041669	$0.00	$3.48	$3.48	$3.48	$0.00	Tax Statement for 2014
2013	123041669	$0.00	$3.48	$3.48	$3.48	$0.00	Tax Statement for 2013

Any total due listed in red may indicate delinquent amount(s) that may also include interest and penalties

Auditor's Office - Conveyances

For recording questions please call (360) 577-3006

Recording Number	Book	Page	Grantor	Grantee
860922034	1008	755	BINGHAM WARREN W D	FUEL PROCESSORS INC C
3022031		0	FUEL PROCESSORS INC	
3022031		0		

Cowlitz County

Homepage Contact

701 BOZARTH AVE

WOODLAND, WA 98674

Print this property info

General Property Info

Parcel (click link for map)	50144
Property ID	3041668
Jurisdiction	WOODLAND
Acres	0.00
Current Assessment Year	**2018**
Abbreviated Prop Ref	147 (COMMERCIAL TO WOODLAND) -2 -6 THRU 8 24 -5N -1W
Section/Township/Range	24-5N-1W
Property Use	PETROLEUM REFINING ETC
Neighborhood	WOODLAND
Tax Code Area	900
Exemptions	None
Tax Code Area Levy Rates (Total Rate = 9.986636)	

Owner Info

Address	C/O OIL RE-REFINING CO, INC
Address	4150 N SUTTLE RD
City, State, Zip	PORTLAND, OR 97217
Country	US

Property Details

Year Built - COMM	1917
Area (SQFT) - COMM SUB_CODE	00
Area (SQFT) - COMM SUB_CODE	00
Year Built - COMM	1917
Area (SQFT) - COMM SUB_CODE	00
Area (SQFT) - COMM SUB_CODE	00

Assessor's Office - Assessed Values

For assessed value questions please call (360) 577-3010

Assessment Year	Tax Payable Year	Land Value	Improvement Value	Total Assessed Value	Links to Notice of Valuation
2018	2019	$100	$35,500	$35,600	NOV for 2018
2018	2019	$100	$35,500	$35,600	NOV for 2018
2017	2018	$100	$35,500	$35,600	NOV for 2017
2016	2017	$100	$35,500	$35,600	NOV for 2016
2015	2016	$100	$35,500	$35,600	NOV for 2015
2014	2015	$100	$35,500	$35,600	NOV for 2014
2013	2014	$100	$35,500	$35,600	NOV for 2013

Treasurer's Office - Taxes and Assessments

Tax Year	Statement ID	Taxes	Assessments	Total Charges	Total Paid	Total Due	Links to Tax Statement
2019	43820	$355.51	$62.28	$417.79	$417.79	$0.00	Tax Statement for 2019
2018	173041668	$413.34	$57.36	$470.70	$470.70	$0.00	Tax Statement for 2018
2017	163041668	$399.38	$57.42	$456.80	$456.80	$0.00	Tax Statement for 2017
2016	153041668	$406.56	$56.82	$463.38	$463.38	$0.00	Tax Statement for 2016
2015	143041668	$425.20	$54.52	$479.72	$479.72	$0.00	Tax Statement for 2015
2014	133041668	$430.06	$56.30	$486.36	$486.36	$0.00	Tax Statement for 2014
2013	123041668	$435.30	$58.12	$493.42	$493.42	$0.00	Tax Statement for 2013

Any total due listed in red may indicate delinquent amount(s) that may also include interest and penalties

Auditor's Office - Conveyances

For recording questions please call (360) 577-3006

Recording Number	Book	Page	Grantor	Grantee
850325046	984	561	BINGHAM WARREN W D	FUEL PROCESSORS INC C
3022031		0	FUEL PROCESSORS INC	
3022031		0		

Appendix D
Available Historical Soil Boring Logs

Coles & Associates, LLC

Drilling/Boring Log No. MW-4

Project: FPI Woodland, WA
Drill Rig: AMS Model 9500-VTR Probe
Initial GW Depth: 9.75'

Date: 11 May 2015
Hole Dia: 2.0"
Drilling Co: Pacific Soil & Water

Logged by: J. Betts, L.G.
Sampler: J. Betts, L.G.
TOC Elev: 25.74

Lithologic Description	USCS Class	Graphic Log	Depth (ft)	Sample	GW Depth	Remarks
asphalt underlain by gravel fill	fill		0			Well Construction Diagram
brown, sandy SILT, sl. plastic	ML		1			
			2			
gray, SAND with trace silt, loose, poorly graded	SP		3			
			4			MW-04-01 (3.2'-4.0')
			5			
			6			no PID response
brown, SILT with some sand, silt increases with depth, sl. plastic,	ML		7			
			8			MW-04-02 (8.2'-9')
no recovery			9			
			10			
brown, SAND with some silt, silt increases with depth, loose	SM		11			
			12			
			13			MW-04-03 (14.2'-15')
			14			
brown, SAND with trace silt, loose, poorly graded	SP		15			
Total Depth			16			
			17			
			18			
			19			
			20			
			21			
			22			
			23			
			24			
			25			

PVC Blank Casing with Bentonite Seal

Well Screen with 010 Sand Pack

bentonite backfill

Coles & Associates, LLC

Drilling/Boring Log No. MW-5

Project: FPI Woodland, WA
Drill Rig: AMS Model 9500-VTR Probe
Initial GW Depth: 5.0'

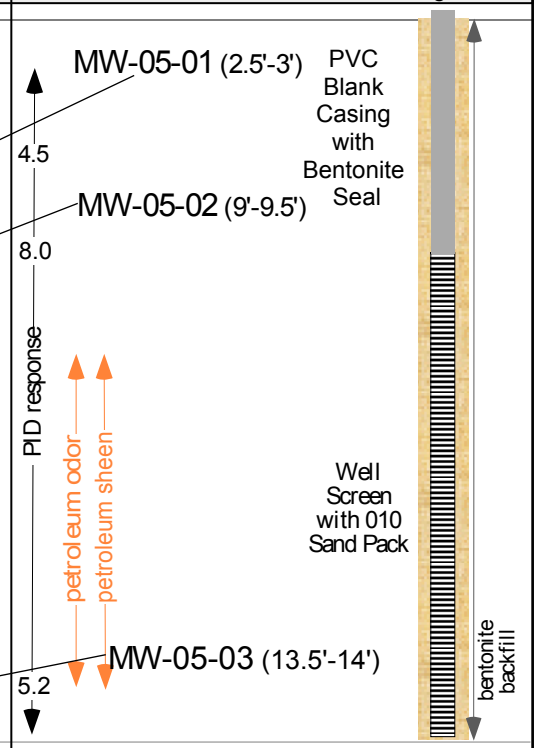
Date: 13 May 2015
Hole Dia: 2.0"
Drilling Co: Pacific Soil & Water

Logged by: J. Betts, L.G.
Sampler: D. Coles, L.G., L.H.G.
TOC Elev: 28.33

Lithologic Description	USCS Class	Graphic Log	Depth (ft)	Sample	GW Depth
silt and wood chips			0–2		
brown, SILT with some sand	ML		2–3		
no recovery			3–5		
brown SILT	ML		5–7		
gray, sandy SILT, petroleum odor and sheen	ML		7–9		
no recovery			9–10		
gray with brown mottling, sandy SILT, petroleum odor and sheen	ML		10–14		
no recovery			14–15		
Total Depth			15–25		

Remarks

Well Construction Diagram



Coles & Associates, LLC

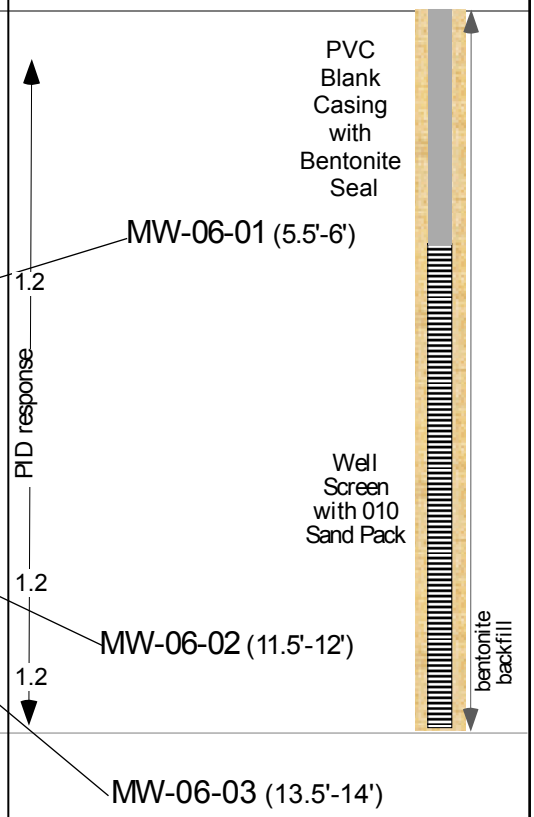
Drilling/Boring Log No. MW-6

Project: FPI Woodland, WA
Drill Rig: AMS Model 9500-VTR Probe
Initial GW Depth: 8.5'

Date: 13 May 2015
Hole Dia: 2.0"
Drilling Co: Pacific Soil & Water

Logged by: J. Betts, L.G.
Sampler: J. Betts, L.G.
TOC Elev: 25.88

Lithologic Description	USCS Class	Graphic Log	Depth (ft)	Sample	GW Depth	Remarks
asphalt with silt fill			0			Well Construction Diagram
brown, silty SAND	SM		1			
			2			
no recovery			3			
			4			
brown, silty SAND	SM		5			
			6			
brown, clayey SILT	ML		7			
			8			
			9			
brown, silty SAND	SM		10			
black gravels from 10' to 10'1"	SM					
brown, silty SAND with trace black gravels			11			
brown, silty SAND	SM					
			12			
gray, silty SAND	SM		13			
			14			
no recovery						
Total Depth			15			
			16			
			17			
			18			
			19			
			20			
			21			
			22			
			23			
			24			
			25			



Coles & Associates, LLC

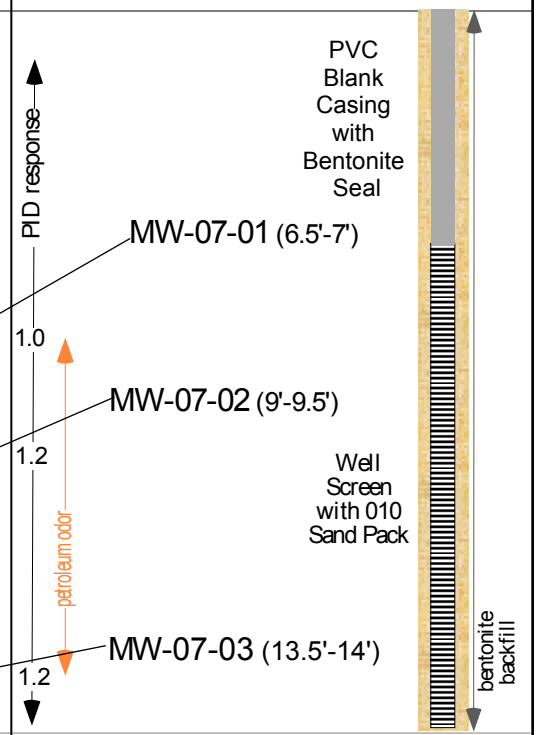
Drilling/Boring Log No. MW-7

Project: FPI Woodland, WA
Drill Rig: AMS Model 9500-VTR Probe
Initial GW Depth: 7.25'

Date: 13 May 2015
Hole Dia: 2.0"
Drilling Co: Pacific Soil & Water

Logged by: J. Betts, L.G.
Sampler: D.Coles, L.G., L.H.G.
TOC Elev: 25.39

Lithologic Description	USCS Class	Graphic Log	Depth (ft)	Sample	GW Depth	Remarks
asphalt with silt fill			0			Well Construction Diagram
brown, silty SAND	SM		1			
			2			
			3			
no recovery			4			
			5			
brown, silty SAND	SM		6			
			7			
brown changing to gray at depth, SILT, petroleum odor, no sheen	ML		8			
gray, v. fine sandy SILT, petroleum odor, no sheen	ML		9			
no recovery			10			
gray, v. fine sandy SILT, petroleum odor, no sheen	ML		11			
gray, SILT, petroleum odor, no sheen	ML		12			
gray, silty SAND, petroleum odor, no sheen	SM					
no recovery in sampler, but soils from 12.5 to 14 feet placed on clean plastic sheeting and sampled. Soils same as SM above.			13			
no recovery			14			
Total Depth			15			
			16			
			17			
			18			
			19			
			20			
			21			
			22			
			23			
			24			
			25			



Coles & Associates, LLC

Drilling/Boring Log No. MW-8

Project: FPI Woodland, WA
Drill Rig: AMS Model 9500-VTR Probe
Initial GW Depth: 9.0'

Date: 13 May 2015
Hole Dia: 2.0"
Drilling Co: Pacific Soil & Water

Logged by: J. Betts, L.G.
Sampler: D. Coles, L.G., L.H.G.
TOC Elev: 25.33

Lithologic Description	USCS Class	Graphic Log	Depth (ft)	Sample	GW Depth	Remarks
asphalt, gravels, and silt fill			0			Well Construction Diagram
brown, silty SAND	SM		1			
			2			
brown SILT			3			MW-08-01 (2.5'-3')
no recovery			4			1.0
			5			PID response
brown, silty SAND	SM		6			PVC Blank Casing with Bentonite Seal
brown SILT dark gray later 2.5" to 3" thick at 7.5'	ML		7			
			8			
brown, silty SAND	SM		9			MW-08-02 (9'-9.5')
no recovery			10			1.0
			11			Well Screen with 010 Sand Pack
brown, silty SAND with some black mottling	SM		12			
			13			MW-08-03 (14'-14.5')
no recovery			14			1.0
Total Depth			15			bentonite backfill
			16			
			17			
			18			
			19			
			20			
			21			
			22			
			23			
			24			
			25			

Coles & Associates, LLC

DRILLING/BORING LOG NO. MW-9

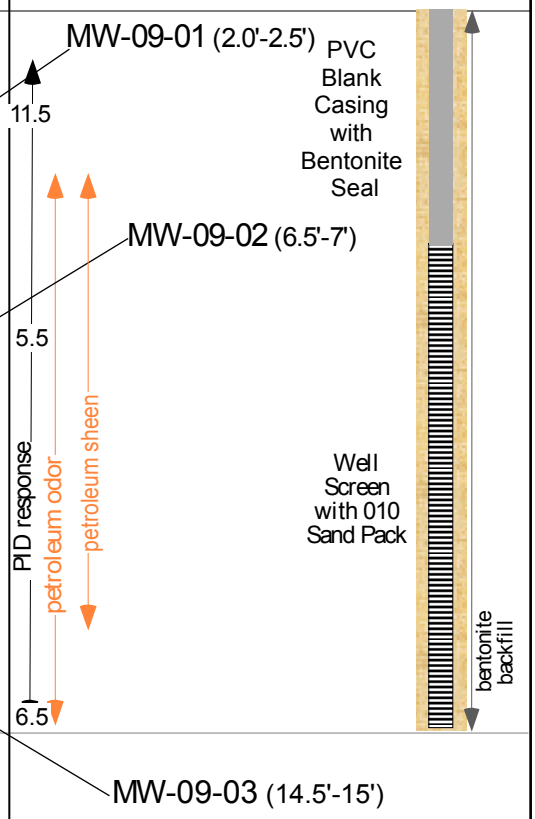
Project: FPI Woodland, WA
Drill Rig: AMS Model 9500-VTR Probe
Initial GW Depth: 2.5'

Date: 11 May 2015
Hole Dia: 2.0"
Drilling Co: Pacific Soil & Water

Logged by: J. Betts, L.G.
Sampler: J. Betts, L.G.
TOC Elev: 27.37

Lithologic Description	USCS Class	Graphic Log	Depth (ft)	Sample	GW Depth	Remarks
no recovery			0–2			
concrete			3			
light brown, silty v.fine SAND, petroleum odor and sheen	SM		4–5			
no recovery			6–7			
light brown, silty SAND, petroleum odor, sheen	SM		8–10			
no recovery			11			
light brown, silty SAND, petroleum odor, sheen	SM		12			
brown, clayey SILT, petroleum odor, no sheen	ML		13–14			
brown, silty SAND, petroleum odor, no sheen	SM		15			
Total Depth			16–25			

Remarks: Well Construction Diagram



Coles & Associates, LLC

General Notes: Sample MW-09-01 was collected from the drill shoe. Odor and sheen was observed in the sample.

1/09

C&A Project No. 10002.1

Coles & Associates, LLC

DRILLING/BORING LOG NO. MW-10

Project: FPI Woodland, WA
Drill Rig: AMS Model 9500-VTR Probe
Initial GW Depth: 4.5'

Date: 12 May 2015
Hole Dia: 2.0"
Drilling Co: Pacific Soil & Water

Logged by: J. Betts, L.G.
Sampler: D. Coles, L.G., L.H.G.
TOC Elev: 27.79

Lithologic Description	USCS Class	Graphic Log	Depth (ft)	Sample	GW Depth
concrete with fill sand below			0		
light gray, sandy SILT, petroleum odor, no sheen	ML		1–3		
no recovery			3–4		
gray, SILT, petroleum odor, no sheen	ML		4–5		
gray, sandy SILT, petroleum odor and sheen	ML		5–7		
gray, SAND with some silt, petroleum odor, no sheen	SM		7–8		
no recovery			8–10		
gray, SAND with some silt, petroleum odor, no sheen	SM		10–11		
gray, SILT, petroleum odor, no sheen	ML		11–14		
gray, SAND with some silt, petroleum odor and sheen	SM		14–15		
no recovery			15		
gray, SAND with some silt, petroleum odor, no sheen	SM		15–16		
gray, SAND, no petroleum odor, no sheen	SW		16–20		
gray, SAND with gravels, no petroleum odor, no sheen	SW		20–23		
gray, gravelly SAND, no petroleum odor, no sheen	SM		23–30		
Total Depth			30		

Remarks

Well Construction Diagram

MW-10-01 (2.5'-3.0')
50
PVC Blank Casing with Bentonite Seal
MW-10-02 (6.5'-7')
145
petroleum sheen
PID response
petroleum odor
Well Screen with 010 Sand Pack
petroleum sheen
MW-10-03 (15.5'-16')
100
MW-10-04 (22.5'-23')
8
MW-10-05 (29.5'-30')
6
bentonite backfill

Coles & Associates, LLC

C&A Project No. 10002.1

Appendix E
2018 Boring Logs

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: FUEL PROCESSORS FACILITY
PROJECT NUMBER: 060866
CLIENT: SHELL
LOCATION: WOODLAND, WASHINGTON

HOLE DESIGNATION: MW-11
DATE COMPLETED: August 8, 2018
DRILLING METHOD: VAC/DIRECT PUSH
FIELD PERSONNEL: D. TRUDEAU

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	RAILROAD BALLAST, 1/2-8" cobble, angular ballast		CONCRETE					0.2
			BENTONITE CHIPS					0.0
2	- large angled concrete slab at 2.6ft BGS		2" PVC WELL CASING	1VAC				0.4
	- angular cobble to 18" at 2.8ft BGS							0.3
4	SM-SILTY SAND (FILL), trace organics, trace angular railroad ballast, glass, cloth, garbage, compact, brown, moist	3.70						0.1
		5.00	3.5" BOREHOLE	5'				0.6
6	SM-SILTY SAND, trace organics, trace coal, compact, brown, moist			2GP		25		
8	ML-SILT, trace sand/clay, firm, brown/gray, moist	8.00						
10			2" PVC WELL SCREEN	3GP 10'				0.8
12			SAND PACK					
14	- wet at 14.1ft BGS			4GP 15'				
16	END OF BOREHOLE @ 16.0ft BGS	16.00	BACKFILLED WITH SOIL CUTTINGS					1.5
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
3.00 to 15.00ft BGS
Length: 12ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
1.00 to 2.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
2.00 to 16.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS ⬭

OVERBURDEN LOG 060866-WI.GPJ GHD_Corp 3/27/19

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: FUEL PROCESSORS FACILITY
PROJECT NUMBER: 060866
CLIENT: SHELL
LOCATION: WOODLAND, WASHINGTON

HOLE DESIGNATION: MW-12
DATE COMPLETED: August 8, 2018
DRILLING METHOD: VAC/DIRECT PUSH
FIELD PERSONNEL: D. TRUDEAU

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	RAILROAD BALLAST, 1/4-4" large cobble/cement debris, with silty sand		CONCRETE					0.0
			BENTONITE CHIPS					0.0
2			2" PVC WELL CASING	1VAC				0.0
	SM-SILTY SAND (FILL), trace organics, compact, brown, moist	3.20						0.0
4	- 3.3 large 1" rebar, metal debris, fabric at 3.3ft BGS							0.0
		5.00	3.5" BOREHOLE	5'				0.1
6	- rusted metal pieces at 4.6ft BGS							0.2
	SM-SILTY SAND, trace clay, compact, brown, moist			2GP		80		
8								
	ML-SILT, few clay, trace sand, firm, brown, moist	8.60						
10			2" PVC WELL SCREEN	10'				0.1
			SAND PACK					
12	SM-SILTY SAND, trace clay, compact, brown, moist to wet	12.00		3GP		75		
	- wet at 13.4ft BGS		▽					
14								
	END OF BOREHOLE @ 15.0ft BGS	15.00		15'				0.1
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
3.00 to 15.00ft BGS
Length: 12ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
1.00 to 2.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
2.00 to 15.40ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS ⬭

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: FUEL PROCESSORS FACILITY
PROJECT NUMBER: 060866
CLIENT: SHELL
LOCATION: WOODLAND, WASHINGTON

HOLE DESIGNATION: MW-13
DATE COMPLETED: August 8, 2018
DRILLING METHOD: VAC/DIRECT PUSH
FIELD PERSONNEL: D. TRUDEAU

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SM-SILTY SAND (FILL), with organics (berry roots), compact, fine grained, brown, moist		CONCRETE					5.2
	- few fine gravel at 0.8ft BGS							0.5
2	- 6" rusty nail at 2.1ft BGS		BENTONITE CHIPS					2.5
			2" PVC WELL CASING	1VAC				
	SM-SILTY SAND, trace organics, compact, brown, moist	3.00						1.9
4								0.8
	SM-SILTY SAND, trace clay, compact, brown, moist	5.00	3.5" BOREHOLE	5'				0.4
6								
				2GP				1.3
8								
			2" PVC WELL SCREEN	10'				
10	SM-SILTY SAND, compact, brown, moist	10.20						
			SAND PACK					2.6
12				3GP				
	- gray at 13.5ft BGS							
14								
	END OF BOREHOLE @ 15.0ft BGS	15.00		15'				3.4
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
3.00 to 15.00ft BGS
Length: 12ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
1.00 to 2.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
2.00 to 15.50ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS ⬭

OVERBURDEN LOG 060866-WI.GPJ GHD_Corp 3/27/19

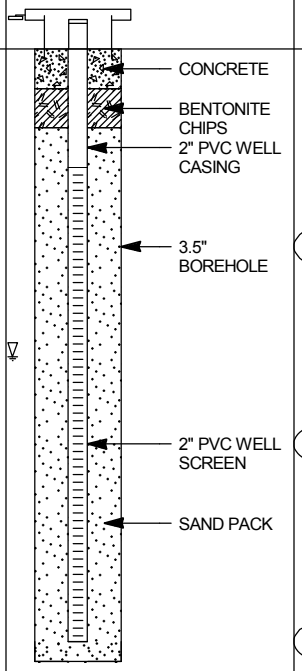
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: FUEL PROCESSORS FACILITY
PROJECT NUMBER: 060866
CLIENT: SHELL
LOCATION: WOODLAND, WASHINGTON

HOLE DESIGNATION: MW-14
DATE COMPLETED: August 9, 2018
DRILLING METHOD: VAC/HAND AUGER/DIRECT PUSH
FIELD PERSONNEL: D. TRUDEAU

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	CONCRETE	0.33					1196
	SM-SILTY SAND, trace organics and fine gravel, compact, gray, moist, odor						1052
2		1.80					
	ML-SANDY SILT, firm, gray, moist		1VAC				365
	ML-SILT, few clay/sand, firm, gray, moist	3.00					760
4							532
	CL-SILTY CLAY, trace sand, firm, gray, moist	4.20	5'				839
	SM-SILTY SAND, compact, gray, moist, odor	5.40					
6			2GP		90		334
	- wet at 7.8ft BGS						
8							
10			3GP 10'		90		299
	- trace clay, wet at 11.8ft BGS						
12							
14			4GP		100		4.6
			15'				
16	END OF BOREHOLE @ 16.0ft BGS	16.00					
18							
20							
22							
24							
26							
28							
30							
32							
34							

MONITORING WELL



WELL DETAILS
Screened interval:
3.00 to 15.00ft BGS
Length: 12ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
1.00 to 2.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
2.00 to 15.50ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS ⬭

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: FUEL PROCESSORS FACILITY
PROJECT NUMBER: 060866
CLIENT: SHELL
LOCATION: WOODLAND, WASHINGTON

HOLE DESIGNATION: MW-15
DATE COMPLETED: August 9, 2018
DRILLING METHOD: VAC/DIRECT PUSH
FIELD PERSONNEL: D. TRUDEAU

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	CONCRETE	0.33	CONCRETE					1545
	SM-SILTY SAND, trace organics (plant roots), compact, black, moist, heavy odor/staining		BENTONITE CHIPS					1887
2	- black/tan at 1.0ft BGS		2" PVC WELL CASING	1VAC				1453
	CL-SILTY CLAY, soft, gray, moist, odor	2.80						772
4	- CL-CLAY, with silt, soft, gray, moist, odor at 4.0ft BGS							329
	- trace organics (roots), green/gray at 5.0ft BGS		3.5" BOREHOLE	5'				1306
6								148
		6.90		2GP		100		
	SM-SILTY SAND, compact, gra, moist, odor							
8								2179
10			2" PVC WELL SCREEN	3GP 10'				1644
	- wet at 11.2ft BGS							
12			SAND PACK					
		13.80		4GP				
14	ML-SILT, few sand, trace clay, firm, gray, moist			15'				
16	END OF BOREHOLE @ 16.0ft BGS	16.00	BACKFILLED WITH SOIL CUTTINGS					30.1
18								
20								
22								
24								
26								
28								
30								
32								
34								

WELL DETAILS
Screened interval:
3.00 to 15.10ft BGS
Length: 12.1ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
1.00 to 2.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
2.00 to 15.10ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS ⬭

OVERBURDEN LOG 060866-WI.GPJ GHD_Corp 3/27/19

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: FUEL PROCESSORS FACILITY
PROJECT NUMBER: 060866
CLIENT: SHELL
LOCATION: WOODLAND, WASHINGTON

HOLE DESIGNATION: SB-1
DATE COMPLETED: August 9, 2018
DRILLING METHOD: VAC/DIRECT PUSH
FIELD PERSONNEL: D. TRUDEAU

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	CONCRETE	0.33						1.8
	GP-GRAVEL (FILL)	0.50						33.7
2	CONCRETE	1.00						923
	SP-SAND (FILL), loose	1.30		1VAC				850
4	SM-SILTY SAND, compact, brown/gray, moist, odor	3.80						560.2
	ML-SILT, few clay/sand, firm, brown/gray, moist, odor			5'				707
6	- wet at 6.8ft BGS		▽	2GP				1351
8			BACKFILLED WITH BENTONITE CHIPS					
10				3GP 10'				
12								1329
14				4GP				
				15'				
16	- organics (roots) at 16.0ft BGS	16.00						1193
	END OF BOREHOLE @ 16.0ft BGS							
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS ⬭

OVERBURDEN LOG 060866-WI.GPJ GHD_Corp 3/27/19

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: FUEL PROCESSORS FACILITY
PROJECT NUMBER: 060866
CLIENT: SHELL
LOCATION: WOODLAND, WASHINGTON

HOLE DESIGNATION: SB-2
DATE COMPLETED: August 9, 2018
DRILLING METHOD: VAC
FIELD PERSONNEL: D. TRUDEAU

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	CONCRETE	0.33						2.2
	GP-GRAVEL (FILL)	0.42						304
2	SP-SAND (FILL), coarse grained	1.00						
	SM-SILTY SAND, trace clay/gravel, compact, brown/gray, moist, odor	1.90		1VAC				1010
4	SM-SILTY SAND, compact, fine grained, brown, moist, odor	3.00						277
	ML-SILT, trace clay, firm, brown/gray, moist, odor	4.00		5'				642
6	ML-SILT, few clay, trace sand, firm, gray, moist, odor							475
	SM-SILTY SAND, compact, gray, moist, odor	7.20	BACKFILLED WITH BENTONITE CHIPS	2GP				3524
8	- wet at 10.8ft BGS							
10				3GP 10'				671
12								
14	ML-SILT, few sand, trace clay, firm, gray, wet	13.70		4GP				
	END OF BOREHOLE @ 16.0ft BGS	16.00		15'				12.7
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS ⬭

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: FUEL PROCESSORS FACILITY
PROJECT NUMBER: 060866
CLIENT: SHELL
LOCATION: WOODLAND, WASHINGTON

HOLE DESIGNATION: SB-3
DATE COMPLETED: August 8, 2018
DRILLING METHOD: VAC/DIRECT PUSH
FIELD PERSONNEL: D. TRUDEAU

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	SM-SILTY SAND, with organics and fine gravel, compact, brown, moist							0.0 0.0
2	SM-SILTY SAND, trace organics/gravel, compact, brown, moist	2.00		1VAC				0.1
4	- heavy solvent odor at 4.0ft BGS							1.5 860
	CL-SILTY CLAY, few fine sand, firm, brown/gray, moist	4.80 5.00		5'				1517
6	ML-SILT, few clay, firm, gray, moist, odor		BACKFILLED WITH BENTONITE CHIPS					
8	SM-SILTY SAND, compact, gray, moist, odor	7.90		2GP				
10	- wet at 9.0ft BGS			10'				1272
12				3GP		20		
14								
	END OF BOREHOLE @ 15.0ft BGS	15.00		15'				1230
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS ⬭

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: FUEL PROCESSORS FACILITY
PROJECT NUMBER: 060866
CLIENT: SHELL
LOCATION: WOODLAND, WASHINGTON

HOLE DESIGNATION: SB-4
DATE COMPLETED: August 7, 2018
DRILLING METHOD: VAC/DIRECT PUSH
FIELD PERSONNEL: D. TRUDEAU

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH	TEMP MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
0	SM-SILTY SAND, with organics (roots), trace gravel, compact, fine grained, brown, moist							0.0
0								0.0
2				1VAC				0.2
4								0.4
4								0.7
5		5.00	2" PVC WELL CASING	5'				100.6
6	ML-SILT, few sand, trace organics, compact, gray, moist, solvent odor							20.1
8				2GP		80		489.5
10			ABANDONED AND BACKFILLED WITH BENTONITE CHIPS	10'				
12	- wet, sheen at 11.5ft BGS			3GP		80		404.5
13	- few clay at 13.2ft BGS							
14				15'				
16								
18		18.00		4GP		90		
18	SP-SAND, trace silt, compact, gray, wet							
20								21.3
22				5GP		100		
24								158.5
26								
27	- few fine gravel/coarse sand, wet at 27.0ft BGS		2" PVC WELL CASING	6GP		100		
28								
30		30.00						88.6
30	END OF BOREHOLE @ 30.0ft BGS							
32								
34								

WELL DETAILS
Screened interval:
25.00 to 30.00ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS ⬭

OVERBURDEN LOG 060866-WI.GPJ GHD_Corp 3/27/19

Appendix F
Terrestrial Ecological Evaluation Form

Voluntary Cleanup Program

Washington State Department of Ecology
Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to www.ecy.wa.gov/programs/tcp/policies/terrestrial/TEEHome.htm.

Step 1: IDENTIFY HAZARDOUS WASTE SITE	
Please identify below the hazardous waste site for which you are documenting an evaluation.	
Facility/Site Name: Fuel Processors Inc	
Facility/Site Address: 701 Bozarth Ave Woodland, WA	
Facility/Site No: 810	VCP Project No.: AO # 5054

Step 2: IDENTIFY EVALUATOR			
Please identify below the person who conducted the evaluation and their contact information.			
Name: Brian Peters		Title: Associate	
Organization: GHD			
Mailing address: 20818 44th Ave W, Suite 190			
City: Lynnwood	State: WA	Zip code: 98036	
Phone: 425-563-5406	Fax:	E-mail: brian.peters@ghd.com	

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

☒ Yes *If you answered **"YES,"** then answer **Question 2**.*

☐ No or Unknown *If you answered **"NO" or "UKNOWN,"** then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? *Check all that apply. Then skip to **Step 4** of this form.*

Point of Compliance: WAC 173-340-7491(1)(a)

☐ All soil contamination is, or will be,* at least 15 feet below the surface.

☐ All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

☒ All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

☐ There is less than 0.25 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.

☐ For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

☐ Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

[±] "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

[#] "Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

☐ Yes *If you answered **"YES,"** then answer **Question 2** below.*

☐ No or Unknown *If you answered **"NO"** or **"UNKNOWN,"** then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

☐ Yes *If you answered **"YES,"** then answer **Question 3** below.*

☐ No *If you answered **"NO,"** then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

☐ Yes *If you answered **"YES,"** then answer **Question 4** below.*

☐ No *If you answered **"NO,"** then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

☐ Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*

☐ Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? *Check all that apply. Then skip to **Step 4** of this form.*

Exposure Analysis: WAC 173-340-7492(2)(a)

☐ Area of soil contamination at the Site is not more than 350 square feet.

☐ Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

☐ No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. *See* WAC 173-340-7493(1)(c).

1. Was there a problem? *See* WAC 173-340-7493(2).

☐ Yes *If you answered **"YES,"** then answer **Question 2** below.*

☐ No *If you answered **"NO,"** then identify the reason here and then skip to **Question 5** below:*

- ☐ No issues were identified during the problem formulation step.
- ☐ While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? *See* WAC 173-340-7493(3).

☐ Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*

☐ Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?
Check all that apply. See WAC 173-340-7493(3).

- ☐ Literature surveys.
- ☐ Soil bioassays.
- ☐ Wildlife exposure model.
- ☐ Biomarkers.
- ☐ Site-specific field studies.
- ☐ Weight of evidence.
- ☐ Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

- ☐ Confirmed there was no problem.
- ☐ Confirmed there was a problem and established site-specific cleanup levels.

5. Have you already obtained Ecology's approval of both your problem formulation and problem resolution steps?

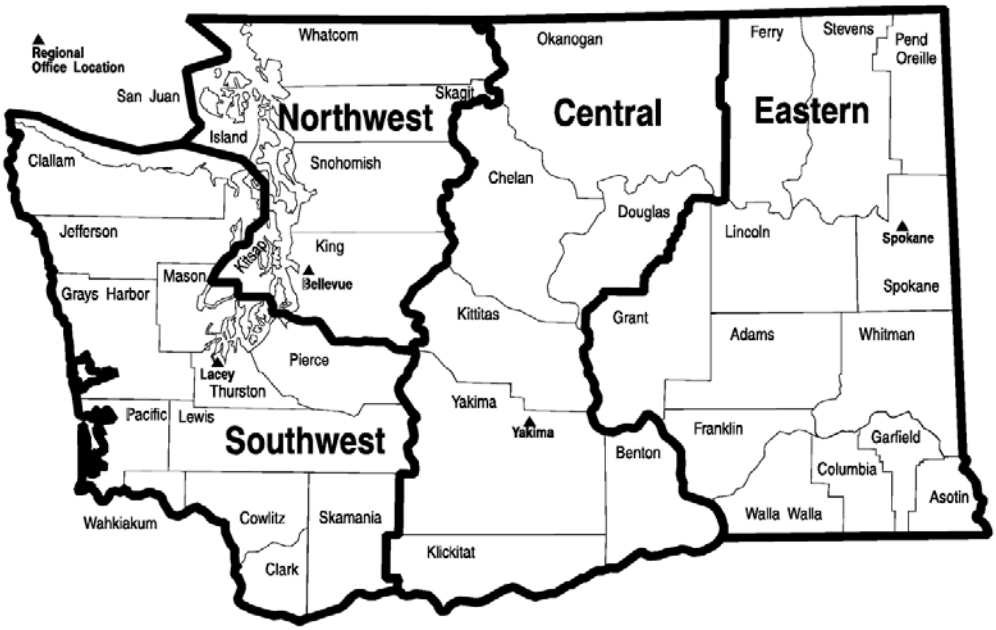
☐ Yes If so, please identify the Ecology staff who approved those steps:

☐ No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.

Northwest Region: Attn: VCP Coordinator 3190 160th Ave. SE Bellevue, WA 98008-5452	**Central Region:** Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009
Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775	**Eastern Region:** Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295



Appendix G
Field Data Sheets

WELL GAUGING DATA

Project # 160510-LBI Date 5/10/16 Client GHD

Site 701 Bozarth Ave, Woodland, WA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	0928	2					7.99	14.91		
MW-2	0811	2					7.85	14.43		
MW-3	1131	2					7.71	14.80		
MW-4	1236	2					7.80	14.62		
MW-5	0913	2					10.82	17.70		
MW-6	1339	2					8.51	14.71		
MW-7	1444	2					8.13	14.58		
MW-8	1026	2					7.73	14.86		
MW-9	1031	2					10.11	14.46		
MW-10	1600	2	ODOR	10.26	2.83	—	13.09	—	↓	

LOW FLOW WELL MONITORING DATA SHEET

Project #: 160510-LB1	Client: GHD
Sampler: LB	Gauging Date: 5/11/16
Well I.D.: MW-1	Well Diameter (in.): Ø 3 4 6 8
Total Well Depth (ft.): 14.91	Depth to Water (ft.): 7.99
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: YSI Pro Plus

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
Sampling Method: Dedicated Tubing New Tubing Other

Start Purge Time: 0933 Flow Rate: 100 mL/min Pump Depth: 10.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0939	16.7	7.48	823	15	0.49	-169.8	600	8.18
0942	16.7	7.51	823	14	0.32	-175.1	900	8.18
0945	16.8	7.53	824	13	0.30	-176.8	1200	8.18
0948	16.9	7.56	825	12	0.28	-178.1	1500	8.18
0951	17.1	7.58	823	13	0.27	-179.4	1800	8.18

Did well dewater? Yes No Amount actually evacuated: 1.8L

Sampling Time: 0952 Sampling Date: 5/11/16

Sample I.D.: GHD-060866-051116-LB-MW-1 Laboratory: TA

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 160510-LB1	Client: GHD
Sampler: LB	Gauging Date: 5/11/12
Well I.D.: MW-2	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.43	Depth to Water (ft.): 7.85
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI Pro Plus

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 0818 Flow Rate: 100 mL/min Pump Depth: 10.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0824	14.1	7.51	617	22	0.47	-156.7	600	8.03
0827	14.2	7.62	600	16	0.39	-163.4	900	8.03
0830	14.2	7.69	604	11	0.38	-166.3	1200	8.03
0833	13.9	7.70	606	12	0.37	-168.1	1500	8.03
0836	14.0	7.71	605	13	0.36	-169.4	1800	8.03

Did well dewater? Yes (No)	Amount actually evacuated: 1.8L
Sampling Time: 0837	Sampling Date: 5/11/16
Sample I.D.: GW-060866-051116-LB-MW-2	Laboratory: TA
Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D)	Other: (SEE COC)
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 160570-LB1	Client: GHD
Sampler: LB	Gauging Date: 5/10/16
Well I.D.: MW-3	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.80	Depth to Water (ft.): 7.71
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: YSI Pro Plus

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 1135 Flow Rate: 100 mL/MIN Pump Depth: 10.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1132	19.1	7.48	437	20	0.40	-168.1	600	7.93
1145	20.2	7.45	438	12	0.33	-171.4	900	7.95
1148	20.5	7.46	436	16	0.29	-174.3	1200	7.94
1151	20.5	7.45	434	17	0.27	-176.2	1500	7.94
1154	20.6	7.46	434	16	0.26	-177.8	1800	7.94

Did well dewater? Yes (No)	Amount actually evacuated: 1.8L
Sampling Time: 1155	Sampling Date: 5/10/16
Sample I.D.: GW-060866-051016-LB-MW-3	Laboratory: TA
Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D)	Other: SEE COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 160510-LB1	Client: 610
Sampler: LB	Gauging Date: 5/10/16
Well I.D.: MW-4	Well Diameter (in.): ② 3 4 6 8 ____
Total Well Depth (ft.): 14.62	Depth to Water (ft.): 7.80
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI Pro Plus

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 1241 Flow Rate: 100 mL/MIN Pump Depth: 10.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1247	19.5	7.39	267	15	1.33	-119.4	600	8.05
1250	18.9	7.37	268	10	1.30	-124.6	900	8.05
1253	18.6	7.36	267	9	1.28	-125.4	1200	8.05
1256	18.4	7.35	266	9	1.26	-126.1	1500	8.05
1259	18.4	7.32	265	8	1.25	-127.4	1800	8.05

Did well dewater? Yes (No)	Amount actually evacuated: 1.8L
Sampling Time: 1300	Sampling Date: 5/10/16
Sample I.D.: GW-060866-051016-LB-MW-4	Laboratory: TA
Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D)	Other: (SEE COC)
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 160510-LB1	Client: GHD
Sampler: LB	Gauging Date: 5/10/16
Well I.D.: MW-5	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 17.70	Depth to Water (ft.): 10.82
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump

Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 0917 Flow Rate: 100 ML/MIN Pump Depth: 13.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0923	12.0	7.49	85	24	0.28	-188.3	600	10.85
0926	11.7	7.42	86	23	0.30	-198.4	900	10.85
0929	11.8	7.41	85	24	0.28	-200.1	1200	10.85
0932	11.7	7.40	84	23	0.27	-201.8	1500	10.85
0935	11.6	7.39	85	24	0.26	-202.4	1800	10.85

Did well dewater? Yes (No)	Amount actually evacuated: 1.8 L
Sampling Time: 0936	Sampling Date: 5/10/16
Sample I.D.: GW-060866-051016-LB-MW-5	Laboratory: TA
Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D)	Other: (SEE COC)
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 160510-LB1	Client: GHD
Sampler: LB	Gauging Date: 5/10/16
Well I.D.: MW-6	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.71	Depth to Water (ft.): 8.51
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump

Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 1343 Flow Rate: 100 mL/min Pump Depth: 11'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1349	17.8	7.31	147	20	0.80	-143.8	600	8.62
1352	17.1	7.23	146	17	0.62	-152.8	900	8.62
1355	16.7	7.19	146	18	0.63	-160.7	1200	8.62
1358	16.8	7.16	147	17	0.61	-159.6	1500	8.62
1401	16.8	7.15	148	16	0.60	-158.4	1800	8.62

Did well dewater? Yes (NO) Amount actually evacuated: 1.8L

Sampling Time: 1402 Sampling Date: 5/10/16

Sample I.D.: GW-060866-051016-LB-MW-6 Laboratory: TA

Analyzed for: (TPH-G) BTEX MTBE (TPH-D) Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 160510-LB1	Client: GHD
Sampler: LB	Gauging Date: 5/10/16
Well I.D.: MW-7	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.58	Depth to Water (ft.): 8.13
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI Pro Plus

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 1448 Flow Rate: 100 mL/MIN Pump Depth: 11'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1454	17.7	7.45	615	122	0.38	-197.1	600	8.28
1457	17.7	7.38	575	139	0.25	-211.4	900	8.28
1500	18.0	7.35	579	140	0.24	-209.3	1200	8.28
1503	17.8	7.35	578	141	0.23	-211.8	1500	8.28
1506	18.0	7.35	578	143	0.21	-212.4	1800	8.28

Did well dewater? Yes (NO)	Amount actually evacuated: 1.8L
Sampling Time: 1507	Sampling Date: 5/10/16
Sample I.D.: GW-060866-051016-LB-MW-7	Laboratory: TA
Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D)	Other: SEE COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 160510-LB1	Client: GHD
Sampler: LB	Gauging Date: 5/10/16
Well I.D.: MW-8	Well Diameter (in.): (2) 3 4 6 8
Total Well Depth (ft.): 14.86	Depth to Water (ft.): 7.73
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other

Start Purge Time: 1031 Flow Rate: 100 mL/min Pump Depth: 10.5

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1037	17.4	7.65	135	33	0.92	-102.1	600	7.91
1040	16.8	7.64	135	19	0.85	-119.8	900	7.93
1043	17.0	7.64	135	15	0.83	-123.4	1200	7.94
1046	16.9	7.66	134	15	0.82	-125.1	1500	7.95
1049	16.7	7.66	135	14	0.81	-127.4	1800	7.95

Did well dewater? Yes (No) Amount actually evacuated: 1.8L

Sampling Time: 1050 Sampling Date: 5/10/16

Sample I.D.: GW-060866-052016-LB-MW-8 Laboratory: TA

Analyzed for: (TPH-G) BTEX MTBE (TPH-D) Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 160510-LB1	Client: GHD
Sampler: LB	Gauging Date: 5/11/16
Well I.D.: MW-9	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.46	Depth to Water (ft.): 10.11
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI Pro Plus

Purge Method: 2" Grundfos Pump Peristaltic Pump Bladder Pump
Sampling Method: Dedicated Tubing New Tubing Other ____

Start Purge Time: 1036 Flow Rate: 100 mL/min Pump Depth: 13'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1042	14.7	7.65	142	43	0.44	-203.8	600	10.48
1045	14.8	7.63	144	17	0.26	-209.2	900	10.50
1048	14.0	7.59	145	20	0.24	-219.9	1200	10.51
1051	13.8	7.58	144	20	0.25	-219.0	1500	10.52
1054	13.7	7.57	143	19	0.26	-218.4	1800	1052

Did well dewater? Yes (No) Amount actually evacuated: 1.8L

Sampling Time: 1055 Sampling Date: 5/11/16

Sample I.D.: GW-060866-051116-LB-MW-9 Laboratory: TA

Analyzed for: (TPH-G) BTEX MTBE TPH-D Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 160510-LB1	Client: GHD
Sampler: LB	Gauging Date: 5/10/16
Well I.D.: MW-10	Well Diameter (in.): (2) 3 4 6 8 ___
Total Well Depth (ft.): ___	Depth to Water (ft.): 13.09
Depth to Free Product: 10.26	Thickness of Free Product (feet): 2.83
Referenced to: PVC Grade	Flow Cell Type: ___

Purge Method: 2" Grundfos Pump / Peristaltic Pump / Bladder Pump
Sampling Method: Dedicated Tubing / New Tubing / Other ___

Start Purge Time: ___ Flow Rate: ___ Pump Depth: ___

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
	___	2.83' OF		SPH	DETECTED		W/	
			INTERFACE		PROBE		___	
1150	___	SPH	SAMPLE TAKEN				___	

Did well dewater? Yes No — Amount actually evacuated: ___

Sampling Time: 1150 — Sampling Date: 5/11/16

Sample I.D.: SPH-060866-051116-LB-MW-10 — Laboratory: SHELL

Analyzed for: TPH-G BTEX MTBE TPH-D — Other: SPH

Equipment Blank I.D.: @ Time — Duplicate I.D.:

Shell Oil Products US Chain Of Custody Record

LAB (LOCATION)
- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (_____)
- ☐ Other (_____)

Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:
- ☐ SGW FDG
- ☐ PIPELINE
- ☑ RETAIL
- ☐ CHEMICALS
- ☐ CONSULTANT
- ☐ LUBES
- ☐ TRANSPORTATION
- ☐ OTHER _____

Print Bill To Contact Name: Brian Peters

PO #:

PlaNet Site or Project ID:

GSAP Project ID:

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 5/11/16

PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services

LOG CODE: BTSS

SITE ADDRESS: Street and City: 701 Bozarth Ave., Woodland

State: WA

GHD Project / Task Number:

ADDRESS: 1680 Rogers Ave., San Jose, CA

EDF DELIVERABLE TO (Name, Company, Office Location): Brian Peters, GHD, Lynnwood, WA

PHONE NO.: 425-563-6506

E-MAIL: brian.peters@aecom.com

AECOM Other ID

PROJECT CONTACT (Hardcopy or PDF Report to): Brian Peters

TELEPHONE: 206-438-2371

FAX:

Bill To Contact E-MAIL: brian.peters@ghd.com

SAMPLER NAME(S) (Print): LEE BORES

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☑ UST AGENCY: Washington Dept of Ecology

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☐ LEVEL 4 ☐ OTHER (SPECIFY) _____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☐ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

UNIT COST: LAB-55 BTEX; SI LAB-123 - WA NW Dx Water; LAB-35 MTBE; LAB-36 TBA; LAB-56 TBA; LAB-37 DIPE; LAB-38 TAME; LAB-39 ETBE

NON-UNIT COST: WA - NWTPH-Gx; Dissolved Lead (6020A) (FF); Naphthalene (8260B); EPA Method 8260 Full; EPA Method 8270; EPA Method 8082A

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	LAB-55 BTEX	SI LAB-123 - WA NW Dx Water	LAB-35 MTBE	LAB-36 TBA	LAB-56 TBA	LAB-37 DIPE	LAB-38 TAME	LAB-39 ETBE	WA - NWTPH-Gx	Dissolved Lead (6020A) (FF)	Naphthalene (8260B)	EPA Method 8260 Full	EPA Method 8270	EPA Method 8082A	Container PID Readings or Laboratory Notes
	GW-0608GG-051116-LB-MW-1	5/11/16	0952	WG	X	X				9	X	X							X	X	X				
	GW-0608GG-051116-LB-MW-2	↓	0857	WG	X	X		X		13	X	X							X	X	X	X	X	X	
	GW-0608GG-051016-LB-MW-3	5/10/16	1155	WG	X	X				9	X	X							X	X	X				
	GW-0608GG-051016-LB-MW-4		1300	WG	X	X				9	X	X							X	X	X				
	GW-0608GG-051016-LB-MW-5		0936	WG	X	X		X		13	X	X							X	X	X	X	X	X	
	GW-0608GG-051016-LB-MW-6		1402	WG	X	X		X		11	X	X							X	X	X	X	X		
	GW-0608GG-051016-LB-MW-7		1357	WG	X	X				9	X	X							X	X	X				
	GW-0608GG-051016-LB-MW-8	↓	1050	WG	X	X				9	X	X							X	X	X				
	GW-0608GG-051116-LB-MW-9	5/11/16	1065	WG	X	Y				9	X	X							X	X	X	X			
	TB	5/10/16	0800	WG	X					2	X								X						ON HOLD

Relinquished by: (Signature)

Received by: (Signature) SHIPPED VIA FEDEX

Date: 5/11/16

Time:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Version: 14Dec15

Shell Oil Products US Chain Of Custody Record

LAB (LOCATION)
- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☐ TESTAMERICA (_____)
- ☑ Other (_____)

Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:
- ☐ GW FDG
- ☐ PIPELINE
- ☑ RETAIL
- ☐ CHEMICALS
- ☐ CONSULTANT
- ☐ LUBES
- ☐ TRANSPORTATION
- ☐ OTHER _____

Print Bill To Contact Name: Brian Peters

PO #:

PlaNet Site or Project ID:

GSAP Project ID:

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 5/11/16

PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services

LOG CODE: BTSS

ADDRESS: 1680 Rogers Ave., San Jose, CA

PROJECT CONTACT (Hardcopy or PDF Report to): Brian Peters

TELEPHONE: 206-438-2371

FAX:

Bill To Contact E-MAIL: brian.peters@ghd.com

SITE ADDRESS: Street and City: 701 Bozarth Ave., Woodland

State: WA

GHD Project / Task Number:

EDF DELIVERABLE TO (Name, Company, Office Location): Brian Peters, GHD, Lynnwood, WA

PHONE NO.: 425-563-6506

E-MAIL: brian.peters@aecom.com

AECOM Other ID

SAMPLER NAME(S) (Print): LEE BORES

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
- ☑ STANDARD (14 DAY)
- ☐ 5 DAYS
- ☐ 3 DAYS
- ☐ 2 DAYS
- ☐ 24 HOURS
- ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☑ UST AGENCY: Washington Dept of Ecology

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☐ LEVEL 4 ☐ OTHER (SPECIFY) _____

TEMPERATURE ON RECEIPT C° Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☐ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

UNIT COST

NON-UNIT COST

COE FINGERPRINT

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	COE FINGERPRINT
	SPH-060866-051116-MB-MW-D	5/11/16	1150	SPH				X		2	X

Relinquished by: (Signature)

Received by: (Signature) SHIPPED VIA FEDEX

Date: Time:

Relinquished by: (Signature)

Received by: (Signature)

Date: Time:

Relinquished by: (Signature)

Received by: (Signature)

Date: Time:

Version: 14Dec15

May 10, 2016

Reference No. 060866

Shell Global Solutions, Inc.
Attn: Ileana Rhodes-EC401
3333 Hwy 6 South
Houston, Texas 77082

Re: **Fingerprinting Analysis Request**
701 Bozarth Ave, Woodland, Washington

Dear Ms. Rhodes:

GHD Services, Inc. (GHD) prepared this request on behalf of Shell Oil Products US (Shell). The sample associated with this letter is for fingerprinting analysis of petroleum hydrocarbons in order to determine composition. The Shell EE for this project is Andrea Wing.

PlaNet Site ID: MIGUS7999038

Sample name: SPH-060866-051116-LB-MW-10

Sample date and time: 5/11/16 1150

Other notes:

If you have questions regarding this report, please contact Brian Peters at (425) 563-6506.

Sincerely,

GHD

Brian Peters

GHD Services Inc.
20818 44th Avenue West Suite 190 Lynnwood Washington 98036 USA
T 425 563 6500 F 425 563 6599 W www.ghd.com

ENVIRONMENTAL WELL, REMEDIATION COMPOUND, AND SITE INSPECTION FORM

INCIDENT #

ADDRESS 701 BOZARTH AVE

DATE: 5/10/16

CITY & STATE WOODLAND, WA

Well ID	Observations Upon Arrival: Manway Cover, Type, Condition & Size						Well Labeled / Painted Properly*		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad / Surface Condition		Note Repairs Made Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition		Repair Date and PM Initials
MW-1	Standpipe	Flush	G	P	Size (inch) 8	G	N	G	R	G	R	NL	G	P		Y	N	
MW-2	Standpipe	Flush	G	P	Size (inch) 8	G	N	G	R	G	R	NL	G	P		Y	N	
MW-3	Standpipe	Flush	G	P	Size (inch) 8	G	N	G	R	G	R	NL	G	P		Y	N	
MW-4	Standpipe	Flush	G	P	Size (inch) 8	G	N	G	R	G	R	NL	G	P		Y	N	
MW-5	Standpipe	Flush	G	P	Size (inch) 8	G	N	G	R	G	R	NL	G	P		Y	N	
MW-6	Standpipe	Flush	G	P	Size (inch) 8	G	N	G	R	G	R	NL	G	P		Y	N	
MW-7	Standpipe	Flush	G	P	Size (inch) 8	G	N	G	R	G	R	NL	G	P		Y	N	
MW-8	Standpipe	Flush	G	P	Size (inch) 8	G	N	G	R	G	R	NL	G	P		Y	N	
MW-9	Standpipe	Flush	G	P	Size (inch) 8	G	N	G	R	G	R	NL	G	P		Y	N	
MW-10	Standpipe	Flush	G	P	Size (inch) 8	G	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
TOTAL # CAPS REPLACED =									0		0	= TOTAL # OF LOCKS REPLACED							

Condition of Soil Boring Patches or Abandoned Monitoring Wells	G	P	N/A	If POOR, Borings/Well IDs or Location Description	Y	N	

Remediation Compound Type (Check boxes that apply)		Condition of Enclosure			Condition of Area Inside Enclosure			Compound Security			Emergency Contact Info Visible			Cleaning / Repairs Recommended and Conducted	Photos of Condition		Repair Date and PM Initials
NA	X	G	P	N/A	G	P	N/A	G	P	N/A	Y	N	N/A		Y	N	
Building																	
Building w/ Fence Comp.																	
Fenced Compound																	
Trailer																	

Number of Drums On-site	Does the Label Reveal the Source of the Contents			Labeled Correctly and Writing Legible			Drum Condition			Confirm Drums Related to Environmental		Drums Located to Min Business Interference			Detailed Explanation of Any Issues Resolved	Photos of Drum Condition		Date Drums Removed from Site and PM Initials
0	Y	N	N/A	Y	N	N/A	G	P	N/A	Y	N	Y	N	N/A		Y	N	

G = Good (Acceptable) R = Replaced

P = Poor (needs attention) NL = No Lock Required

Note: All repairs other than locks and grippers require Shell PM approval prior to repair.

* = Groundwater monitoring well covers must be painted and labeled in accordance with applicable regulations.

Version 2.4, March 2008

All environmental wells and the remediation compound were in good condition, locked, and secured upon my departure (unless otherwise noted above).

LEE BORES / BTS

Print or type Name of Field Personnel & Consultant Company

SHELL BILL OF LADING

SOURCE RECORD **BILL OF LADING**

FOR NON-HAZARDOUS PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT SHELL FACILITIES IN THE STATE OF WASHINGTON OR OREGON. THE NON-HAZARDOUS PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS, IS MADE UP INTO LOADS OF APPROPRIATE SIZE TO BE TRANSPORTED & PROCESSED BY A SHELL APPROVED WASTE HAULER.

The contractor performing this work is BLAINE TECH SERVICES, INC. 22727 72ND Ave South, Suite D – 102, Kent, WA 98032. Blaine Tech Services, Inc. is authorized by SHELL OIL COMPANY (SHELL) to recover, collect, apportion into loads, and haul the Non-Hazardous Well Purgewater that is drawn from wells at the SHELL facility indicated below and to deliver that purgewater to BTS. Transport routing of the Non-Hazardous Well Purgewater may be direct from one Shell facility to BTS; from one Shell facility to BTS via another Shell facility; or any combination thereof. The Non-Hazardous Well Purgewater is and remains the property of SHELL.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the SHELL facility described below:

INCIDENT #	Perry Pineda Shell Engineer

701	Bozarth Ave	Woodland,	WA
street number	street name	city	state

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-1	0.5	MW-9	0.5
MW-2	0.5		
MW-3	0.5		
MW-4	0.5		
MW-5	0.5		
MW-6	0.5		
MW-7	0.5		
MW-8	0.5		
added equip. rinse water	2.5	any other adjustments	

TOTAL GALS. RECOVERED 7.0

loaded onto BTS vehicle # 88

BTS event # 160510-LB1 time 1200 date 5/11/16

signature

****

RECEIVED AT BTS Kent time date

unloaded by signature

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME 701 Bozarth Ave Woodland, WA				PROJECT NUMBER 160510.LB1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
YSI Pro Plus	14C100740	5/10/16 0800	pH 4.0 7.0 10.0	3.88 7.16 10.12	4.01 ✓ 7.00 ✓ 10.01 ✓	15.6	LB
			COND 3900	3918	3901 ✓	15.4	LB
			ORP 244	256.4	244.1 ✓	15.3	LB
			DO 100%	112.4%	100.3% ✓	—	LB
YSI Pro Plus	14C100740	5/11/16 0755	pH 4.0 7.0 10.0	4.01 7.00 9.98	—	15.3	LB
			COND 3900	3902	—	15.4	LB
			ORP 244	241.6	244.1 ✓	15.5	LB
			DO 100%	101.2%	—	—	LB

Project Data:

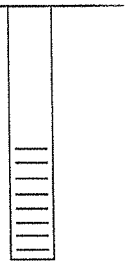
Project Name: SHELL WOODLAND
Ref. No.: 0608666

Date: 8/15/18
Personnel: L. BURES

Monitoring Well Data:

Well No.: MW-1
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 14.82
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]: 14'
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 10.76



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
1126	100		START	PURGE							
1132	100	12.01	1.25	19.95	0.469	56	1.55	6.67	-70.8	600	
1135	100	12.31	1.55	20.21	0.467	42	1.04	6.69	-69.0	900	
1138	100	12.31	1.55	20.58	0.468	41	0.90	6.72	-70.3	1200	
1141	100	12.31	1.55	20.87	0.469	37	0.87	6.73	-68.7	1500	
1144	100	12.31	1.55	21.08	0.470	33	0.77	6.74	-70.0	1800	
1147	100	12.31	1.55	20.96	0.469	32	0.76	6.74	-71.5	2100	

Sample ID: GW-0608666-081518-LB-MW-1

Sample Time: 1150

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/15/18

Monitoring Well Record for Low Purging
(Form SP-09)

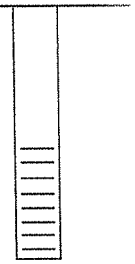
Project Data:

Project Name: SHELL WOODLAND
Ref. No.: 0608666
Date: 8/15/18
Personnel: L. BURES

Monitoring Well Data:

Well No.: MW-2
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 14.417
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]: 12.5
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 10.31



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
0913	100			START PURGE							
0919	100	11.55	1.24	14.35	0.417	28	2.30	6.59	-33.6	600	
0922	100	11.58	1.27	14.41	0.417	32	1.60	6.59	-32.8	900	
0925	100	~~11.58~~ 11.71	~~1.27~~ 1.40	14.51	0.417	37	1.34	6.59	-36.9	1200	
0928	100	11.73	1.43	14.52	0.414	43	1.12	6.60	-37.1	1500	
0931	100	11.74	1.44	14.51	0.413	44	1.10	6.60	-37.6	1800	
0934	100	11.75	1.45	14.50	0.412	44	1.09	6.61	-38.2	2100	

Sample ID: GW-0608666-081518-LB-MW-2
Sample Time: 0935

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/15/18

Monitoring Well Record for Low Purging
(Form SP-09)

Project Data:

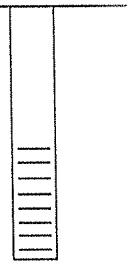
Project Name: SHELL WOODLAND
Ref. No.: 0608660

Date: 8/14/18
Personnel: L. BURES

Monitoring Well Data:

Well No.: MW-3
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 14.33
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]: 12.5'
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 10.31



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]	
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV			
1141	~~200~~ 100		START	PURGE								
1147	~~200~~ 100	11.51	1.20	16.87	0.374	22	1.91	7.25	-39.3	600		ODOR
1150	~~200~~ 100	11.81	1.50	17.15	0.375	22	1.48	7.24	-51.4	~~2900~~		
1153	~~200~~ 100	11.89	1.58	17.13	0.374	16	1.16	7.26	-52.7	1200		
1156	~~200~~ 100	11.91	1.60	17.18	0.374	17	1.09	7.25	-46.7	1500		
1159	100	11.92	1.61	17.17	0.375	16	1.07	7.23	-48.1	1800		
1202	100	11.92	1.61	17.16	0.376	16	1.06	7.24	-49.3	2100		

Sample ID: GW-0608660-081418-LB-MW-3
Sample Time: 1205

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/14/18

Project Data:

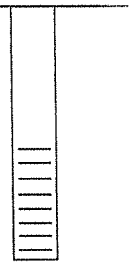
Project Name: SHELL WOODLAND
Ref. No.: 0608666

Date: 8/14/18
Personnel: L. BORES

Monitoring Well Data:

Well No.: MW-4
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 14.51
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]: 12.50
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 10.41



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
1458	100			START PURGE							
1504	100	10.71	0.30	18.89	0.251	16	3.47	7.47	98.2	600	
1507	100	10.71	0.30	18.80	0.254	6	2.71	6.90	94.4	900	
1510	100	10.71	0.30	18.50	0.254	7	2.38	6.87	89.8	1200	
1513	100	10.71	0.30	18.56	0.255	5	2.19	6.80	84.2	1500	
1516	100	10.71	0.30	18.54	0.256	6	2.16	6.83	83.7	1800	
1519	100	10.71	0.30	18.57	0.256	6	2.15	6.85	82.7	2100	

Sample ID: GW-0608666 081418-LB-MW-4

Sample Time: 1520

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/14/18

Project Data:

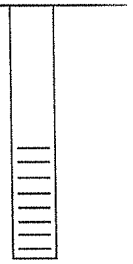
Project Name: SHELL WOODLAND
Ref. No.: 0608GG

Date: 8/14/18
Personnel: L. BURES

Monitoring Well Data:

Well No.: MW-5
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 17.59
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]: 16.5'
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 13.37



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
1101	200			START PURGE							
1104	200	13.48	0.11	13.08	0.047	27	1.19	5.16	106.3	600	
1107	200	13.50	0.13	12.89	0.047	13	1.06	4.75	101.4	1200	
1110	200	13.51	0.14	13.33	0.048	9	0.94	7.68	77.8	1800	
1113	200	13.53	0.16	13.86	0.049	8	0.92	7.66	63.8	2400	
~~1116~~	~~200~~									3000	LB
		WELL DEWATERING, SAMPLE TAKEN									
		WELL DEWATERED @ 7 VOAS									
1355		RETURN TO WELL			DTW: 13.49						
		WELL DEWATERED @ 2 1/2 LITERS									

Sample ID: GW-0608GG-081418-LB-MW-5
Sample Time: 1115

Notes:

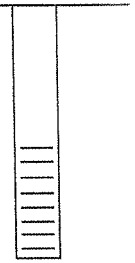
(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.
(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches
(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.
(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.
(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/14/18

Project Data:

Project Name: SHELL WOODLAND
Ref. No.: 060866

Date: 8/14/18
Personnel: L. BORES



Monitoring Well Data:

Well No.: MW-6
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 14.66
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]: 12.5'
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 11.09

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
1638	100		START	PURGE							
1644	100	11.59	0.50	20.37	0.115	47	2.27	7.18	138.6	600	
1647	100	11.59	0.50	20.26	0.114	36	1.82	7.08	131.4	900	
1650	100	11.59	0.50	19.72	0.112	19	1.73	7.06	125.3	1200	
1653	100	11.59	0.50	19.68	0.113	15	1.71	7.03	126.6	1500	
1656	100	11.59	0.50	19.66	0.114	14	1.70	7.02	125.9	1800	
1659	100	11.59	0.50	19.64	0.112	13	1.69	7.00	125.1	2100	

Sample ID: GW-060866-081418-LB-MW-6

Sample Time: 1700

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/14/18

Project Data:

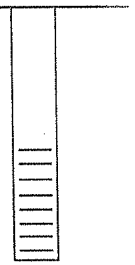
Project Name: SHELL WOODLAND
Ref. No.: 0608666

Date: 8/15/18
Personnel: L. BURES

Monitoring Well Data:

Well No.: MW-7
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 14.57
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]: ~~12.5'~~ 14'
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 10.82



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
1032	100	START PURGE									
1038	100	12.56	1.74	16.67	0.367	351	1.69	6.53	7.9	600	—
1041	100	13.14	2.32	16.95	0.358	241	1.09	6.54	5.6	900	—
1044	100	13.48	2.66	17.00	0.352	221	0.98	6.55	9.6	1200	—
1047	100	13.65	2.83	17.36	0.346	~~487~~ 21	0.83	6.56	8.6	1500	—
1050	100	13.91	3.09	17.33	0.345	214	6.84	6.57	9.8	1800	—
		WELL DEWATERING, START SAMPLING									
		WELL DEWATERED @				6 VOAS					
1553	RETURN TO WELL, DTW: 10.78										

Sample ID: GW-0608666-081518-LB-MW-7
Sample Time: 1050

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/15/18

Project Data:

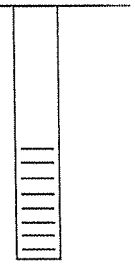
Project Name: SHELL WOODLAND
Ref. No.: 0608606

Date: 8/14/18
Personnel: L. BURES

Monitoring Well Data:

Well No.: MW-8
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 14.89
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft): ~~13'~~
Depth to Pump Intake (m/ft)[1]: 13'
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]: ~~14~~
Initial Depth to Water (m/ft): 10.32



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
1307	100		START PURGE								
1303	100	11.81	1.49	17.15	0.132	42	3.79	7.73	116.3	600	
1316	100	12.03	1.71	17.14	0.131	21	2.85	7.56	106.3	900	
1319	100	12.18	1.86	17.28	0.133	30	2.53	7.55	101.2	1200	
1322	100	12.21	1.89	17.52	0.133	28	2.39	7.57	90.3	1500	
1325	100	12.23	1.91	17.67	0.134	33	2.14	7.61	86.7	1800	
1328	100	12.84	2.52	17.47	0.134	34	2.15	7.60	85.4	2100	
1331	100	13.25	2.93	17.47	0.133	33	2.13	7.59	84.6	2400	
			WELL DEWATERED		< 10	VOAs					
1423		RETURN TO WELL, DTW: 10.91									
		FINISH FILLING BOTTLE SET									

Sample ID: GW-0608606-081418-LB-MW-8

Sample Time: 1335

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/14/18

Monitoring Well Record for Low Purging (Form SP-09)

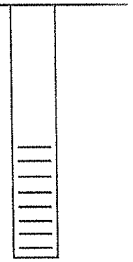
Project Data:

Project Name: SHELL WOODLAND
Ref. No.: 0608666
Date: 8/15/18
Personnel: L. BURES

Monitoring Well Data:

Well No.: MW-9
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 17.76
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft): 10
Depth to Pump Intake (m/ft)[1]: 17'
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 12.75



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]	
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV			
1354	100		START PURGE									
1400	100	14.96	2.21	25.53	0.193	18	1.19	6.77	-26.0	600	—	ODOR
1403	100	15.09	2.34	25.89	0.194	9	0.98	6.79	-30.2	900	—	
1406		WELL	DEWATERING,	GRAB	SAMPLE	TAKEN				1200		
1409			WELL	DEWATED	@ 11 VOLS	+ 3 (1L AMBERS)						

Sample ID: GW-060866-081518-LB-MW-9
Sample Time: 1405

Notes: GW-060866-081518-LB-DUP-1

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/15/18

Project Data:

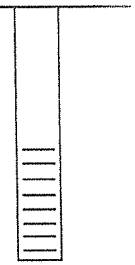
Project Name: SHELL WOODLAND
Ref. No.: 0608666

Date: 8/15/18
Personnel: L. BURES

Monitoring Well Data:

Well No.: MW-10
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft):
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 14.48
DEPTH TO LNAPL: 13.05



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
			1.43' OF LNAPL	DETECTED	W/	INTERFACE	PROBE				
			NO	SAMPLE	TAKEN						

Sample ID: NA
Sample Time: NA

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/15/18

Project Data:

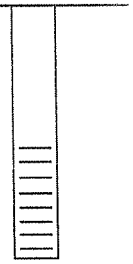
Project Name: SHELL WOODLAND
Ref. No.: 0608660

Date: 8/14/18
Personnel: L. BURES

Monitoring Well Data:

Well No.: MW-11
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 14.57
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]: 14.45
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 13.59



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
0949	100	—	—	START PURGE							
0951	100	13.79	—	WELL DEWATERING,		GRAB	SAMPLE	TAKEN			
0953	—	—	—	19.79	0.223	483	8.08	6.29	107.9	—	

Sample ID: GW-0608660-081418-LB-MW-11

Sample Time: 0953

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/14/18

Project Data:

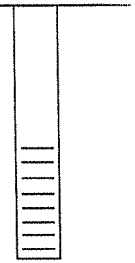
Project Name: SHELL WOODLAND
Ref. No.: 0600866

Date: 8/14/18
Personnel: L. BURNS

Monitoring Well Data:

Well No.: MW-12
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 15.23
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]: 15.15
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 14.27



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
0905	100		START	PURGE							
0909	100	14.83		WELL DEWATERING,		GRAB	SAMPLE	TAKEN			
0913	—			15.31	~~0.351~~ 0.251	494	8.04	5.64	91.2		—
		WELL DEWATERED @			3 VOAS						
1611		RETURN TO WELL, DTW: 14.41									
		WELL DEWATERED @			5 VOAS						

Sample ID: GW-0600866-081418-LB-MW-12

Sample Time: 0913

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/14/18

Monitoring Well Record for Low Purging
(Form SP-09)

Project Data:

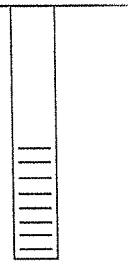
Project Name: SHELL WOODLAND
Ref. No.: 0608666

Date: 8/15/18
Personnel: L. BURES

Monitoring Well Data:

Well No.: MW-13
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 18.48
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]: 16.5
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 14.01



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
0747	100			START PURGE							
0753	100	14.76	0.75	12.90	0.213	74	2.59	6.89	87.7	600	
0756	100	14.76	0.75	12.92	0.207	40	1.68	6.82	74.8	900	
0759	100	14.76	0.75	12.87	0.207	30	1.52	6.83	69.4	1200	
0802	100	14.76	0.75	12.85	0.204	24	1.42	6.80	68.3	1500	
0805	100	14.76	0.75	12.89	0.202	23	1.41	6.78	66.9	1800	
0808	100	14.76	0.75	12.90	0.202	22	1.40	6.74	65.3	2100	

Sample ID: GW-0608666-081518-LB-MW-13

Sample Time: 0810

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/15/18

Project Data:

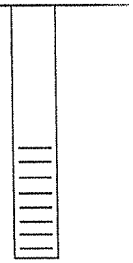
Project Name: SHELL WOODLAND
Ref. No.: 0608866

Date: 8/15/18
Personnel: L. BORES

Monitoring Well Data:

Well No.: MW-14
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 17.11
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]: 16.5'
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 11.91



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV		
14.56	100			START PURGE							
1502	100	13.89	1.98	27.05	0.278	150	0.88	6.88	-39.8	600	
1505	100	14.27	2.36	27.11	0.278	95	0.68	6.94	-49.8	900	
~~1508~~	~~100~~			WELL DEWATERING, GRAB SAMPLE TAKEN							
				WELL DEWATERED @ 9 VOA'S + 2 (1)L AMBERS							

Sample ID: GW-0608866-081518-LB-MW-14
Sample Time: 1510

Notes: ~~DUP 2 GW-0608866-081518-LB-DUP-1~~ LB

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/15/18

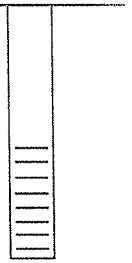
Monitoring Well Record for Low Purging
(Form SP-09)

Project Data:

Project Name: SHELL WOODLAND
Ref. No.: 060866
Date: 8/15/18
Personnel: L. BURES

Monitoring Well Data:

Well No.: MW-15
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 17.08
Depth of Sediment (m/ft):
Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]: 16.5
Well Diameter, D (cm/in): 2
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 11.69



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]	
Precision Required[5]:				±3 %	±0.005 or 0.01[6]	±10 %	±10 %	±0.1 Units	±10 mV			
1240	100			START PURGE								
1246	100	12.65	0.96	19.65	0.531	15	1.42	6.75	-61.2	600	—	ODOR
1249	100	12.96	1.27	19.65	0.532	14	1.04	6.75	-60.2	900	—	
1252	100	13.12	1.43	19.78	0.537	15	0.80	6.76	-61.7	1200	—	
1255	100	13.29	1.60	19.64	0.542	15	0.72	6.77	-66.3	1500	—	SHEEN ON PURGE H2O
1258	100	13.47	1.78	19.57	0.545	13	0.64	6.78	-74.0	1800	—	
1301	100	13.75	2.06	19.59	0.546	15	0.58	6.78	-75.8	2100	—	
1304	100	13.82	2.13	19.61	0.545	15	0.56	6.78	-76.2	2400	—	
1307	100	14.03	2.34	19.58	0.545	14	0.55	6.78	-78.2	2700	—	

Sample ID: GW-060866 081518-LB-MW-15
Sample Time: 1310

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 500 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

8/15/18

FIELD ENVIRONMENTAL INSTRUMENTS, INC.
www.fieldenvironmental.com

301 Brushton Ave
Suite A
Pittsburgh, PA 15221
Toll Free (800) 393-4009
Local (412) 436-2600
Fax (412) 436-2616

YSI 556 MPS Calibration Certificate

Cal Standard	Lot #	Expiration	Pre-Cal Reading	Post-Cal Reading	Acceptable Range
PH 7 @ 25^{C}	7801468	2/28/2020	7.26	7.00	(6.86 to 7.14)
			pH mV value	-15.1	(0 mV +/- 50mV)
Cal Standard	**Lot #**	**Expiration**	**Pre-Cal Reading**	**Post-Cal Reading**	**Acceptable Range**
PH 4 @ 25^{C}	780545	2/28/2020	4.04	4.00	(3.92 to 4.08)
			pH mV value	160.5	(149.9mV to 164.9mV)
Cal Standard	**Lot #**	**Expiration**	**Pre-Cal Reading**	**Post-Cal Reading**	**Acceptable Range**
PH 10 @ 25^{C}	7712366	1/31/2020	9.97	10.00	(9.80 to 10.20)
			pH mV value	-183.2	(-180.1mV to -195.1mV)
Cal Standard	**Lot #**	**Expiration**	**Pre-Cal Reading**	**Post-Cal Reading**	**Acceptable Range**
Conductivity	7802111	2/28/2020	1.387	1.409	(1.338 to 1.479)
			Gain	0.900	(0.9 to 1.10)

Check Standard	Temp ©	Reading	Acceptable Range
ORP	26.0	237.0	(+/- 2.0mV)

mV Offset 39.11 (0 +/- 100)

Dissolved Oxygen	% Saturation	mg/L
	100.0	8.20

		Acceptable Range
Gain	1	(.7 to 1.4)

New DO Membrane: ○ Yes ◉ No

DO Cap Color: ○ Black ◉ Blue ○ Yellow

Model	556-4 MPS
S/N	14F101474
Barcode	U77273X
Cable	81366
Order #	375694

Calibrated By: David Lampert

Date of Calibration: 8/13/2018

*Solutions provided by LabChem (412-826-5230)

All calibrations performed by FEI conform to manufacturer's specifications. Please report any issues within 24 hours of receiving equipment.
All calibration solutions used are traceable to NIST. Additional documentation is available upon request.

Field Data Record Form
Meter, Flow Cell, PH/Cond./Temp./ORP/DO/ Salinity/Turbidity, QED
(QSF-457D)

Control number: ~~for Rental~~ SN: 14F101474
Date (mm/dd/yyyy): 08/15/2018
User (print name): L. BURES

Project number: 060866
Project name: SHELL WOODLAND
Location:

Calibration solution(s): PH: 4.0, PH: 7.0, PH: 10.0, COND: 3900, ORP: 241

Lot #(s):	76A211	76A250	8GE347	55849	1720
Supplier(s):	PINE	PINE	PINE	EQUIPCO	HANNA
Expiration date(s):	1/19	1/19	5/20	5/20	6/22

Additional information:

Field procedure before use:

	Check when completed
• Check kit contents.	☒
• Check battery.	☒
• Calibrate, according to manual, if necessary.	☒

	READING	CAL'D
PH 4:	4.31	4.00
PH 7:	7.29	7.00
PH 10:	9.86	10.01
COND:	3912	3900
ORP:	249.6	241.3
DO:	125%	101.3%

Filing: Field file

Signature:

WELL GAUGING DATA

Project # 190226-LB1 Date 2/26/19 Client GHD

Site 701 BOZARTH AVE, WOODLAND, WA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	1100	2					7.16	14.77		
MW-2	1502	2					7.18	14.52		
MW-3	0913	2					7.12	14.28		
MW-4	1011 ~~1028~~	2					6.89	14.44		
MW-5	1605	2					10.08	17.61		
MW-6	1227	2					8.08	14.61		
MW-7	1410	2					7.63	14.51		
MW-8	0824	2					6.95	14.67		
MW-9	1320	2					9.55	17.75		
MW-10	—	2	ODOR	9.58	4.31	—	13.89	—		
MW-11	1114	2					10.36	14.47		
MW-12	1032	2					11.16	15.20		
MW-13	1320	2					10.81	18.48		
MW-14	1226	2					8.87	16.93		
MW-15	1151	2					8.57	16.87		

LOW FLOW WELL MONITORING DATA SHEET

Project #: 190226-LB1	Client: GHD
Sampler: LB	Gauging Date: 2/26/19
Well I.D.: MW-1	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.77	Depth to Water (ft.): 7.16
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other____

Start Purge Time: 1108 Flow Rate: 200 mL/min Pump Depth: 12'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1111	8.1	7.83	716	3	1.05	-152.3	600	7.29
1114	7.5	7.85	717	3	0.68	-159.3	1200	7.29
1117	7.7	7.84	719	4	0.67	-162.6	1800	7.29
1120	7.8	7.84	722	3	0.66	-164.3	2400	7.29
1123	7.8	7.83	721	3	0.65	-165.8	3000	7.29

Did well dewater? Yes (No) Amount actually evacuated: 3L

Sampling Time: 1124 Sampling Date: 2/27/19

Sample I.D.: GW-060866-022719-LB-MW-1 Laboratory: TA

Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D) Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

2/28/19

LOW FLOW WELL MONITORING DATA SHEET

Project #: 190226-LB	Client: GHD
Sampler: LB	Gauging Date: 2/26/19
Well I.D.: MW-2	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.52	Depth to Water (ft.): 7.18
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 1506 Flow Rate: 200 mL/MIN Pump Depth: 12.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1509	9.0	7.79	598	13	0.83	-146.3	600	7.29
1512	9.0	7.79	597	11	0.54	-149.5	1200	7.29
1515	9.0	7.73	600	11	0.36	-152.0	1800	7.29
1518	9.1	7.71	601	11	0.34	-153.6	2400	7.29
1521	9.1	7.69	602	10	0.33	-154.9	3000	7.29
1524	9.1	7.68	603	10	0.33	-155.6	3600	7.29

Did well dewater? Yes (No) Amount actually evacuated: 3.6L

Sampling Time: 1525 Sampling Date: 2/26/19

Sample I.D.: GW-060866-022619-LB-MW-2 Laboratory: TA

Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D) (Other: SEE COC)

Equipment Blank I.D.: @ Time Duplicate I.D.:

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2/26/19

LOW FLOW WELL MONITORING DATA SHEET

Project #: 190226-LB1	Client: GHD
Sampler: LB	Gauging Date: 2/26/19
Well I.D.: MW-3	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.28	Depth to Water (ft.): 7.12
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other____

Start Purge Time: 0918 Flow Rate: 200mL/MIN Pump Depth: 12'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0921	10.5	7.73	379	7	0.85	-80.6	600	7.32
0924	10.3	7.74	380	11	0.49	-87.4	1200	7.32
0927	10.4	7.74	380	6	0.42	-90.9	1800	7.32
0930	10.3	7.76	381	7	0.40	-94.1	2400	7.32
0933	10.3	7.74	382	8	0.39	-95.9	3000	7.32
0936	10.4	7.73	383	8	0.37	-97.0	3600	7.32

Did well dewater? Yes (No) Amount actually evacuated: 3.6L

Sampling Time: 0937 Sampling Date: 2/27/19

Sample I.D.: GW-060866-022719-LB-MW-3 Laboratory: TA

Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D) (Other): SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

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2/27/19

LOW FLOW WELL MONITORING DATA SHEET

Project #: 190226-LB1	Client: GHD
Sampler: LB	Gauging Date: 2/26/19
Well I.D.: MW-4	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.44	Depth to Water (ft.): 6.89
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: YSI PRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other____

Start Purge Time: 1016 Flow Rate: 200 mL/MIN Pump Depth: 12'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1019	11.8	7.69	263	11	1.98	27.8	600	7.03
1022	12.0	7.68	262	4	1.78	21.3	1200	7.03
1025	12.0	7.68	261	4	1.65	17.3	1800	7.03
1028	12.1	7.67	262	6	1.63	16.1	2400	7.03
1031	12.1	7.67	261	6	1.62	15.8	3000	7.03

Did well dewater? Yes (No) Amount actually evacuated: 3L

Sampling Time: 1032 Sampling Date: 2/27/19

Sample I.D.: GW-0608666-022719-LB-MW-4 Laboratory: TA

Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D) Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

2/27/19

LOW FLOW WELL MONITORING DATA SHEET

Project #: 190226-LB1	Client: GHD
Sampler: LB	Gauging Date: ~~2~~/26/19
Well I.D.: MW-5	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 17.61	Depth to Water (ft.): 10.08
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other____

Start Purge Time: 1610 Flow Rate: 200 mL/MIN Pump Depth: 15.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1613	8.3	6.82	51	16	0.64	-23.0	600	10.39
1616	8.3	6.89	50	11	0.49	-27.8	1200	10.41
1619	8.2	6.92	51	12	0.48	-28.6	1800	10.43
1622	8.2	6.96	51	11	0.48	-29.3	2400	10.44
1625	8.2	6.90	51	11	0.49	-30.8	3000	10.44

Did well dewater? Yes (No) Amount actually evacuated: 3L

Sampling Time: 1626 Sampling Date: 2/26/19

Sample I.D.: GW-060866-022619-LB-MW-5 Laboratory: TA

Analyzed for: (TPH-G) (BTEX) MTBE ~~TPH-D~~ Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

2/26/19

LOW FLOW WELL MONITORING DATA SHEET

Project #: 190226-LB1	Client: GHD
Sampler: LB	Gauging Date: 2/26/19
Well I.D.: MW-6	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.61	Depth to Water (ft.): 8.08
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 1233 Flow Rate: 200 mL/MIN Pump Depth: 13'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1236	10.9	7.03	149	3	2.07	202.3	600	8.21
1239	10.9	6.72	149	2	1.75	191.2	1200	8.21
1242	11.0	6.77	149	9	1.66	188.5	1800	8.21
1245	11.1	6.81	149	8	1.63	183.4	2400	8.21
1248	11.2	6.78	150	9	1.62	182.7	3000	8.21
1251	11.1	6.77	152	10	1.61	181.4	3600	8.21

Did well dewater? Yes (No) Amount actually evacuated: 3.6L

Sampling Time: 1252 Sampling Date: 2/26/19

Sample I.D.: GW-060866-022618-LB-MW-6 Laboratory: TA

Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D) Other: (SEE COC)

Equipment Blank I.D.: @ Time Duplicate I.D.:

2/26/19

LOW FLOW WELL MONITORING DATA SHEET

Project #: 190226-LB1	Client: GHD
Sampler: LB	Gauging Date: 2/26/19
Well I.D.: MW-7	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.51	Depth to Water (ft.): 7.63
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO

Purge Method: 2" Grundfos Pump (Peristaltic Pump) Bladder Pump
Sampling Method: Dedicated Tubing (New Tubing) Other____

Start Purge Time: 1417 Flow Rate: 200 mL/min Pump Depth: 12'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1420	12.3	7.66	403	322	0.71	-32.8	600	7.81
1423	12.3	7.67	403	~~403~~ 359	0.50	-38.4	1200	7.81
1426	12.7	7.58	404	211	0.29	-42.5	1800	7.81
1429	12.6	7.56	405	208	0.24	-47.2	2400	7.81
1432	12.6	7.54	406	207	0.23	-48.8	3000	7.81
1435	12.6	7.56	407	209	0.22	-49.5	3600	7.81

Did well dewater? Yes (No) Amount actually evacuated: 3.6L

Sampling Time: 1436 Sampling Date: 2/26/19

Sample I.D.: GW-060866-022619-LB-MW-7 Laboratory: TA

Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D) Other: (SEE COC)

Equipment Blank I.D.: @ Time Duplicate I.D.:

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2/26/19

LOW FLOW WELL MONITORING DATA SHEET

Project #: 190226-LB	Client: GHD
Sampler: LB	Gauging Date: 2/26/19
Well I.D.: MW-8	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.67	Depth to Water (ft.): 6.95
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: YSI PRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other____

Start Purge Time: 0829 Flow Rate: 200 mL/min Pump Depth: 11.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
0832	11.4	7.70	225	11	1.71	57.1	600	7.18
0835	11.3	7.71	203	11	1.56	61.5	1200	7.18
0838	11.5	7.70	200	8	1.43	54.6	1800	7.18
0841	11.4	7.68	199	7	1.34	50.2	2400	7.18
0844	11.4	7.66	198	6	1.33	49.6	3000	7.18
0847	11.3	7.62	196	3	1.33	48.1	3600	7.18

Did well dewater? Yes (No) Amount actually evacuated: 3.6L

Sampling Time: 0848 Sampling Date: 2/27/19

Sample I.D.: GW-060866-022719-LB-MW-8 Laboratory: TA

Analyzed for: (TPH-G) BTEX MTBE (TPH-D) Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

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2/27/19

LOW FLOW WELL MONITORING DATA SHEET

Project #: 190226-LB1	Client: GHD
Sampler: LB	Gauging Date: 2/26/19
Well I.D.: MW-9	Well Diameter (in.): 2 3 4 6 8 ____
Total Well Depth (ft.): 17.75	Depth to Water (ft.): 9.55
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: YSI PRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 1325 Flow Rate: 200 mL/min Pump Depth: 13.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1328	6.8	6.88	329	4	0.96	-70.8	600	9.69
1331	6.1	6.90	330	2	0.75	-81.1	1200	9.69
1334	5.5	6.93	329	2	0.68	-88.7	1800	9.69
1337	5.6	6.92	329	2	0.67	-89.4	2400	9.69
1340	5.7	6.91	328	3	0.66	-90.7	3000	9.69

Did well dewater? Yes No	Amount actually evacuated: 3L
Sampling Time: 1341	Sampling Date: 2/27/19
Sample I.D.: GW-060866-022719-LB-MW-9	Laboratory: TA
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: SEE COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

2/27/19

LOW FLOW WELL MONITORING DATA SHEET

Project #: 190226-LB1	Client: GHD
Sampler: LB	Gauging Date: 2/26/19
Well I.D.: MW-11	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 14.47	Depth to Water (ft.): 10.36
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 1120 Flow Rate: 200 mL/min Pump Depth: 14'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
~~1126~~ 1123	8.2	7.34	150	37	1.54	181.6	600	10.63
1126	8.1	7.14	146	17	1.70	187.0	1200	10.63
1129	8.2	7.08	145	13	1.38	181.9	1800	10.63
1132	8.3	7.05	144	12	1.33	180.1	2400	10.63
1135	8.3	7.05	143	9	1.34	179.2	3000	10.63
1138	8.2	7.03	143	8	1.33	1985	3600	10.63

Did well dewater? Yes (No) Amount actually evacuated: 3.6L

Sampling Time: 1139 Sampling Date: 2/26/19

Sample I.D.: GW-060866-022619-LB-MW-11 Laboratory: TA

Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D) (Other: SEE COC)

Equipment Blank I.D.: @ Time Duplicate I.D.:

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2/26/19

LOW FLOW WELL MONITORING DATA SHEET

Project #: 190226-LB1	Client: GHD
Sampler: LB	Gauging Date: 2/26/19
Well I.D.: MW-12	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 15.20	Depth to Water (ft.): 11.16
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO

Purge Method: 2" Grundfos Pump (Peristaltic) Pump Bladder Pump
Sampling Method: Dedicated Tubing New Tubing Other____

Start Purge Time: 1040 Flow Rate: 100 mL/min Pump Depth: 14.5'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1046	10.3	6.88	142	94	1.88	148.8	600	12.31
1049	10.4	6.90	123	68	1.73	145.6	900	12.98
			WELL DEWATERING, SAMPLE TAKEN					
			FULL BOTTLE SET TAKEN					
			DTW:	14.95'				

Did well dewater? (Yes) No Amount actually evacuated: 900mL

Sampling Time: 1050 Sampling Date: 2/26/19

Sample I.D.: GW-060866-022619-LB-MW-12 Laboratory: TA

Analyzed for: (TPH-G) BTEX MTBE (TPH-D) Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

2/26/19

LOW FLOW WELL MONITORING DATA SHEET

Project #: 190226-181	Client: GHD
Sampler: LB	Gauging Date: 2/26/19
Well I.D.: MW-13	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 18.48	Depth to Water (ft.): 10.81
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 1329 Flow Rate: 200 mL/min Pump Depth: 15'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1332	10.7	7.73	155	67	1.38	-87.3	600	11.23
1335	10.4	7.74	156	30	0.88	-91.3	1200	11.23
1338	10.6	7.73	153	28	0.74	-95.3	1800	11.23
1341	10.7	7.71	152	23	0.70	-94.9	2400	11.23
1345	10.6	7.70	151	22	0.68	-95.3	3000	11.23
1347	10.6	7.68	150	21	0.67	-96.8	3600	11.23

Did well dewater? Yes (No) Amount actually evacuated: 3.6L

Sampling Time: 1348 Sampling Date: 2/26/19

Sample I.D.: GW-060866-022619-LB-MW-13 Laboratory: TA

Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D) Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

2/26/19

LOW FLOW WELL MONITORING DATA SHEET

Project #: 190226-LB1	Client: GHD
Sampler: LB	Gauging Date: 2/26/19
Well I.D.: MW-14	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 16.93	Depth to Water (ft.): 8.87
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 1232 Flow Rate: 200 mL/min Pump Depth: 13'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1235	6.1	6.78	330	6	1.12	-78.6	600	8.95
1238	5.8	6.92	331	6	0.82	-87.2	1200	8.95
1241	5.4	6.93	332	5	0.80	-93.8	1800	8.95
1244	5.3	6.94	334	5	0.78	-94.7	2400	8.95
1247	5.4	6.93	335	5	0.77	-95.8	3000	8.95

Did well dewater? Yes (No) Amount actually evacuated: 3L

Sampling Time: 1248 Sampling Date: 2/27/19

Sample I.D.: GW-0608666-022719-LB-MW-14 Laboratory: TA

Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D) Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.: GW-0608666-022719-LB-DUP

2/27/19

LOW FLOW WELL MONITORING DATA SHEET

Project #: 190226-LB1	Client: GHD
Sampler: LB	Gauging Date: 2/26/19
Well I.D.: MW-15	Well Diameter (in.): (2) 3 4 6 8 ____
Total Well Depth (ft.): 16.87	Depth to Water (ft.): 8.57
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: YSI PRO

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump
Sampling Method: Dedicated Tubing | New Tubing | Other ____

Start Purge Time: 1158 Flow Rate: 200 mL/MIN Pump Depth: 13'

Time	Temp. (°C or °F)	pH	Cond. (mS/cm or µS/cm)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Depth to Water (ft.)
1201	7.0	6.87	105	15	1.15	-128.8	600	8.76
1204	6.5	6.89	102	9	0.52	-127.3	1200	8.76
1207	6.5	6.89	103	6	0.47	-128.6	1800	8.76
1210	6.4	6.90	104	6	0.46	-129.3	2400	8.76
1213	6.4	6.91	103	5	0.45	-130.4	3000	8.76

Did well dewater? Yes (No) Amount actually evacuated: 3L

Sampling Time: 1214 Sampling Date: 2/27/19

Sample I.D.: GW-060866-022619-LB-MW-15 Laboratory: TA

Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D) Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

2/27/19

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. BURES	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 490-95876-27140.1
Client Contact: Brian Peters	Phone: (206) 348-8985	E-Mail: roxanne.cisneros@testamericainc.com		Page: Page 1 of 2
Company: GHD Services Inc.				Job #:
Address: 20818 44th Ave W Suite 190	Due Date Requested:			
City: Lynnwood	TAT Requested (days): STANDARD			
State, Zip: WA, 98036				
Phone:	PO #: 4036058			
Email: brian.peters@ghd.com	WO #: 060866			
Project Name: Shell - Washington	Project #: 49001126			
Site: 701 BOZARTH AVE, WOODLAND	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B, NWTPH_Gx	NWTPH_Dx - NWTPH-Dx w/ SGT	8260B - 8260 VOC											Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	A												
GW-060866-022719-LB-MW-1	2/27/19	1124	G	Water	N	N	X	X	X											3	
GW-060866-022619-LB-MW-2	2/26/19	1525	G	Water	N	N	X	X	X											3	
GW-060866-022719-LB-MW-3	2/27/19	0937	G	Water	N	N	X	X	X											3	
GW-060866-022719-LB-MW-4	2/27/19	1032	G	Water	N	N	X	X	X											3	
GW-060866-022619-LB-MW-5	2/26/19	1626	G	Water	N	N	X	X	X											3	
GW-060866-022619-LB-MW-6	2/26/19	1252	G	Water	N	N	X	X	X											3	
GW-060866-022619-LB-MW-7	2/26/19	1436	G	Water	N	N	X	X	X											3	
GW-060866-022719-LB-MW-8	2/27/19	0848	G	Water	N	N	X	X	X											3	
GW-060866-022719-LB-MW-9	2/27/19	1341	G	Water	N	N	X	X	X											3	
GW-060866-022619-LB-MW-11	2/26/19	1139	G	Water	N	N	X	X	X											3	
GW-060866-022619-LB-MW-12	2/26/19	1050	G	Water	N	N	X	X	X											3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		2/28/19 1600	BTS	SHIPPED VIA FEDEX		
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. BORES	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 490-95876-27140.2
Client Contact: Brian Peters	Phone: (206) 348-8985	E-Mail: roxanne.cisneros@testamericainc.com		Page: Page 2 of 2
Company: GHD Services Inc.				Job #:

Address: 20818 44th Ave W Suite 190	Due Date Requested:
City: Lynnwood	TAT Requested (days): STANDARD
State, Zip: WA, 98036	
Phone:	PO #: 4036058
Email: brian.peters@ghd.com	WO #: 060866
Project Name: Shell - Washington	Project #: 49001126
Site: 701 BOZARTH AVE, WOODLAND	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B, NWTPH_Gx	NWTPH_Dx - NWTPH-Dx w/ SGT	8260B - 8260 VOC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	A		
GW-060866-022619-LB-MW-13	2/26/19	1348	G	Water	N	N	X	X	X	8	
GW-060866-022719-LB-MW-14	2/27/19	1248	G	Water	N	N	X	X	X	8	
GW-060866-022719-LB-MW-15	2/27/19	1214	G	Water	N	N	X	X	X	8	
GW-060866-022719-LB-DUP	2/27/19	—	G	Water	N	N	X	X	X	8	
TB-1	2/26/19	1000	G	Water	N	N	X		X	2	
				Water							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 2/28/19 1600	Company BTS	Received by: SHIPPED VIA FEDEX	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

ENVIRONMENTAL WELL, REMEDIATION COMPOUND, AND SITE INSPECTION FORM

INCIDENT # _____ ADDRESS 701 BOZARTH AVE

DATE: 2/26/19 CITY & STATE WOODLAND, WA

Well ID	Observations Upon Arrival: Manway Cover, Type, Condition & Size						Well Labeled / Painted Properly*		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad / Surface Condition		Note Repairs Made Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition		Repair Date and PM Initials
MW-1	Standpipe	Flush	G	P	Size (inch) 8		Y	N	G	R	G	R	NL	G	P		Y	N	
MW-2	Standpipe	Flush	G	P	Size (inch) 8		Y	N	G	R	G	R	NL	G	P		Y	N	
MW-3	Standpipe	Flush	G	P	Size (inch) 8		Y	N	G	R	G	R	NL	G	P		Y	N	
MW-4	Standpipe	Flush	G	P	Size (inch) 8		Y	N	G	R	G	R	NL	G	P		Y	N	
MW-5	Standpipe	Flush	G	P	Size (inch) 8		Y	N	G	R	G	R	NL	G	P		Y	N	
MW-6	Standpipe	Flush	G	P	Size (inch) 8		Y	N	G	R	G	R	NL	G	P		Y	N	
MW-7	Standpipe	Flush	G	P	Size (inch) 8		Y	N	G	R	G	R	NL	G	P		Y	N	
MW-8	Standpipe	Flush	G	P	Size (inch) 8		Y	N	G	R	G	R	NL	G	P		Y	N	
MW-9	Standpipe	Flush	G	P	Size (inch) 8		Y	N	G	R	G	R	NL	G	P		Y	N	
MW-10	Standpipe	Flush	G	P	Size (inch) 8		Y	N	G	R	G	R	NL	G	P		Y	N	
MW-11	Standpipe	Flush	G	P	Size (inch) 8		Y	N	G	R	G	R	NL	G	P		Y	N	

TOTAL # CAPS REPLACED = 0 | 0 = TOTAL # OF LOCKS REPLACED

Condition of Soil Boring Patches or Abandoned Monitoring Wells	G	P	N/A	If POOR, Borings/Well IDs or Location Description		Y	N	

Remediation Compound Type (Check boxes that apply)		Condition of Enclosure			Condition of Area Inside Enclosure			Compound Security			Emergency Contact Info Visible			Cleaning / Repairs Recommended and Conducted	Photos of Condition		Repair Date and PM Initials
NA	X	G	P	N/A	G	P	N/A	G	P	N/A	Y	N	N/A		Y	N	
Building																	
Building w/ Fence Comp.																	
Fenced Compound																	
Trailer																	

Number of Drums On-site	Does the Label Reveal the Source of the Contents			Labeled Correctly and Writing Legible			Drum Condition			Confirm Drums Related to Environmental		Drums Located to Min Business Interference			Detailed Explanation of Any Issues Resolved	Photos of Drum Condition		Date Drums Removed from Site and PM Initials
0	Y	N	N/A	Y	N	N/A	G	P	N/A	Y	N	Y	N	N/A		Y	N	

G = Good (Acceptable) R = Replaced

P = Poor (needs attention) NL = No Lock Required

Note: All repairs other than locks and grippers require Shell PM approval prior to repair.

* = Groundwater monitoring well covers must be painted and labeled in accordance with applicable regulations.

Version 2.4, March 2008

All environmental wells and the remediation compound were in good condition, locked, and secured upon my departure (unless otherwise noted above).

LEE BORES / BTS

Print or type Name of Field Personnel & Consultant Company

ENVIRONMENTAL WELL, REMEDIATION COMPOUND, AND SITE INSPECTION FORM

INCIDENT #

ADDRESS 701 BOZARTH AVE

DATE: 2/26/19

CITY & STATE WOODLAND, WA

Well ID	Observations Upon Arrival: Manway Cover, Type, Condition & Size					Well Labeled / Painted Properly*		Well Cap (Gripper) Condition		Well Lock Condition			Well Pad / Surface Condition		Note Repairs Made Detailed Explanation of Maintenance Recommended and Performed	Photos of Well Condition		Repair Date and PM Initials
MW-12	Standpipe	**Flush**	**G**	P	Size (inch) 8	**Y**	N	**G**	R	**G**	R	NL	**G**	P		Y	**N**	
MW-13	**Standpipe**	Flush	**G**	P	Size (inch) 8	**Y**	N	**G**	R	**G**	R	NL	**G**	P		Y	**N**	
MW-14	**Standpipe**	Flush	**G**	P	Size (inch) 8	**Y**	N	**G**	R	**G**	R	NL	**G**	P		Y	**N**	
MW-15	**Standpipe**	Flush	**G**	P	Size (inch) 8	**Y**	N	**G**	R	**G**	R	NL	**G**	P		Y	**N**	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	
	Standpipe	Flush	G	P	Size (inch)	Y	N	G	R	G	R	NL	G	P		Y	N	

TOTAL # CAPS REPLACED = 0 | 0 = TOTAL # OF LOCKS REPLACED

Condition of Soil Boring Patches or Abandoned Monitoring Wells			If POOR, Borings/Well IDs or Location Description		Photos		
G	P	**N/A**			Y	N	

Remediation Compound Type (Check boxes that apply)		Condition of Enclosure			Condition of Area Inside Enclosure			Compound Security			Emergency Contact Info Visible			Cleaning / Repairs Recommended and Conducted	Photos of Condition		Repair Date and PM Initials
NA	X	G	P	N/A	G	P	N/A	G	P	N/A	Y	N	N/A		Y	N	
Building																	
Building w/ Fence Comp.																	
Fenced Compound																	
Trailer																	

Number of Drums On-site	Does the Label Reveal the Source of the Contents			Labeled Correctly and Writing Legible			Drum Condition			Confirm Drums Related to Environmental		Drums Located to Min Business Interference			Detailed Explanation of Any Issues Resolved	Photos of Drum Condition		Date Drums Removed from Site and PM Initials
0	Y	N	N/A	Y	N	N/A	G	P	N/A	Y	N	Y	N	N/A		Y	N	

G = Good (Acceptable) R = Replaced

P = Poor (needs attention) NL = No Lock Required

Note: All repairs other than locks and grippers require Shell PM approval prior to repair.

* = Groundwater monitoring well covers must be painted and labeled in accordance with applicable regulations.

Version 2.4, March 2008

All environmental wells and the remediation compound were in good condition, locked, and secured upon my departure (unless otherwise noted above).

LEE BURES / BTS

Print or type Name of Field Personnel & Consultant Company

Appendix H
Laboratory Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-103608-1
TestAmerica Sample Delivery Group: 060866
Client Project/Site: 701 Bozarth Ave., Woodland, WA

For:
GHD Services Inc.
20818 44th Ave W
Suite 190
Lynnwood, Washington 98036

Attn: Brian Peters

Roxanne Cisneros

Authorized for release by:
5/25/2016 11:39:25 AM

Roxanne Cisneros, Senior Project Manager
(615)301-5761
roxanne.cisneros@testamericainc.com

Table of Contents

Sample Summary

Client: GHD Services Inc.
Project/Site: 701 Bozarth Ave., Woodland, WA

TestAmerica Job ID: 490-103608-1
SDG: 060866

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-103608-1	GW-060866-051116-LB-MW-1	Water	05/11/16 09:52	05/12/16 10:22
490-103608-2	GW-060866-051116-LB-MW-2	Water	05/11/16 08:37	05/12/16 10:22
490-103608-3	GW-060866-051016-LB-MW-3	Water	05/10/16 11:55	05/12/16 10:22
490-103608-4	GW-060866-051016-LB-MW-4	Water	05/10/16 13:00	05/12/16 10:22
490-103608-5	GW-060866-051016-LB-MW-5	Water	05/10/16 09:36	05/12/16 10:22
490-103608-6	GW-060866-051016-LB-MW-6	Water	05/10/16 14:02	05/12/16 10:22
490-103608-7	GW-060866-051016-LB-MW-7	Water	05/10/16 15:07	05/12/16 10:22
490-103608-8	GW-060866-051016-LB-MW-8	Water	05/10/16 10:50	05/12/16 10:22
490-103608-9	GW-060866-051116-LB-MW-9	Water	05/11/16 10:55	05/12/16 10:22
490-103608-10	TB	Water	05/10/16 08:00	05/12/16 10:22

Job ID: 490-103608-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-103608-1

Comments
No additional comments.

Receipt
The samples were received on 5/12/2016 10:22 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.8º C and 2.9º C.

GC Semi VOA
Method(s) 8082A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-340308 and analytical batch 490-340546.

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

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

Job ID: 490-103608-2

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-103608-2

Comments
No additional comments.

Receipt
The samples were received on 5/12/2016 10:22 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.8º C and 2.9º C.

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

GC/MS Semi VOA
Method(s) 8270D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-340765 and analytical batch 490-323824.

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

GC VOA
Method(s) NWTPH-Gx: The following samples was diluted due to the nature of the sample matrix: GW-060866-051116-LB-MW-1 (490-103608-1), GW-060866-051116-LB-MW-2 (490-103608-2), GW-060866-051016-LB-MW-3 (490-103608-3) and GW-060866-051016-LB-MW-5 (490-103608-5). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA
Method(s) NWTPH-Dx: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-341329.

Method(s) NWTPH-Dx: The method blank for preparation batch 490-341329 contained C10-C24 and C24-C40 above the reporting limit

Job ID: 490-103608-2 (Continued)

Laboratory: TestAmerica Nashville (Continued)

(RL). There was insufficient volume for the following samples to perform a re-extraction and/or re-analysis; therefore, the data have been reported: GW-060866-051116-LB-MW-1 (490-103608-1) and (490-103608-A-1-A DU).

Method(s) NWTPH-Dx: The following samples contained a hydrocarbon pattern for analyte C10-C24 which does not match a typical Total Petroleum Hydrocarbon (TPH) pattern used by the laboratory for quantitative purposes: GW-060866-051016-LB-MW-5 (490-103608-5) and GW-060866-051016-LB-MW-7 (490-103608-7).

Method(s) NWTPH-Dx: There was insufficient contamination present to perform a pattern match for the following sample: GW-060866-051016-LB-MW-6 (490-103608-6).

Method(s) NWTPH-Dx: There was insufficient contamination present for analyte C24-C40 to perform a pattern match for the following samples: GW-060866-051016-LB-MW-7 (490-103608-7) and GW-060866-051116-LB-MW-9 (490-103608-9).

Method(s) NWTPH-Dx: The following sample contained a hydrocarbon pattern for analyte C24-C40 that most closely resembles a Motor oil product used by the laboratory for quantitative purposes: GW-060866-051116-LB-MW-2 (490-103608-2).

Method(s) NWTPH-Dx: The following samples contained a hydrocarbon pattern for analyte C10-C24 that most closely resembles a Diesel Fuel #2 product used by the laboratory for quantitative purposes: GW-060866-051116-LB-MW-2 (490-103608-2) and GW-060866-051016-LB-MW-3 (490-103608-3).

Method(s) NWTPH-Dx: Insufficient sample volume was available to perform a sample duplicate (DUP) associated with 490-341927.

Method(s) NWTPH-Dx: The following samples contained a hydrocarbon pattern that most closely resembles a Diesel Fuel #2 product used by the laboratory for quantitative purposes: GW-060866-051116-LB-MW-1 (490-103608-1) and (490-103608-A-1-A DU).

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

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

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-341927.

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

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

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

Client Sample ID: GW-060866-051116-LB-MW-1

Lab Sample ID: 490-103608-1

Date Collected: 05/11/16 09:52
Matrix: Water
Date Received: 05/12/16 10:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			05/13/16 20:42	1
Ethylbenzene	ND		1.00		ug/L			05/13/16 20:42	1
Naphthalene	ND		5.00		ug/L			05/13/16 20:42	1
Toluene	ND		1.00		ug/L			05/13/16 20:42	1
Xylenes, Total	ND		3.00		ug/L			05/13/16 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*05/13/16 20:42*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*05/13/16 20:42*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*05/13/16 20:42*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/13/16 20:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**366**		100		ug/L			05/19/16 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*117*		*50 - 150*		*05/19/16 14:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**1440**	**B**	96.2		ug/L		05/19/16 09:54	05/20/16 00:43	1
C24-C40	ND		96.2		ug/L		05/19/16 09:54	05/20/16 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*75*		*50 - 150*	*05/19/16 09:54*	*05/20/16 00:43*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND	F1	0.00200		mg/L		05/17/16 19:37	05/18/16 14:18	1

Client: GHD Services Inc.
Project/Site: 701 Bozarth Ave., Woodland, WA

TestAmerica Job ID: 490-103608-1
SDG: 060866

Client Sample ID: GW-060866-051116-LB-MW-2
Date Collected: 05/11/16 08:37
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			05/13/16 21:09	1
Benzene	**244**		5.00		ug/L			05/14/16 22:02	5
Bromobenzene	ND		1.00		ug/L			05/13/16 21:09	1
Bromochloromethane	ND		1.00		ug/L			05/13/16 21:09	1
Bromodichloromethane	ND		1.00		ug/L			05/13/16 21:09	1
Bromoform	ND		1.00		ug/L			05/13/16 21:09	1
Bromomethane	ND		1.00		ug/L			05/13/16 21:09	1
2-Butanone (MEK)	ND		50.0		ug/L			05/13/16 21:09	1
Carbon disulfide	ND		1.00		ug/L			05/13/16 21:09	1
Carbon tetrachloride	ND		1.00		ug/L			05/13/16 21:09	1
Chlorobenzene	ND		1.00		ug/L			05/13/16 21:09	1
Chlorodibromomethane	ND		1.00		ug/L			05/13/16 21:09	1
Chloroethane	ND		1.00		ug/L			05/13/16 21:09	1
Chloroform	ND		1.00		ug/L			05/13/16 21:09	1
Chloromethane	ND		1.00		ug/L			05/13/16 21:09	1
2-Chlorotoluene	**2.59**		1.00		ug/L			05/13/16 21:09	1
4-Chlorotoluene	ND		1.00		ug/L			05/13/16 21:09	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			05/13/16 21:09	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			05/13/16 21:09	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			05/13/16 21:09	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			05/13/16 21:09	1
Dibromomethane	ND		1.00		ug/L			05/13/16 21:09	1
1,2-Dichlorobenzene	**5.19**		1.00		ug/L			05/13/16 21:09	1
1,3-Dichlorobenzene	ND		1.00		ug/L			05/13/16 21:09	1
1,4-Dichlorobenzene	**1.67**		1.00		ug/L			05/13/16 21:09	1
Dichlorodifluoromethane	ND		1.00		ug/L			05/13/16 21:09	1
1,1-Dichloroethane	ND		1.00		ug/L			05/13/16 21:09	1
1,2-Dichloroethane	ND		1.00		ug/L			05/13/16 21:09	1
1,1-Dichloroethene	ND		1.00		ug/L			05/13/16 21:09	1
1,2-Dichloropropane	ND		1.00		ug/L			05/13/16 21:09	1
1,3-Dichloropropane	ND		1.00		ug/L			05/13/16 21:09	1
2,2-Dichloropropane	ND		1.00		ug/L			05/13/16 21:09	1
1,1-Dichloropropene	ND		1.00		ug/L			05/13/16 21:09	1
Ethylbenzene	**9.09**		1.00		ug/L			05/13/16 21:09	1
Hexachlorobutadiene	ND		2.00		ug/L			05/13/16 21:09	1
2-Hexanone	ND		10.0		ug/L			05/13/16 21:09	1
Isopropylbenzene	**42.4**		1.00		ug/L			05/13/16 21:09	1
Methylene Chloride	ND		5.00		ug/L			05/13/16 21:09	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			05/13/16 21:09	1
Methyl tert-butyl ether	ND		1.00		ug/L			05/13/16 21:09	1
Naphthalene	ND		5.00		ug/L			05/13/16 21:09	1
n-Butylbenzene	**7.91**		1.00		ug/L			05/13/16 21:09	1
N-Propylbenzene	**80.4**		1.00		ug/L			05/13/16 21:09	1
p-Isopropyltoluene	**2.44**		1.00		ug/L			05/13/16 21:09	1
sec-Butylbenzene	**7.91**		1.00		ug/L			05/13/16 21:09	1
Styrene	ND		1.00		ug/L			05/13/16 21:09	1
tert-Butylbenzene	**1.06**		1.00		ug/L			05/13/16 21:09	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			05/13/16 21:09	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			05/13/16 21:09	1

Client Sample ID: GW-060866-051116-LB-MW-2

Date Collected: 05/11/16 08:37
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00		ug/L			05/13/16 21:09	1
Toluene	**2.60**		1.00		ug/L			05/13/16 21:09	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			05/13/16 21:09	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			05/13/16 21:09	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			05/13/16 21:09	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			05/13/16 21:09	1
1,1,1-Trichloroethane	ND		1.00		ug/L			05/13/16 21:09	1
1,1,2-Trichloroethane	ND		1.00		ug/L			05/13/16 21:09	1
Trichloroethene	ND		1.00		ug/L			05/13/16 21:09	1
Trichlorofluoromethane	ND		1.00		ug/L			05/13/16 21:09	1
1,2,3-Trichloropropane	ND		1.00		ug/L			05/13/16 21:09	1
1,2,4-Trimethylbenzene	**42.1**		1.00		ug/L			05/13/16 21:09	1
1,3,5-Trimethylbenzene	**2.78**		1.00		ug/L			05/13/16 21:09	1
Vinyl chloride	ND		1.00		ug/L			05/13/16 21:09	1
Xylenes, Total	**16.1**		3.00		ug/L			05/13/16 21:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*05/13/16 21:09*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*05/14/16 22:02*	*5*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*05/13/16 21:09*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*05/14/16 22:02*	*5*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*05/13/16 21:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*05/14/16 22:02*	*5*
Toluene-d8 (Surr)	*93*		*70 - 130*		*05/13/16 21:09*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*05/14/16 22:02*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
Acenaphthylene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
Anthracene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
Benzo[a]anthracene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
Benzo[a]pyrene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
Benzo[b]fluoranthene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
Benzo[g,h,i]perylene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
Benzo[k]fluoranthene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
Bis(2-chloroethoxy)methane	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Bis(2-chloroethyl)ether	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
bis (2-chloroisopropyl) ether	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Bis(2-ethylhexyl) phthalate	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
4-Bromophenyl phenyl ether	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Butyl benzyl phthalate	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Carbazole	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
4-Chloroaniline	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
4-Chloro-3-methylphenol	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
2-Chloronaphthalene	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
2-Chlorophenol	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
4-Chlorophenyl phenyl ether	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Chrysene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
Cresols	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1

Client Sample ID: GW-060866-051116-LB-MW-2
Date Collected: 05/11/16 08:37
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
Dibenzofuran	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
1,2-Dichlorobenzene	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
1,3-Dichlorobenzene	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
1,4-Dichlorobenzene	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
3,3'-Dichlorobenzidine	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
2,4-Dichlorophenol	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Diethyl phthalate	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
2,4-Dimethylphenol	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Dimethyl phthalate	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Di-n-butyl phthalate	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
4,6-Dinitro-2-methylphenol	ND		24.0		ug/L		05/17/16 16:13	05/18/16 18:39	1
2,4-Dinitrophenol	ND		24.0		ug/L		05/17/16 16:13	05/18/16 18:39	1
2,4-Dinitrotoluene	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
2,6-Dinitrotoluene	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Di-n-octyl phthalate	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Fluoranthene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
Fluorene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
Hexachlorobenzene	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Hexachlorobutadiene	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Hexachlorocyclopentadiene	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Hexachloroethane	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Indeno[1,2,3-cd]pyrene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
Isophorone	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
1-Methylnaphthalene	**28.0**		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
2-Methylnaphthalene	**30.6**		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
2-Methylphenol	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
3 & 4 Methylphenol	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Naphthalene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
2-Nitroaniline	ND		24.0		ug/L		05/17/16 16:13	05/18/16 18:39	1
3-Nitroaniline	ND		24.0		ug/L		05/17/16 16:13	05/18/16 18:39	1
4-Nitroaniline	ND		24.0		ug/L		05/17/16 16:13	05/18/16 18:39	1
Nitrobenzene	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
2-Nitrophenol	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
4-Nitrophenol	ND		24.0		ug/L		05/17/16 16:13	05/18/16 18:39	1
N-Nitrosodi-n-propylamine	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
n-Nitrosodiphenylamine(as diphenylamine)	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Pentachlorophenol	ND		24.0		ug/L		05/17/16 16:13	05/18/16 18:39	1
Phenanthrene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
Phenol	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
Pyrene	ND		1.92		ug/L		05/17/16 16:13	05/18/16 18:39	1
1,2,4-Trichlorobenzene	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
2,4,5-Trichlorophenol	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1
2,4,6-Trichlorophenol	ND		9.62		ug/L		05/17/16 16:13	05/18/16 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*75*		*29 - 120*	*05/17/16 16:13*	*05/18/16 18:39*	*1*
2-Fluorophenol (Surr)	*53*		*10 - 120*	*05/17/16 16:13*	*05/18/16 18:39*	*1*
Nitrobenzene-d5 (Surr)	*75*		*27 - 120*	*05/17/16 16:13*	*05/18/16 18:39*	*1*

Client Sample ID: GW-060866-051116-LB-MW-2

Date Collected: 05/11/16 08:37
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-2

Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5 (Surr)	*35*		*10 - 120*	*05/17/16 16:13*	*05/18/16 18:39*	*1*
Terphenyl-d14 (Surr)	*67*		*13 - 120*	*05/17/16 16:13*	*05/18/16 18:39*	*1*
2,4,6-Tribromophenol (Surr)	*93*		*10 - 120*	*05/17/16 16:13*	*05/18/16 18:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**2280**		1000		ug/L			05/19/16 01:29	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	*100*		*50 - 150*		*05/19/16 01:29*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.481		ug/L		05/16/16 11:30	05/17/16 14:59	1
PCB-1221	ND		0.481		ug/L		05/16/16 11:30	05/17/16 14:59	1
PCB-1232	ND		0.481		ug/L		05/16/16 11:30	05/17/16 14:59	1
PCB-1242	ND		0.481		ug/L		05/16/16 11:30	05/17/16 14:59	1
PCB-1248	ND		0.481		ug/L		05/16/16 11:30	05/17/16 14:59	1
PCB-1254	ND		0.481		ug/L		05/16/16 11:30	05/17/16 14:59	1
PCB-1260	ND		0.481		ug/L		05/16/16 11:30	05/17/16 14:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*40*		*10 - 150*	*05/16/16 11:30*	*05/17/16 14:59*	*1*
Tetrachloro-m-xylene	*74*		*10 - 150*	*05/16/16 11:30*	*05/17/16 14:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**5510**		185		ug/L		05/21/16 09:32	05/21/16 21:16	2
C24-C40	**1260**		92.6		ug/L		05/21/16 09:32	05/21/16 19:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*73*		*50 - 150*	*05/21/16 09:32*	*05/21/16 19:01*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00200		mg/L		05/17/16 19:37	05/18/16 14:46	1

Client Sample ID: GW-060866-051016-LB-MW-3

Lab Sample ID: 490-103608-3

Date Collected: 05/10/16 11:55
Matrix: Water
Date Received: 05/12/16 10:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	6.45		1.00		ug/L			05/13/16 21:36	1
Ethylbenzene	26.5		1.00		ug/L			05/13/16 21:36	1
Naphthalene	23.9		5.00		ug/L			05/13/16 21:36	1
Toluene	1.58		1.00		ug/L			05/13/16 21:36	1
Xylenes, Total	5.37		3.00		ug/L			05/13/16 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*05/13/16 21:36*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*05/13/16 21:36*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*05/13/16 21:36*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*05/13/16 21:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	1880		1000		ug/L			05/19/16 02:09	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*50 - 150*		*05/19/16 02:09*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	3810		100		ug/L		05/21/16 09:32	05/21/16 19:18	1
C24-C40	303		100		ug/L		05/21/16 09:32	05/21/16 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*98*		*50 - 150*	*05/21/16 09:32*	*05/21/16 19:18*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00200		mg/L		05/17/16 19:37	05/18/16 14:52	1

Client Sample ID: GW-060866-051016-LB-MW-4

Date Collected: 05/10/16 13:00
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			05/14/16 02:59	1
Ethylbenzene	ND		1.00		ug/L			05/14/16 02:59	1
Naphthalene	ND		5.00		ug/L			05/14/16 02:59	1
Toluene	ND		1.00		ug/L			05/14/16 02:59	1
Xylenes, Total	ND		3.00		ug/L			05/14/16 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*05/14/16 02:59*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*05/14/16 02:59*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*05/14/16 02:59*	*1*
Toluene-d8 (Surr)	*81*		*70 - 130*		*05/14/16 02:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			05/18/16 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*50 - 150*		*05/18/16 17:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		92.6		ug/L		05/21/16 09:32	05/21/16 19:35	1
C24-C40	ND		92.6		ug/L		05/21/16 09:32	05/21/16 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*69*		*50 - 150*	*05/21/16 09:32*	*05/21/16 19:35*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00200		mg/L		05/17/16 19:37	05/18/16 16:57	1

Client Sample ID: GW-060866-051016-LB-MW-5

Date Collected: 05/10/16 09:36
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			05/14/16 03:26	1
Benzene	ND		1.00		ug/L			05/14/16 03:26	1
Bromobenzene	ND		1.00		ug/L			05/14/16 03:26	1
Bromochloromethane	ND		1.00		ug/L			05/14/16 03:26	1
Bromodichloromethane	ND		1.00		ug/L			05/14/16 03:26	1
Bromoform	ND		1.00		ug/L			05/14/16 03:26	1
Bromomethane	ND		1.00		ug/L			05/14/16 03:26	1
2-Butanone (MEK)	ND		50.0		ug/L			05/14/16 03:26	1
Carbon disulfide	ND		1.00		ug/L			05/14/16 03:26	1
Carbon tetrachloride	ND		1.00		ug/L			05/14/16 03:26	1
Chlorobenzene	ND		1.00		ug/L			05/14/16 03:26	1
Chlorodibromomethane	ND		1.00		ug/L			05/14/16 03:26	1
Chloroethane	ND		1.00		ug/L			05/14/16 03:26	1
Chloroform	ND		1.00		ug/L			05/14/16 03:26	1
Chloromethane	ND		1.00		ug/L			05/14/16 03:26	1
2-Chlorotoluene	ND		1.00		ug/L			05/14/16 03:26	1
4-Chlorotoluene	ND		1.00		ug/L			05/14/16 03:26	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			05/14/16 03:26	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			05/14/16 03:26	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			05/14/16 03:26	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			05/14/16 03:26	1
Dibromomethane	ND		1.00		ug/L			05/14/16 03:26	1
1,2-Dichlorobenzene	ND		1.00		ug/L			05/14/16 03:26	1
1,3-Dichlorobenzene	ND		1.00		ug/L			05/14/16 03:26	1
1,4-Dichlorobenzene	ND		1.00		ug/L			05/14/16 03:26	1
Dichlorodifluoromethane	ND		1.00		ug/L			05/14/16 03:26	1
1,1-Dichloroethane	ND		1.00		ug/L			05/14/16 03:26	1
1,2-Dichloroethane	ND		1.00		ug/L			05/14/16 03:26	1
1,1-Dichloroethene	ND		1.00		ug/L			05/14/16 03:26	1
1,2-Dichloropropane	ND		1.00		ug/L			05/14/16 03:26	1
1,3-Dichloropropane	ND		1.00		ug/L			05/14/16 03:26	1
2,2-Dichloropropane	ND		1.00		ug/L			05/14/16 03:26	1
1,1-Dichloropropene	ND		1.00		ug/L			05/14/16 03:26	1
Ethylbenzene	**10.0**		1.00		ug/L			05/14/16 03:26	1
Hexachlorobutadiene	ND		2.00		ug/L			05/14/16 03:26	1
2-Hexanone	ND		10.0		ug/L			05/14/16 03:26	1
Isopropylbenzene	**4.46**		1.00		ug/L			05/14/16 03:26	1
Methylene Chloride	ND		5.00		ug/L			05/14/16 03:26	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			05/14/16 03:26	1
Methyl tert-butyl ether	ND		1.00		ug/L			05/14/16 03:26	1
Naphthalene	ND		5.00		ug/L			05/14/16 03:26	1
n-Butylbenzene	**3.65**		1.00		ug/L			05/14/16 03:26	1
N-Propylbenzene	**11.7**		1.00		ug/L			05/14/16 03:26	1
p-Isopropyltoluene	**1.70**		1.00		ug/L			05/14/16 03:26	1
sec-Butylbenzene	**2.87**		1.00		ug/L			05/14/16 03:26	1
Styrene	ND		1.00		ug/L			05/14/16 03:26	1
tert-Butylbenzene	ND		1.00		ug/L			05/14/16 03:26	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			05/14/16 03:26	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			05/14/16 03:26	1

Client: GHD Services Inc.
Project/Site: 701 Bozarth Ave., Woodland, WA

TestAmerica Job ID: 490-103608-1
SDG: 060866

Client Sample ID: GW-060866-051016-LB-MW-5
Date Collected: 05/10/16 09:36
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00		ug/L			05/14/16 03:26	1
Toluene	ND		1.00		ug/L			05/14/16 03:26	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			05/14/16 03:26	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			05/14/16 03:26	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			05/14/16 03:26	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			05/14/16 03:26	1
1,1,1-Trichloroethane	ND		1.00		ug/L			05/14/16 03:26	1
1,1,2-Trichloroethane	ND		1.00		ug/L			05/14/16 03:26	1
Trichloroethene	ND		1.00		ug/L			05/14/16 03:26	1
Trichlorofluoromethane	ND		1.00		ug/L			05/14/16 03:26	1
1,2,3-Trichloropropane	ND		1.00		ug/L			05/14/16 03:26	1
1,2,4-Trimethylbenzene	**21.3**		1.00		ug/L			05/14/16 03:26	1
1,3,5-Trimethylbenzene	**6.63**		1.00		ug/L			05/14/16 03:26	1
Vinyl chloride	ND		1.00		ug/L			05/14/16 03:26	1
Xylenes, Total	**9.80**		3.00		ug/L			05/14/16 03:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*05/14/16 03:26*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*05/14/16 03:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*05/14/16 03:26*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/14/16 03:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
Acenaphthylene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
Anthracene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
Benzo[a]anthracene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
Benzo[a]pyrene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
Benzo[b]fluoranthene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
Benzo[g,h,i]perylene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
Benzo[k]fluoranthene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
Bis(2-chloroethoxy)methane	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Bis(2-chloroethyl)ether	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
bis (2-chloroisopropyl) ether	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Bis(2-ethylhexyl) phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
4-Bromophenyl phenyl ether	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Butyl benzyl phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Carbazole	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
4-Chloroaniline	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
4-Chloro-3-methylphenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
2-Chloronaphthalene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
2-Chlorophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
4-Chlorophenyl phenyl ether	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Chrysene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
Cresols	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Dibenz(a,h)anthracene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
Dibenzofuran	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
1,2-Dichlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
1,3-Dichlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1

Client Sample ID: GW-060866-051016-LB-MW-5
Date Collected: 05/10/16 09:36
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
3,3'-Dichlorobenzidine	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
2,4-Dichlorophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Diethyl phthalate	**13.4**		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
2,4-Dimethylphenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Dimethyl phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Di-n-butyl phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
4,6-Dinitro-2-methylphenol	ND		25.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
2,4-Dinitrophenol	ND		25.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
2,4-Dinitrotoluene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
2,6-Dinitrotoluene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Di-n-octyl phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Fluoranthene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
Fluorene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
Hexachlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Hexachlorobutadiene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Hexachlorocyclopentadiene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Hexachloroethane	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Indeno[1,2,3-cd]pyrene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
Isophorone	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
1-Methylnaphthalene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
2-Methylnaphthalene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
2-Methylphenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
3 & 4 Methylphenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Naphthalene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
2-Nitroaniline	ND		25.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
3-Nitroaniline	ND		25.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
4-Nitroaniline	ND		25.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Nitrobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
2-Nitrophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
4-Nitrophenol	ND		25.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
N-Nitrosodi-n-propylamine	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
n-Nitrosodiphenylamine(as diphenylamine)	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Pentachlorophenol	ND		25.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Phenanthrene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
Phenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
Pyrene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:06	1
1,2,4-Trichlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
2,4,5-Trichlorophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1
2,4,6-Trichlorophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*29 - 120*	*05/17/16 16:13*	*05/18/16 19:06*	*1*
2-Fluorophenol (Surr)	*47*		*10 - 120*	*05/17/16 16:13*	*05/18/16 19:06*	*1*
Nitrobenzene-d5 (Surr)	*70*		*27 - 120*	*05/17/16 16:13*	*05/18/16 19:06*	*1*
Phenol-d5 (Surr)	*31*		*10 - 120*	*05/17/16 16:13*	*05/18/16 19:06*	*1*
Terphenyl-d14 (Surr)	*79*		*13 - 120*	*05/17/16 16:13*	*05/18/16 19:06*	*1*
2,4,6-Tribromophenol (Surr)	*82*		*10 - 120*	*05/17/16 16:13*	*05/18/16 19:06*	*1*

Client: GHD Services Inc.
Project/Site: 701 Bozarth Ave., Woodland, WA

TestAmerica Job ID: 490-103608-1
SDG: 060866

Client Sample ID: GW-060866-051016-LB-MW-5
Date Collected: 05/10/16 09:36
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	515		100		ug/L			05/19/16 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*105*		*50 - 150*		*05/19/16 15:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.481		ug/L		05/16/16 11:30	05/17/16 15:14	1
PCB-1221	ND		0.481		ug/L		05/16/16 11:30	05/17/16 15:14	1
PCB-1232	ND		0.481		ug/L		05/16/16 11:30	05/17/16 15:14	1
PCB-1242	ND		0.481		ug/L		05/16/16 11:30	05/17/16 15:14	1
PCB-1248	ND		0.481		ug/L		05/16/16 11:30	05/17/16 15:14	1
PCB-1254	ND		0.481		ug/L		05/16/16 11:30	05/17/16 15:14	1
PCB-1260	ND		0.481		ug/L		05/16/16 11:30	05/17/16 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*38*		*10 - 150*	*05/16/16 11:30*	*05/17/16 15:14*	*1*
Tetrachloro-m-xylene	*44*		*10 - 150*	*05/16/16 11:30*	*05/17/16 15:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	372		92.6		ug/L		05/21/16 09:32	05/21/16 19:52	1
C24-C40	ND		92.6		ug/L		05/21/16 09:32	05/21/16 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*60*		*50 - 150*	*05/21/16 09:32*	*05/21/16 19:52*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00200		mg/L		05/17/16 19:37	05/18/16 17:02	1

Client: GHD Services Inc.
Project/Site: 701 Bozarth Ave., Woodland, WA

TestAmerica Job ID: 490-103608-1
SDG: 060866

Client Sample ID: GW-060866-051016-LB-MW-6
Date Collected: 05/10/16 14:02
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			05/14/16 03:53	1
Benzene	ND		1.00		ug/L			05/14/16 03:53	1
Bromobenzene	ND		1.00		ug/L			05/14/16 03:53	1
Bromochloromethane	ND		1.00		ug/L			05/14/16 03:53	1
Bromodichloromethane	ND		1.00		ug/L			05/14/16 03:53	1
Bromoform	ND		1.00		ug/L			05/14/16 03:53	1
Bromomethane	ND		1.00		ug/L			05/14/16 03:53	1
2-Butanone (MEK)	ND		50.0		ug/L			05/14/16 03:53	1
Carbon disulfide	ND		1.00		ug/L			05/14/16 03:53	1
Carbon tetrachloride	ND		1.00		ug/L			05/14/16 03:53	1
Chlorobenzene	ND		1.00		ug/L			05/14/16 03:53	1
Chlorodibromomethane	ND		1.00		ug/L			05/14/16 03:53	1
Chloroethane	ND		1.00		ug/L			05/14/16 03:53	1
Chloroform	ND		1.00		ug/L			05/14/16 03:53	1
Chloromethane	ND		1.00		ug/L			05/14/16 03:53	1
2-Chlorotoluene	ND		1.00		ug/L			05/14/16 03:53	1
4-Chlorotoluene	ND		1.00		ug/L			05/14/16 03:53	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			05/14/16 03:53	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			05/14/16 03:53	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			05/14/16 03:53	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			05/14/16 03:53	1
Dibromomethane	ND		1.00		ug/L			05/14/16 03:53	1
1,2-Dichlorobenzene	ND		1.00		ug/L			05/14/16 03:53	1
1,3-Dichlorobenzene	ND		1.00		ug/L			05/14/16 03:53	1
1,4-Dichlorobenzene	ND		1.00		ug/L			05/14/16 03:53	1
Dichlorodifluoromethane	ND		1.00		ug/L			05/14/16 03:53	1
1,1-Dichloroethane	ND		1.00		ug/L			05/14/16 03:53	1
1,2-Dichloroethane	ND		1.00		ug/L			05/14/16 03:53	1
1,1-Dichloroethene	ND		1.00		ug/L			05/14/16 03:53	1
1,2-Dichloropropane	ND		1.00		ug/L			05/14/16 03:53	1
1,3-Dichloropropane	ND		1.00		ug/L			05/14/16 03:53	1
2,2-Dichloropropane	ND		1.00		ug/L			05/14/16 03:53	1
1,1-Dichloropropene	ND		1.00		ug/L			05/14/16 03:53	1
Ethylbenzene	ND		1.00		ug/L			05/14/16 03:53	1
Hexachlorobutadiene	ND		2.00		ug/L			05/14/16 03:53	1
2-Hexanone	ND		10.0		ug/L			05/14/16 03:53	1
Isopropylbenzene	ND		1.00		ug/L			05/14/16 03:53	1
Methylene Chloride	ND		5.00		ug/L			05/14/16 03:53	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			05/14/16 03:53	1
Methyl tert-butyl ether	ND		1.00		ug/L			05/14/16 03:53	1
Naphthalene	ND		5.00		ug/L			05/14/16 03:53	1
n-Butylbenzene	ND		1.00		ug/L			05/14/16 03:53	1
N-Propylbenzene	ND		1.00		ug/L			05/14/16 03:53	1
p-Isopropyltoluene	ND		1.00		ug/L			05/14/16 03:53	1
sec-Butylbenzene	ND		1.00		ug/L			05/14/16 03:53	1
Styrene	ND		1.00		ug/L			05/14/16 03:53	1
tert-Butylbenzene	ND		1.00		ug/L			05/14/16 03:53	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			05/14/16 03:53	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			05/14/16 03:53	1

Client: GHD Services Inc.
Project/Site: 701 Bozarth Ave., Woodland, WA

TestAmerica Job ID: 490-103608-1
SDG: 060866

Client Sample ID: GW-060866-051016-LB-MW-6
Date Collected: 05/10/16 14:02
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00		ug/L			05/14/16 03:53	1
Toluene	ND		1.00		ug/L			05/14/16 03:53	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			05/14/16 03:53	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			05/14/16 03:53	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			05/14/16 03:53	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			05/14/16 03:53	1
1,1,1-Trichloroethane	ND		1.00		ug/L			05/14/16 03:53	1
1,1,2-Trichloroethane	ND		1.00		ug/L			05/14/16 03:53	1
Trichloroethene	ND		1.00		ug/L			05/14/16 03:53	1
Trichlorofluoromethane	ND		1.00		ug/L			05/14/16 03:53	1
1,2,3-Trichloropropane	ND		1.00		ug/L			05/14/16 03:53	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			05/14/16 03:53	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			05/14/16 03:53	1
Vinyl chloride	ND		1.00		ug/L			05/14/16 03:53	1
Xylenes, Total	ND		3.00		ug/L			05/14/16 03:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*05/14/16 03:53*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*05/14/16 03:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*05/14/16 03:53*	*1*
Toluene-d8 (Surr)	*84*		*70 - 130*		*05/14/16 03:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
Acenaphthylene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
Anthracene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
Benzo[a]anthracene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
Benzo[a]pyrene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
Benzo[b]fluoranthene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
Benzo[g,h,i]perylene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
Benzo[k]fluoranthene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
Bis(2-chloroethoxy)methane	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Bis(2-chloroethyl)ether	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
bis (2-chloroisopropyl) ether	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Bis(2-ethylhexyl) phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
4-Bromophenyl phenyl ether	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Butyl benzyl phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Carbazole	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
4-Chloroaniline	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
4-Chloro-3-methylphenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
2-Chloronaphthalene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
2-Chlorophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
4-Chlorophenyl phenyl ether	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Chrysene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
Cresols	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Dibenz(a,h)anthracene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
Dibenzofuran	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
1,2-Dichlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
1,3-Dichlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1

Client: GHD Services Inc.
Project/Site: 701 Bozarth Ave., Woodland, WA

TestAmerica Job ID: 490-103608-1
SDG: 060866

Client Sample ID: GW-060866-051016-LB-MW-6
Date Collected: 05/10/16 14:02
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
3,3'-Dichlorobenzidine	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
2,4-Dichlorophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Diethyl phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
2,4-Dimethylphenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Dimethyl phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Di-n-butyl phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
4,6-Dinitro-2-methylphenol	ND		25.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
2,4-Dinitrophenol	ND		25.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
2,4-Dinitrotoluene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
2,6-Dinitrotoluene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Di-n-octyl phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Fluoranthene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
Fluorene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
Hexachlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Hexachlorobutadiene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Hexachlorocyclopentadiene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Hexachloroethane	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Indeno[1,2,3-cd]pyrene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
Isophorone	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
1-Methylnaphthalene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
2-Methylnaphthalene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
2-Methylphenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
3 & 4 Methylphenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Naphthalene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
2-Nitroaniline	ND		25.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
3-Nitroaniline	ND		25.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
4-Nitroaniline	ND		25.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Nitrobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
2-Nitrophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
4-Nitrophenol	ND		25.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
N-Nitrosodi-n-propylamine	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
n-Nitrosodiphenylamine(as diphenylamine)	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Pentachlorophenol	ND		25.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Phenanthrene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
Phenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
Pyrene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 19:32	1
1,2,4-Trichlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
2,4,5-Trichlorophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1
2,4,6-Trichlorophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*71*		*29 - 120*	*05/17/16 16:13*	*05/18/16 19:32*	*1*
2-Fluorophenol (Surr)	*52*		*10 - 120*	*05/17/16 16:13*	*05/18/16 19:32*	*1*
Nitrobenzene-d5 (Surr)	*67*		*27 - 120*	*05/17/16 16:13*	*05/18/16 19:32*	*1*
Phenol-d5 (Surr)	*32*		*10 - 120*	*05/17/16 16:13*	*05/18/16 19:32*	*1*
Terphenyl-d14 (Surr)	*83*		*13 - 120*	*05/17/16 16:13*	*05/18/16 19:32*	*1*
2,4,6-Tribromophenol (Surr)	*75*		*10 - 120*	*05/17/16 16:13*	*05/18/16 19:32*	*1*

Client Sample ID: GW-060866-051016-LB-MW-6

Lab Sample ID: 490-103608-6

Date Collected: 05/10/16 14:02

Matrix: Water

Date Received: 05/12/16 10:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			05/18/16 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*104*		*50 - 150*		*05/18/16 18:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**224**		94.3		ug/L		05/21/16 09:32	05/21/16 20:09	1
C24-C40	**143**		94.3		ug/L		05/21/16 09:32	05/21/16 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*79*		*50 - 150*	*05/21/16 09:32*	*05/21/16 20:09*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00200		mg/L		05/17/16 19:37	05/18/16 17:08	1

Client Sample ID: GW-060866-051016-LB-MW-7

Date Collected: 05/10/16 15:07
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			05/14/16 04:19	1
Ethylbenzene	ND		1.00		ug/L			05/14/16 04:19	1
Naphthalene	ND		5.00		ug/L			05/14/16 04:19	1
Toluene	ND		1.00		ug/L			05/14/16 04:19	1
Xylenes, Total	ND		3.00		ug/L			05/14/16 04:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*05/14/16 04:19*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*05/14/16 04:19*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*05/14/16 04:19*	*1*
Toluene-d8 (Surr)	*87*		*70 - 130*		*05/14/16 04:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			05/18/16 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*107*		*50 - 150*		*05/18/16 19:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**434**		93.5		ug/L		05/21/16 09:32	05/21/16 20:26	1
C24-C40	**185**		93.5		ug/L		05/21/16 09:32	05/21/16 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*71*		*50 - 150*	*05/21/16 09:32*	*05/21/16 20:26*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00200		mg/L		05/17/16 19:37	05/18/16 17:14	1

Client Sample ID: GW-060866-051016-LB-MW-8

Lab Sample ID: 490-103608-8

Date Collected: 05/10/16 10:50
Matrix: Water
Date Received: 05/12/16 10:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			05/14/16 04:46	1
Ethylbenzene	ND		1.00		ug/L			05/14/16 04:46	1
Naphthalene	ND		5.00		ug/L			05/14/16 04:46	1
Toluene	ND		1.00		ug/L			05/14/16 04:46	1
Xylenes, Total	ND		3.00		ug/L			05/14/16 04:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*05/14/16 04:46*	*1*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*05/14/16 04:46*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*05/14/16 04:46*	*1*
Toluene-d8 (Surr)	*83*		*70 - 130*		*05/14/16 04:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			05/18/16 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*109*		*50 - 150*		*05/18/16 20:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		94.3		ug/L		05/21/16 09:32	05/21/16 20:43	1
C24-C40	ND		94.3		ug/L		05/21/16 09:32	05/21/16 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*74*		*50 - 150*	*05/21/16 09:32*	*05/21/16 20:43*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00200		mg/L		05/17/16 19:37	05/18/16 17:19	1

Client: GHD Services Inc.
Project/Site: 701 Bozarth Ave., Woodland, WA

TestAmerica Job ID: 490-103608-1
SDG: 060866

Client Sample ID: GW-060866-051116-LB-MW-9
Date Collected: 05/11/16 10:55
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			05/14/16 05:13	1
Benzene	**1.90**		1.00		ug/L			05/14/16 05:13	1
Bromobenzene	ND		1.00		ug/L			05/14/16 05:13	1
Bromochloromethane	ND		1.00		ug/L			05/14/16 05:13	1
Bromodichloromethane	ND		1.00		ug/L			05/14/16 05:13	1
Bromoform	ND		1.00		ug/L			05/14/16 05:13	1
Bromomethane	ND		1.00		ug/L			05/14/16 05:13	1
2-Butanone (MEK)	ND		50.0		ug/L			05/14/16 05:13	1
Carbon disulfide	ND		1.00		ug/L			05/14/16 05:13	1
Carbon tetrachloride	ND		1.00		ug/L			05/14/16 05:13	1
Chlorobenzene	ND		1.00		ug/L			05/14/16 05:13	1
Chlorodibromomethane	ND		1.00		ug/L			05/14/16 05:13	1
Chloroethane	ND		1.00		ug/L			05/14/16 05:13	1
Chloroform	ND		1.00		ug/L			05/14/16 05:13	1
Chloromethane	ND		1.00		ug/L			05/14/16 05:13	1
2-Chlorotoluene	ND		1.00		ug/L			05/14/16 05:13	1
4-Chlorotoluene	ND		1.00		ug/L			05/14/16 05:13	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			05/14/16 05:13	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			05/14/16 05:13	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			05/14/16 05:13	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			05/14/16 05:13	1
Dibromomethane	ND		1.00		ug/L			05/14/16 05:13	1
1,2-Dichlorobenzene	**1.23**		1.00		ug/L			05/14/16 05:13	1
1,3-Dichlorobenzene	ND		1.00		ug/L			05/14/16 05:13	1
1,4-Dichlorobenzene	ND		1.00		ug/L			05/14/16 05:13	1
Dichlorodifluoromethane	ND		1.00		ug/L			05/14/16 05:13	1
1,1-Dichloroethane	ND		1.00		ug/L			05/14/16 05:13	1
1,2-Dichloroethane	ND		1.00		ug/L			05/14/16 05:13	1
1,1-Dichloroethene	ND		1.00		ug/L			05/14/16 05:13	1
1,2-Dichloropropane	ND		1.00		ug/L			05/14/16 05:13	1
1,3-Dichloropropane	ND		1.00		ug/L			05/14/16 05:13	1
2,2-Dichloropropane	ND		1.00		ug/L			05/14/16 05:13	1
1,1-Dichloropropene	ND		1.00		ug/L			05/14/16 05:13	1
Ethylbenzene	ND		1.00		ug/L			05/14/16 05:13	1
Hexachlorobutadiene	ND		2.00		ug/L			05/14/16 05:13	1
2-Hexanone	ND		10.0		ug/L			05/14/16 05:13	1
Isopropylbenzene	**14.4**		1.00		ug/L			05/14/16 05:13	1
Methylene Chloride	ND		5.00		ug/L			05/14/16 05:13	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			05/14/16 05:13	1
Methyl tert-butyl ether	ND		1.00		ug/L			05/14/16 05:13	1
Naphthalene	ND		5.00		ug/L			05/14/16 05:13	1
n-Butylbenzene	**8.91**		1.00		ug/L			05/14/16 05:13	1
N-Propylbenzene	**27.4**		1.00		ug/L			05/14/16 05:13	1
p-Isopropyltoluene	**5.01**		1.00		ug/L			05/14/16 05:13	1
sec-Butylbenzene	**5.32**		1.00		ug/L			05/14/16 05:13	1
Styrene	ND		1.00		ug/L			05/14/16 05:13	1
tert-Butylbenzene	ND		1.00		ug/L			05/14/16 05:13	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			05/14/16 05:13	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			05/14/16 05:13	1

Client Sample ID: GW-060866-051116-LB-MW-9
Date Collected: 05/11/16 10:55
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00		ug/L			05/14/16 05:13	1
Toluene	**1.92**		1.00		ug/L			05/14/16 05:13	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			05/14/16 05:13	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			05/14/16 05:13	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			05/14/16 05:13	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			05/14/16 05:13	1
1,1,1-Trichloroethane	ND		1.00		ug/L			05/14/16 05:13	1
1,1,2-Trichloroethane	ND		1.00		ug/L			05/14/16 05:13	1
Trichloroethene	ND		1.00		ug/L			05/14/16 05:13	1
Trichlorofluoromethane	ND		1.00		ug/L			05/14/16 05:13	1
1,2,3-Trichloropropane	ND		1.00		ug/L			05/14/16 05:13	1
1,2,4-Trimethylbenzene	**133**		1.00		ug/L			05/14/16 05:13	1
1,3,5-Trimethylbenzene	**42.8**		1.00		ug/L			05/14/16 05:13	1
Vinyl chloride	ND		1.00		ug/L			05/14/16 05:13	1
Xylenes, Total	**41.6**		3.00		ug/L			05/14/16 05:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*05/14/16 05:13*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*05/14/16 05:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*05/14/16 05:13*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*05/14/16 05:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**1900**		100		ug/L			05/19/16 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*83*		*50 - 150*		*05/19/16 21:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**2060**		94.3		ug/L		05/21/16 09:32	05/21/16 20:59	1
C24-C40	**128**		94.3		ug/L		05/21/16 09:32	05/21/16 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*91*		*50 - 150*	*05/21/16 09:32*	*05/21/16 20:59*	*1*

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00200		mg/L		05/17/16 19:37	05/18/16 17:25	1

Client: GHD Services Inc.
Project/Site: 701 Bozarth Ave., Woodland, WA

TestAmerica Job ID: 490-103608-1
SDG: 060866

Client Sample ID: TB
Date Collected: 05/10/16 08:00
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			05/13/16 17:34	1
Benzene	ND		1.00		ug/L			05/13/16 17:34	1
Bromobenzene	ND		1.00		ug/L			05/13/16 17:34	1
Bromochloromethane	ND		1.00		ug/L			05/13/16 17:34	1
Bromodichloromethane	ND		1.00		ug/L			05/13/16 17:34	1
Bromoform	ND		1.00		ug/L			05/13/16 17:34	1
Bromomethane	ND		1.00		ug/L			05/13/16 17:34	1
2-Butanone (MEK)	ND		50.0		ug/L			05/13/16 17:34	1
Carbon disulfide	ND		1.00		ug/L			05/13/16 17:34	1
Carbon tetrachloride	ND		1.00		ug/L			05/13/16 17:34	1
Chlorobenzene	ND		1.00		ug/L			05/13/16 17:34	1
Chlorodibromomethane	ND		1.00		ug/L			05/13/16 17:34	1
Chloroethane	ND		1.00		ug/L			05/13/16 17:34	1
Chloroform	ND		1.00		ug/L			05/13/16 17:34	1
Chloromethane	ND		1.00		ug/L			05/13/16 17:34	1
2-Chlorotoluene	ND		1.00		ug/L			05/13/16 17:34	1
4-Chlorotoluene	ND		1.00		ug/L			05/13/16 17:34	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			05/13/16 17:34	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			05/13/16 17:34	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			05/13/16 17:34	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			05/13/16 17:34	1
Dibromomethane	ND		1.00		ug/L			05/13/16 17:34	1
1,2-Dichlorobenzene	ND		1.00		ug/L			05/13/16 17:34	1
1,3-Dichlorobenzene	ND		1.00		ug/L			05/13/16 17:34	1
1,4-Dichlorobenzene	ND		1.00		ug/L			05/13/16 17:34	1
Dichlorodifluoromethane	ND		1.00		ug/L			05/13/16 17:34	1
1,1-Dichloroethane	ND		1.00		ug/L			05/13/16 17:34	1
1,2-Dichloroethane	ND		1.00		ug/L			05/13/16 17:34	1
1,1-Dichloroethene	ND		1.00		ug/L			05/13/16 17:34	1
1,2-Dichloropropane	ND		1.00		ug/L			05/13/16 17:34	1
1,3-Dichloropropane	ND		1.00		ug/L			05/13/16 17:34	1
2,2-Dichloropropane	ND		1.00		ug/L			05/13/16 17:34	1
1,1-Dichloropropene	ND		1.00		ug/L			05/13/16 17:34	1
Ethylbenzene	ND		1.00		ug/L			05/13/16 17:34	1
Hexachlorobutadiene	ND		2.00		ug/L			05/13/16 17:34	1
2-Hexanone	ND		10.0		ug/L			05/13/16 17:34	1
Isopropylbenzene	ND		1.00		ug/L			05/13/16 17:34	1
Methylene Chloride	ND		5.00		ug/L			05/13/16 17:34	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			05/13/16 17:34	1
Methyl tert-butyl ether	ND		1.00		ug/L			05/13/16 17:34	1
Naphthalene	ND		5.00		ug/L			05/13/16 17:34	1
n-Butylbenzene	ND		1.00		ug/L			05/13/16 17:34	1
N-Propylbenzene	ND		1.00		ug/L			05/13/16 17:34	1
p-Isopropyltoluene	ND		1.00		ug/L			05/13/16 17:34	1
sec-Butylbenzene	ND		1.00		ug/L			05/13/16 17:34	1
Styrene	ND		1.00		ug/L			05/13/16 17:34	1
tert-Butylbenzene	ND		1.00		ug/L			05/13/16 17:34	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			05/13/16 17:34	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			05/13/16 17:34	1

Client: GHD Services Inc.
Project/Site: 701 Bozarth Ave., Woodland, WA

TestAmerica Job ID: 490-103608-1
SDG: 060866

Client Sample ID: TB
Date Collected: 05/10/16 08:00
Date Received: 05/12/16 10:22

Lab Sample ID: 490-103608-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00		ug/L			05/13/16 17:34	1
Toluene	ND		1.00		ug/L			05/13/16 17:34	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			05/13/16 17:34	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			05/13/16 17:34	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			05/13/16 17:34	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			05/13/16 17:34	1
1,1,1-Trichloroethane	ND		1.00		ug/L			05/13/16 17:34	1
1,1,2-Trichloroethane	ND		1.00		ug/L			05/13/16 17:34	1
Trichloroethene	ND		1.00		ug/L			05/13/16 17:34	1
Trichlorofluoromethane	ND		1.00		ug/L			05/13/16 17:34	1
1,2,3-Trichloropropane	ND		1.00		ug/L			05/13/16 17:34	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			05/13/16 17:34	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			05/13/16 17:34	1
Vinyl chloride	ND		1.00		ug/L			05/13/16 17:34	1
Xylenes, Total	ND		3.00		ug/L			05/13/16 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*05/13/16 17:34*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*05/13/16 17:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*05/13/16 17:34*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/13/16 17:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			05/18/16 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*		*05/18/16 14:55*	*1*

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

Lab Sample ID: MB 490-339716/7
Matrix: Water
Analysis Batch: 339716

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			05/13/16 12:58	1
Benzene	ND		1.00		ug/L			05/13/16 12:58	1
Bromobenzene	ND		1.00		ug/L			05/13/16 12:58	1
Bromochloromethane	ND		1.00		ug/L			05/13/16 12:58	1
Bromodichloromethane	ND		1.00		ug/L			05/13/16 12:58	1
Bromoform	ND		1.00		ug/L			05/13/16 12:58	1
Bromomethane	ND		1.00		ug/L			05/13/16 12:58	1
2-Butanone (MEK)	ND		50.0		ug/L			05/13/16 12:58	1
Carbon disulfide	ND		1.00		ug/L			05/13/16 12:58	1
Carbon tetrachloride	ND		1.00		ug/L			05/13/16 12:58	1
Chlorobenzene	ND		1.00		ug/L			05/13/16 12:58	1
Chlorodibromomethane	ND		1.00		ug/L			05/13/16 12:58	1
Chloroethane	ND		1.00		ug/L			05/13/16 12:58	1
Chloroform	ND		1.00		ug/L			05/13/16 12:58	1
Chloromethane	ND		1.00		ug/L			05/13/16 12:58	1
2-Chlorotoluene	ND		1.00		ug/L			05/13/16 12:58	1
4-Chlorotoluene	ND		1.00		ug/L			05/13/16 12:58	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			05/13/16 12:58	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			05/13/16 12:58	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			05/13/16 12:58	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			05/13/16 12:58	1
Dibromomethane	ND		1.00		ug/L			05/13/16 12:58	1
1,2-Dichlorobenzene	ND		1.00		ug/L			05/13/16 12:58	1
1,3-Dichlorobenzene	ND		1.00		ug/L			05/13/16 12:58	1
1,4-Dichlorobenzene	ND		1.00		ug/L			05/13/16 12:58	1
Dichlorodifluoromethane	ND		1.00		ug/L			05/13/16 12:58	1
1,1-Dichloroethane	ND		1.00		ug/L			05/13/16 12:58	1
1,2-Dichloroethane	ND		1.00		ug/L			05/13/16 12:58	1
1,1-Dichloroethene	ND		1.00		ug/L			05/13/16 12:58	1
1,2-Dichloropropane	ND		1.00		ug/L			05/13/16 12:58	1
1,3-Dichloropropane	ND		1.00		ug/L			05/13/16 12:58	1
2,2-Dichloropropane	ND		1.00		ug/L			05/13/16 12:58	1
1,1-Dichloropropene	ND		1.00		ug/L			05/13/16 12:58	1
Ethylbenzene	ND		1.00		ug/L			05/13/16 12:58	1
Hexachlorobutadiene	ND		2.00		ug/L			05/13/16 12:58	1
2-Hexanone	ND		10.0		ug/L			05/13/16 12:58	1
Isopropylbenzene	ND		1.00		ug/L			05/13/16 12:58	1
Methylene Chloride	ND		5.00		ug/L			05/13/16 12:58	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			05/13/16 12:58	1
Methyl tert-butyl ether	ND		1.00		ug/L			05/13/16 12:58	1
Naphthalene	ND		5.00		ug/L			05/13/16 12:58	1
n-Butylbenzene	ND		1.00		ug/L			05/13/16 12:58	1
N-Propylbenzene	ND		1.00		ug/L			05/13/16 12:58	1
p-Isopropyltoluene	ND		1.00		ug/L			05/13/16 12:58	1
sec-Butylbenzene	ND		1.00		ug/L			05/13/16 12:58	1
Styrene	ND		1.00		ug/L			05/13/16 12:58	1
tert-Butylbenzene	ND		1.00		ug/L			05/13/16 12:58	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			05/13/16 12:58	1

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

Lab Sample ID: MB 490-339716/7
Matrix: Water
Analysis Batch: 339716

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			05/13/16 12:58	1
Tetrachloroethene	ND		1.00		ug/L			05/13/16 12:58	1
Toluene	ND		1.00		ug/L			05/13/16 12:58	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			05/13/16 12:58	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			05/13/16 12:58	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			05/13/16 12:58	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			05/13/16 12:58	1
1,1,1-Trichloroethane	ND		1.00		ug/L			05/13/16 12:58	1
1,1,2-Trichloroethane	ND		1.00		ug/L			05/13/16 12:58	1
Trichloroethene	ND		1.00		ug/L			05/13/16 12:58	1
Trichlorofluoromethane	ND		1.00		ug/L			05/13/16 12:58	1
1,2,3-Trichloropropane	ND		1.00		ug/L			05/13/16 12:58	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			05/13/16 12:58	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			05/13/16 12:58	1
Vinyl chloride	ND		1.00		ug/L			05/13/16 12:58	1
Xylenes, Total	ND		3.00		ug/L			05/13/16 12:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*05/13/16 12:58*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*05/13/16 12:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*05/13/16 12:58*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*05/13/16 12:58*	*1*

Lab Sample ID: LCS 490-339716/3
Matrix: Water
Analysis Batch: 339716

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	95.21		ug/L		95	39 - 150
Benzene	20.0	21.16		ug/L		106	70 - 130
Bromobenzene	20.0	20.60		ug/L		103	70 - 130
Bromochloromethane	20.0	19.84		ug/L		99	70 - 130
Bromodichloromethane	20.0	20.37		ug/L		102	70 - 130
Bromoform	20.0	20.38		ug/L		102	70 - 137
Bromomethane	20.0	14.36		ug/L		72	53 - 150
2-Butanone (MEK)	100	89.31		ug/L		89	55 - 143
Carbon disulfide	20.0	22.28		ug/L		111	64 - 135
Carbon tetrachloride	20.0	20.41		ug/L		102	70 - 147
Chlorobenzene	20.0	20.97		ug/L		105	70 - 130
Chlorodibromomethane	20.0	20.19		ug/L		101	70 - 133
Chloroethane	20.0	17.65		ug/L		88	60 - 138
Chloroform	20.0	19.58		ug/L		98	70 - 130
Chloromethane	20.0	21.34		ug/L		107	33 - 150
2-Chlorotoluene	20.0	21.02		ug/L		105	70 - 130
4-Chlorotoluene	20.0	20.76		ug/L		104	70 - 130
cis-1,2-Dichloroethene	20.0	20.20		ug/L		101	70 - 130
cis-1,3-Dichloropropene	20.0	19.80		ug/L		99	70 - 133
1,2-Dibromo-3-Chloropropane	20.0	16.27		ug/L		81	45 - 138

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

Lab Sample ID: LCS 490-339716/3
Matrix: Water
Analysis Batch: 339716

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	20.0	18.48		ug/L		92	70 - 130
Dibromomethane	20.0	19.64		ug/L		98	70 - 130
1,2-Dichlorobenzene	20.0	20.01		ug/L		100	70 - 130
1,3-Dichlorobenzene	20.0	20.44		ug/L		102	70 - 130
1,4-Dichlorobenzene	20.0	20.22		ug/L		101	70 - 130
Dichlorodifluoromethane	20.0	25.26		ug/L		126	48 - 150
1,1-Dichloroethane	20.0	19.71		ug/L		99	70 - 130
1,2-Dichloroethane	20.0	19.85		ug/L		99	70 - 130
1,1-Dichloroethene	20.0	21.02		ug/L		105	70 - 132
1,2-Dichloropropane	20.0	20.65		ug/L		103	70 - 130
1,3-Dichloropropane	20.0	20.08		ug/L		100	70 - 130
2,2-Dichloropropane	20.0	23.75		ug/L		119	60 - 143
1,1-Dichloropropene	20.0	20.69		ug/L		103	70 - 130
Ethylbenzene	20.0	21.12		ug/L		106	70 - 130
Hexachlorobutadiene	20.0	19.41		ug/L		97	70 - 138
2-Hexanone	100	89.32		ug/L		89	54 - 142
Isopropylbenzene	20.0	20.10		ug/L		101	70 - 131
Methylene Chloride	20.0	19.87		ug/L		99	70 - 130
4-Methyl-2-pentanone (MIBK)	100	86.45		ug/L		86	60 - 137
Methyl tert-butyl ether	20.0	18.73		ug/L		94	70 - 130
Naphthalene	20.0	18.10		ug/L		90	54 - 150
n-Butylbenzene	20.0	20.31		ug/L		102	68 - 137
N-Propylbenzene	20.0	21.55		ug/L		108	70 - 134
p-Isopropyltoluene	20.0	20.95		ug/L		105	66 - 130
sec-Butylbenzene	20.0	21.45		ug/L		107	70 - 135
Styrene	20.0	19.19		ug/L		96	70 - 130
tert-Butylbenzene	20.0	20.96		ug/L		105	70 - 130
1,1,1,2-Tetrachloroethane	20.0	19.69		ug/L		98	70 - 130
1,1,2,2-Tetrachloroethane	20.0	20.50		ug/L		102	69 - 131
Tetrachloroethene	20.0	20.64		ug/L		103	70 - 130
Toluene	20.0	19.96		ug/L		100	70 - 130
trans-1,2-Dichloroethene	20.0	21.58		ug/L		108	70 - 130
trans-1,3-Dichloropropene	20.0	16.62		ug/L		83	63 - 142
1,2,3-Trichlorobenzene	20.0	19.86		ug/L		99	46 - 150
1,2,4-Trichlorobenzene	20.0	19.81		ug/L		99	58 - 147
1,1,1-Trichloroethane	20.0	19.91		ug/L		100	70 - 135
1,1,2-Trichloroethane	20.0	19.70		ug/L		99	70 - 130
Trichloroethene	20.0	19.81		ug/L		99	70 - 130
Trichlorofluoromethane	20.0	19.53		ug/L		98	59 - 150
1,2,3-Trichloropropane	20.0	18.20		ug/L		91	70 - 131
1,2,4-Trimethylbenzene	20.0	21.23		ug/L		106	70 - 130
1,3,5-Trimethylbenzene	20.0	20.51		ug/L		103	70 - 130
Vinyl chloride	20.0	19.86		ug/L		99	57 - 137
Xylenes, Total	40.0	40.21		ug/L		101	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*

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

Lab Sample ID: LCS 490-339716/3
Matrix: Water
Analysis Batch: 339716

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 490-339716/4
Matrix: Water
Analysis Batch: 339716

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			100	90.95		ug/L		91	39 - 150	5	23
Benzene			20.0	21.25		ug/L		106	70 - 130	0	12
Bromobenzene			20.0	21.02		ug/L		105	70 - 130	2	16
Bromochloromethane			20.0	19.17		ug/L		96	70 - 130	3	16
Bromodichloromethane			20.0	20.56		ug/L		103	70 - 130	1	14
Bromoform			20.0	19.69		ug/L		98	70 - 137	3	14
Bromomethane			20.0	17.37		ug/L		87	53 - 150	19	19
2-Butanone (MEK)			100	93.92		ug/L		94	55 - 143	5	19
Carbon disulfide			20.0	21.21		ug/L		106	64 - 135	5	16
Carbon tetrachloride			20.0	20.37		ug/L		102	70 - 147	0	16
Chlorobenzene			20.0	20.92		ug/L		105	70 - 130	0	12
Chlorodibromomethane			20.0	19.88		ug/L		99	70 - 133	2	13
Chloroethane			20.0	19.85		ug/L		99	60 - 138	12	15
Chloroform			20.0	19.47		ug/L		97	70 - 130	1	14
Chloromethane			20.0	23.03		ug/L		115	33 - 150	8	20
2-Chlorotoluene			20.0	21.17		ug/L		106	70 - 130	1	15
4-Chlorotoluene			20.0	20.70		ug/L		104	70 - 130	0	15
cis-1,2-Dichloroethene			20.0	20.01		ug/L		100	70 - 130	1	15
cis-1,3-Dichloropropene			20.0	18.84		ug/L		94	70 - 133	5	15
1,2-Dibromo-3-Chloropropane			20.0	17.29		ug/L		86	45 - 138	6	19
1,2-Dibromoethane (EDB)			20.0	18.12		ug/L		91	70 - 130	2	13
Dibromomethane			20.0	19.78		ug/L		99	70 - 130	1	14
1,2-Dichlorobenzene			20.0	20.31		ug/L		102	70 - 130	1	12
1,3-Dichlorobenzene			20.0	20.44		ug/L		102	70 - 130	0	13
1,4-Dichlorobenzene			20.0	19.85		ug/L		99	70 - 130	2	12
Dichlorodifluoromethane			20.0	26.06		ug/L		130	48 - 150	3	16
1,1-Dichloroethane			20.0	19.75		ug/L		99	70 - 130	0	17
1,2-Dichloroethane			20.0	19.80		ug/L		99	70 - 130	0	13
1,1-Dichloroethene			20.0	20.63		ug/L		103	70 - 132	2	20
1,2-Dichloropropane			20.0	20.27		ug/L		101	70 - 130	2	15
1,3-Dichloropropane			20.0	19.59		ug/L		98	70 - 130	2	12
2,2-Dichloropropane			20.0	23.34		ug/L		117	60 - 143	2	20
1,1-Dichloropropene			20.0	20.36		ug/L		102	70 - 130	2	16
Ethylbenzene			20.0	21.03		ug/L		105	70 - 130	0	12
Hexachlorobutadiene			20.0	19.77		ug/L		99	70 - 138	2	16
2-Hexanone			100	90.03		ug/L		90	54 - 142	1	17
Isopropylbenzene			20.0	19.46		ug/L		97	70 - 131	3	13
Methylene Chloride			20.0	19.67		ug/L		98	70 - 130	1	15
4-Methyl-2-pentanone (MIBK)			100	84.65		ug/L		85	60 - 137	2	21
Methyl tert-butyl ether			20.0	19.20		ug/L		96	70 - 130	2	16

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

Lab Sample ID: LCSD 490-339716/4
Matrix: Water
Analysis Batch: 339716

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene			20.0	19.76		ug/L		99	54 - 150	9	15
n-Butylbenzene			20.0	20.03		ug/L		100	68 - 137	1	14
N-Propylbenzene			20.0	21.86		ug/L		109	70 - 134	1	14
p-Isopropyltoluene			20.0	21.16		ug/L		106	66 - 130	1	13
sec-Butylbenzene			20.0	21.32		ug/L		107	70 - 135	1	14
Styrene			20.0	18.88		ug/L		94	70 - 130	2	12
tert-Butylbenzene			20.0	21.04		ug/L		105	70 - 130	0	14
1,1,1,2-Tetrachloroethane			20.0	19.90		ug/L		99	70 - 130	1	13
1,1,2,2-Tetrachloroethane			20.0	20.83		ug/L		104	69 - 131	2	15
Tetrachloroethene			20.0	19.80		ug/L		99	70 - 130	4	17
Toluene			20.0	18.77		ug/L		94	70 - 130	6	13
trans-1,2-Dichloroethene			20.0	21.55		ug/L		108	70 - 130	0	15
trans-1,3-Dichloropropene			20.0	16.03		ug/L		80	63 - 142	4	13
1,2,3-Trichlorobenzene			20.0	20.96		ug/L		105	46 - 150	5	16
1,2,4-Trichlorobenzene			20.0	19.87		ug/L		99	58 - 147	0	15
1,1,1-Trichloroethane			20.0	19.57		ug/L		98	70 - 135	2	15
1,1,2-Trichloroethane			20.0	19.10		ug/L		95	70 - 130	3	13
Trichloroethene			20.0	19.28		ug/L		96	70 - 130	3	14
Trichlorofluoromethane			20.0	21.37		ug/L		107	59 - 150	9	22
1,2,3-Trichloropropane			20.0	18.75		ug/L		94	70 - 131	3	14
1,2,4-Trimethylbenzene			20.0	21.40		ug/L		107	70 - 130	1	13
1,3,5-Trimethylbenzene			20.0	20.60		ug/L		103	70 - 130	0	14
Vinyl chloride			20.0	21.49		ug/L		107	57 - 137	8	15
Xylenes, Total			40.0	39.87		ug/L		100	70 - 132	1	11

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Lab Sample ID: 490-103490-B-1 MS
Matrix: Water
Analysis Batch: 339716

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		100	94.59		ug/L		95	39 - 150
Benzene	ND		20.0	21.09		ug/L		105	55 - 147
Bromobenzene	ND		20.0	20.50		ug/L		102	60 - 133
Bromochloromethane	ND		20.0	19.59		ug/L		98	59 - 132
Bromodichloromethane	ND		20.0	19.86		ug/L		99	70 - 140
Bromoform	ND		20.0	20.77		ug/L		104	53 - 150
Bromomethane	ND		20.0	14.30		ug/L		71	30 - 150
2-Butanone (MEK)	ND		100	96.55		ug/L		97	50 - 143
Carbon disulfide	ND		20.0	21.75		ug/L		109	35 - 150
Carbon tetrachloride	ND		20.0	21.33		ug/L		107	56 - 150
Chlorobenzene	ND		20.0	20.62		ug/L		103	70 - 130
Chlorodibromomethane	ND		20.0	20.22		ug/L		101	66 - 140

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

Lab Sample ID: 490-103490-B-1 MS
Matrix: Water
Analysis Batch: 339716

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	ND		20.0	20.06		ug/L		100	58 - 141
Chloroform	ND		20.0	19.07		ug/L		95	66 - 138
Chloromethane	ND		20.0	22.48		ug/L		112	10 - 150
2-Chlorotoluene	ND		20.0	20.49		ug/L		102	67 - 138
4-Chlorotoluene	ND		20.0	20.02		ug/L		100	69 - 138
cis-1,2-Dichloroethene	ND		20.0	20.14		ug/L		101	68 - 131
cis-1,3-Dichloropropene	ND		20.0	18.91		ug/L		95	70 - 133
1,2-Dibromo-3-Chloropropane	ND		20.0	20.13		ug/L		101	38 - 138
1,2-Dibromoethane (EDB)	ND		20.0	19.15		ug/L		96	65 - 137
Dibromomethane	ND		20.0	19.19		ug/L		96	70 - 130
1,2-Dichlorobenzene	ND		20.0	19.07		ug/L		95	70 - 130
1,3-Dichlorobenzene	ND		20.0	19.71		ug/L		99	68 - 131
1,4-Dichlorobenzene	ND		20.0	19.22		ug/L		96	70 - 130
Dichlorodifluoromethane	ND		20.0	25.10		ug/L		126	10 - 150
1,1-Dichloroethane	ND		20.0	20.04		ug/L		100	61 - 139
1,2-Dichloroethane	ND		20.0	19.03		ug/L		95	64 - 136
1,1-Dichloroethene	ND		20.0	21.00		ug/L		105	54 - 150
1,2-Dichloropropane	ND		20.0	19.64		ug/L		98	67 - 130
1,3-Dichloropropane	ND		20.0	20.75		ug/L		104	70 - 130
2,2-Dichloropropane	ND		20.0	23.04		ug/L		115	50 - 146
1,1-Dichloropropene	ND		20.0	20.88		ug/L		104	54 - 150
Ethylbenzene	ND		20.0	22.03		ug/L		110	65 - 139
Hexachlorobutadiene	ND		20.0	16.44		ug/L		82	61 - 141
2-Hexanone	ND		100	111.3		ug/L		111	44 - 150
Isopropylbenzene	ND		20.0	20.53		ug/L		103	70 - 137
Methylene Chloride	ND		20.0	19.78		ug/L		99	64 - 130
4-Methyl-2-pentanone (MIBK)	ND		100	102.7		ug/L		103	50 - 140
Methyl tert-butyl ether	ND		20.0	20.06		ug/L		99	55 - 141
Naphthalene	ND		20.0	22.22		ug/L		111	32 - 150
n-Butylbenzene	ND		20.0	18.75		ug/L		94	61 - 141
N-Propylbenzene	ND		20.0	21.48		ug/L		107	53 - 150
p-Isopropyltoluene	ND		20.0	20.38		ug/L		102	66 - 137
sec-Butylbenzene	ND		20.0	20.72		ug/L		104	55 - 136
Styrene	ND		20.0	19.31		ug/L		97	70 - 130
tert-Butylbenzene	ND		20.0	20.21		ug/L		101	70 - 138
1,1,1,2-Tetrachloroethane	ND		20.0	19.70		ug/L		99	70 - 131
1,1,2,2-Tetrachloroethane	ND		20.0	21.90		ug/L		110	56 - 145
Tetrachloroethene	ND		20.0	20.14		ug/L		101	57 - 138
Toluene	ND		20.0	19.65		ug/L		98	64 - 136
trans-1,2-Dichloroethene	ND		20.0	22.52		ug/L		113	59 - 143
trans-1,3-Dichloropropene	ND		20.0	19.10		ug/L		95	63 - 142
1,2,3-Trichlorobenzene	ND		20.0	19.36		ug/L		97	36 - 150
1,2,4-Trichlorobenzene	ND		20.0	19.01		ug/L		95	47 - 147
1,1,1-Trichloroethane	ND		20.0	20.15		ug/L		101	68 - 144
1,1,2-Trichloroethane	ND		20.0	20.03		ug/L		100	70 - 130
Trichloroethene	ND		20.0	19.41		ug/L		97	63 - 135
Trichlorofluoromethane	ND		20.0	21.55		ug/L		108	44 - 150
1,2,3-Trichloropropane	ND		20.0	19.63		ug/L		98	65 - 131

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

Lab Sample ID: 490-103490-B-1 MS
Matrix: Water
Analysis Batch: 339716

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	ND		20.0	20.33		ug/L		102	64 - 136
1,3,5-Trimethylbenzene	ND		20.0	19.72		ug/L		99	69 - 139
Vinyl chloride	ND		20.0	22.73		ug/L		114	57 - 150
Xylenes, Total	ND		40.0	41.13		ug/L		103	69 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: 490-103490-C-1 MSD
Matrix: Water
Analysis Batch: 339716

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		100	92.94		ug/L		93	39 - 150	2	28
Benzene	ND		20.0	20.57		ug/L		103	55 - 147	3	22
Bromobenzene	ND		20.0	19.64		ug/L		98	60 - 133	4	18
Bromochloromethane	ND		20.0	17.84		ug/L		89	59 - 132	9	21
Bromodichloromethane	ND		20.0	20.01		ug/L		100	70 - 140	1	196
Bromoform	ND		20.0	19.70		ug/L		98	53 - 150	5	20
Bromomethane	ND		20.0	15.17		ug/L		76	30 - 150	6	44
2-Butanone (MEK)	ND		100	91.46		ug/L		91	50 - 143	5	28
Carbon disulfide	ND		20.0	21.12		ug/L		106	35 - 150	3	34
Carbon tetrachloride	ND		20.0	20.81		ug/L		104	56 - 150	2	18
Chlorobenzene	ND		20.0	19.99		ug/L		100	70 - 130	3	15
Chlorodibromomethane	ND		20.0	19.67		ug/L		98	66 - 140	3	19
Chloroethane	ND		20.0	20.01		ug/L		100	58 - 141	0	31
Chloroform	ND		20.0	18.76		ug/L		94	66 - 138	2	21
Chloromethane	ND		20.0	22.78		ug/L		114	10 - 150	1	43
2-Chlorotoluene	ND		20.0	19.66		ug/L		98	67 - 138	4	17
4-Chlorotoluene	ND		20.0	19.09		ug/L		95	69 - 138	5	15
cis-1,2-Dichloroethene	ND		20.0	19.67		ug/L		98	68 - 131	2	21
cis-1,3-Dichloropropene	ND		20.0	17.99		ug/L		90	70 - 133	5	19
1,2-Dibromo-3-Chloropropane	ND		20.0	17.91		ug/L		90	38 - 138	12	26
1,2-Dibromoethane (EDB)	ND		20.0	18.13		ug/L		91	65 - 137	5	21
Dibromomethane	ND		20.0	18.50		ug/L		92	70 - 130	4	19
1,2-Dichlorobenzene	ND		20.0	18.77		ug/L		94	70 - 130	2	15
1,3-Dichlorobenzene	ND		20.0	19.50		ug/L		97	68 - 131	1	14
1,4-Dichlorobenzene	ND		20.0	19.15		ug/L		96	70 - 130	0	14
Dichlorodifluoromethane	ND		20.0	24.62		ug/L		123	10 - 150	2	50
1,1-Dichloroethane	ND		20.0	19.34		ug/L		97	61 - 139	4	23
1,2-Dichloroethane	ND		20.0	19.13		ug/L		96	64 - 136	1	22
1,1-Dichloroethene	ND		20.0	21.34		ug/L		107	54 - 150	2	24
1,2-Dichloropropane	ND		20.0	19.30		ug/L		96	67 - 130	2	19
1,3-Dichloropropane	ND		20.0	18.98		ug/L		95	70 - 130	9	17
2,2-Dichloropropane	ND		20.0	21.90		ug/L		110	50 - 146	5	20

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

Lab Sample ID: 490-103490-C-1 MSD
Matrix: Water
Analysis Batch: 339716

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloropropene	ND		20.0	20.15		ug/L		101	54 - 150	4	24
Ethylbenzene	ND		20.0	20.64		ug/L		103	65 - 139	7	18
Hexachlorobutadiene	ND		20.0	17.58		ug/L		88	61 - 141	7	26
2-Hexanone	ND		100	99.96		ug/L		100	44 - 150	11	21
Isopropylbenzene	ND		20.0	19.58		ug/L		98	70 - 137	5	17
Methylene Chloride	ND		20.0	19.30		ug/L		97	64 - 130	2	22
4-Methyl-2-pentanone (MIBK)	ND		100	92.50		ug/L		93	50 - 140	10	24
Methyl tert-butyl ether	ND		20.0	18.75		ug/L		92	55 - 141	7	24
Naphthalene	ND		20.0	20.29		ug/L		101	32 - 150	9	40
n-Butylbenzene	ND		20.0	18.94		ug/L		95	61 - 141	1	17
N-Propylbenzene	ND		20.0	20.49		ug/L		102	53 - 150	5	18
p-Isopropyltoluene	ND		20.0	20.19		ug/L		101	66 - 137	1	16
sec-Butylbenzene	ND		20.0	20.81		ug/L		104	55 - 136	0	50
Styrene	ND		20.0	18.45		ug/L		92	70 - 130	5	16
tert-Butylbenzene	ND		20.0	20.24		ug/L		101	70 - 138	0	17
1,1,1,2-Tetrachloroethane	ND		20.0	19.25		ug/L		96	70 - 131	2	16
1,1,2,2-Tetrachloroethane	ND		20.0	20.33		ug/L		102	56 - 145	7	19
Tetrachloroethene	ND		20.0	19.92		ug/L		100	57 - 138	1	17
Toluene	ND		20.0	18.39		ug/L		92	64 - 136	7	18
trans-1,2-Dichloroethene	ND		20.0	21.24		ug/L		106	59 - 143	6	25
trans-1,3-Dichloropropene	ND		20.0	17.61		ug/L		88	63 - 142	8	18
1,2,3-Trichlorobenzene	ND		20.0	20.16		ug/L		101	36 - 150	4	43
1,2,4-Trichlorobenzene	ND		20.0	19.34		ug/L		97	47 - 147	2	24
1,1,1-Trichloroethane	ND		20.0	20.01		ug/L		100	68 - 144	1	17
1,1,2-Trichloroethane	ND		20.0	21.29		ug/L		106	70 - 130	6	18
Trichloroethene	ND		20.0	18.93		ug/L		95	63 - 135	2	17
Trichlorofluoromethane	ND		20.0	21.55		ug/L		108	44 - 150	0	32
1,2,3-Trichloropropane	ND		20.0	17.58		ug/L		88	65 - 131	11	19
1,2,4-Trimethylbenzene	ND		20.0	20.16		ug/L		101	64 - 136	1	18
1,3,5-Trimethylbenzene	ND		20.0	19.43		ug/L		97	69 - 139	1	17
Vinyl chloride	ND		20.0	21.56		ug/L		108	57 - 150	5	37
Xylenes, Total	ND		40.0	39.28		ug/L		98	69 - 132	5	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Lab Sample ID: MB 490-339934/7
Matrix: Water
Analysis Batch: 339934

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			05/14/16 01:38	1
Benzene	ND		1.00		ug/L			05/14/16 01:38	1
Bromobenzene	ND		1.00		ug/L			05/14/16 01:38	1
Bromochloromethane	ND		1.00		ug/L			05/14/16 01:38	1

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

Lab Sample ID: MB 490-339934/7
Matrix: Water
Analysis Batch: 339934

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.00		ug/L			05/14/16 01:38	1
Bromoform	ND		1.00		ug/L			05/14/16 01:38	1
Bromomethane	ND		1.00		ug/L			05/14/16 01:38	1
2-Butanone (MEK)	ND		50.0		ug/L			05/14/16 01:38	1
Carbon disulfide	ND		1.00		ug/L			05/14/16 01:38	1
Carbon tetrachloride	ND		1.00		ug/L			05/14/16 01:38	1
Chlorobenzene	ND		1.00		ug/L			05/14/16 01:38	1
Chlorodibromomethane	ND		1.00		ug/L			05/14/16 01:38	1
Chloroethane	ND		1.00		ug/L			05/14/16 01:38	1
Chloroform	ND		1.00		ug/L			05/14/16 01:38	1
Chloromethane	ND		1.00		ug/L			05/14/16 01:38	1
2-Chlorotoluene	ND		1.00		ug/L			05/14/16 01:38	1
4-Chlorotoluene	ND		1.00		ug/L			05/14/16 01:38	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			05/14/16 01:38	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			05/14/16 01:38	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			05/14/16 01:38	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			05/14/16 01:38	1
Dibromomethane	ND		1.00		ug/L			05/14/16 01:38	1
1,2-Dichlorobenzene	ND		1.00		ug/L			05/14/16 01:38	1
1,3-Dichlorobenzene	ND		1.00		ug/L			05/14/16 01:38	1
1,4-Dichlorobenzene	ND		1.00		ug/L			05/14/16 01:38	1
Dichlorodifluoromethane	ND		1.00		ug/L			05/14/16 01:38	1
1,1-Dichloroethane	ND		1.00		ug/L			05/14/16 01:38	1
1,2-Dichloroethane	ND		1.00		ug/L			05/14/16 01:38	1
1,1-Dichloroethene	ND		1.00		ug/L			05/14/16 01:38	1
1,2-Dichloropropane	ND		1.00		ug/L			05/14/16 01:38	1
1,3-Dichloropropane	ND		1.00		ug/L			05/14/16 01:38	1
2,2-Dichloropropane	ND		1.00		ug/L			05/14/16 01:38	1
1,1-Dichloropropene	ND		1.00		ug/L			05/14/16 01:38	1
Ethylbenzene	ND		1.00		ug/L			05/14/16 01:38	1
Hexachlorobutadiene	ND		2.00		ug/L			05/14/16 01:38	1
2-Hexanone	ND		10.0		ug/L			05/14/16 01:38	1
Isopropylbenzene	ND		1.00		ug/L			05/14/16 01:38	1
Methylene Chloride	ND		5.00		ug/L			05/14/16 01:38	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			05/14/16 01:38	1
Methyl tert-butyl ether	ND		1.00		ug/L			05/14/16 01:38	1
Naphthalene	ND		5.00		ug/L			05/14/16 01:38	1
n-Butylbenzene	ND		1.00		ug/L			05/14/16 01:38	1
N-Propylbenzene	ND		1.00		ug/L			05/14/16 01:38	1
p-Isopropyltoluene	ND		1.00		ug/L			05/14/16 01:38	1
sec-Butylbenzene	ND		1.00		ug/L			05/14/16 01:38	1
Styrene	ND		1.00		ug/L			05/14/16 01:38	1
tert-Butylbenzene	ND		1.00		ug/L			05/14/16 01:38	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			05/14/16 01:38	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			05/14/16 01:38	1
Tetrachloroethene	ND		1.00		ug/L			05/14/16 01:38	1
Toluene	ND		1.00		ug/L			05/14/16 01:38	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			05/14/16 01:38	1

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

Lab Sample ID: MB 490-339934/7
Matrix: Water
Analysis Batch: 339934

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.00		ug/L			05/14/16 01:38	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			05/14/16 01:38	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			05/14/16 01:38	1
1,1,1-Trichloroethane	ND		1.00		ug/L			05/14/16 01:38	1
1,1,2-Trichloroethane	ND		1.00		ug/L			05/14/16 01:38	1
Trichloroethene	ND		1.00		ug/L			05/14/16 01:38	1
Trichlorofluoromethane	ND		1.00		ug/L			05/14/16 01:38	1
1,2,3-Trichloropropane	ND		1.00		ug/L			05/14/16 01:38	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			05/14/16 01:38	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			05/14/16 01:38	1
Vinyl chloride	ND		1.00		ug/L			05/14/16 01:38	1
Xylenes, Total	ND		3.00		ug/L			05/14/16 01:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*05/14/16 01:38*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*05/14/16 01:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*05/14/16 01:38*	*1*
Toluene-d8 (Surr)	*83*		*70 - 130*		*05/14/16 01:38*	*1*

Lab Sample ID: LCS 490-339934/3
Matrix: Water
Analysis Batch: 339934

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	99.87		ug/L		100	39 - 150
Benzene	20.0	22.22		ug/L		111	70 - 130
Bromobenzene	20.0	21.73		ug/L		109	70 - 130
Bromochloromethane	20.0	20.68		ug/L		103	70 - 130
Bromodichloromethane	20.0	21.12		ug/L		106	70 - 130
Bromoform	20.0	22.03		ug/L		110	70 - 137
Bromomethane	20.0	18.30		ug/L		92	53 - 150
2-Butanone (MEK)	100	99.26		ug/L		99	55 - 143
Carbon disulfide	20.0	22.96		ug/L		115	64 - 135
Carbon tetrachloride	20.0	21.96		ug/L		110	70 - 147
Chlorobenzene	20.0	22.26		ug/L		111	70 - 130
Chlorodibromomethane	20.0	21.39		ug/L		107	70 - 133
Chloroethane	20.0	20.54		ug/L		103	60 - 138
Chloroform	20.0	20.40		ug/L		102	70 - 130
Chloromethane	20.0	25.92		ug/L		130	33 - 150
2-Chlorotoluene	20.0	21.56		ug/L		108	70 - 130
4-Chlorotoluene	20.0	21.41		ug/L		107	70 - 130
cis-1,2-Dichloroethene	20.0	21.48		ug/L		107	70 - 130
cis-1,3-Dichloropropene	20.0	19.80		ug/L		99	70 - 133
1,2-Dibromo-3-Chloropropane	20.0	18.74		ug/L		94	45 - 138
1,2-Dibromoethane (EDB)	20.0	20.35		ug/L		102	70 - 130
Dibromomethane	20.0	20.62		ug/L		103	70 - 130
1,2-Dichlorobenzene	20.0	20.80		ug/L		104	70 - 130
1,3-Dichlorobenzene	20.0	21.19		ug/L		106	70 - 130

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

Lab Sample ID: LCS 490-339934/3
Matrix: Water
Analysis Batch: 339934

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	20.0	20.59		ug/L		103	70 - 130
Dichlorodifluoromethane	20.0	28.52		ug/L		143	48 - 150
1,1-Dichloroethane	20.0	21.18		ug/L		106	70 - 130
1,2-Dichloroethane	20.0	20.68		ug/L		103	70 - 130
1,1-Dichloroethene	20.0	21.93		ug/L		110	70 - 132
1,2-Dichloropropane	20.0	21.22		ug/L		106	70 - 130
1,3-Dichloropropane	20.0	21.90		ug/L		110	70 - 130
2,2-Dichloropropane	20.0	22.23		ug/L		111	60 - 143
1,1-Dichloropropene	20.0	21.53		ug/L		108	70 - 130
Ethylbenzene	20.0	22.66		ug/L		113	70 - 130
Hexachlorobutadiene	20.0	19.57		ug/L		98	70 - 138
2-Hexanone	100	105.5		ug/L		105	54 - 142
Isopropylbenzene	20.0	21.45		ug/L		107	70 - 131
Methylene Chloride	20.0	20.58		ug/L		103	70 - 130
4-Methyl-2-pentanone (MIBK)	100	95.30		ug/L		95	60 - 137
Methyl tert-butyl ether	20.0	20.45		ug/L		102	70 - 130
Naphthalene	20.0	21.67		ug/L		108	54 - 150
n-Butylbenzene	20.0	20.33		ug/L		102	68 - 137
N-Propylbenzene	20.0	22.16		ug/L		111	70 - 134
p-Isopropyltoluene	20.0	21.56		ug/L		108	66 - 130
sec-Butylbenzene	20.0	22.26		ug/L		111	70 - 135
Styrene	20.0	20.95		ug/L		105	70 - 130
tert-Butylbenzene	20.0	21.58		ug/L		108	70 - 130
1,1,1,2-Tetrachloroethane	20.0	20.50		ug/L		102	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.78		ug/L		109	69 - 131
Tetrachloroethene	20.0	20.87		ug/L		104	70 - 130
Toluene	20.0	18.29		ug/L		91	70 - 130
trans-1,2-Dichloroethene	20.0	22.87		ug/L		114	70 - 130
trans-1,3-Dichloropropene	20.0	16.99		ug/L		85	63 - 142
1,2,3-Trichlorobenzene	20.0	21.56		ug/L		108	46 - 150
1,2,4-Trichlorobenzene	20.0	20.81		ug/L		104	58 - 147
1,1,1-Trichloroethane	20.0	21.05		ug/L		105	70 - 135
1,1,2-Trichloroethane	20.0	20.82		ug/L		104	70 - 130
Trichloroethene	20.0	20.84		ug/L		104	70 - 130
Trichlorofluoromethane	20.0	22.94		ug/L		115	59 - 150
1,2,3-Trichloropropane	20.0	19.04		ug/L		95	70 - 131
1,2,4-Trimethylbenzene	20.0	22.08		ug/L		110	70 - 130
1,3,5-Trimethylbenzene	20.0	20.91		ug/L		105	70 - 130
Vinyl chloride	20.0	23.85		ug/L		119	57 - 137
Xylenes, Total	40.0	43.69		ug/L		109	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*85*		*70 - 130*

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

Lab Sample ID: LCSD 490-339934/4
Matrix: Water
Analysis Batch: 339934

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	102.6		ug/L		103	39 - 150	3	23
Benzene	20.0	22.58		ug/L		113	70 - 130	2	12
Bromobenzene	20.0	22.47		ug/L		112	70 - 130	3	16
Bromochloromethane	20.0	19.57		ug/L		98	70 - 130	5	16
Bromodichloromethane	20.0	21.75		ug/L		109	70 - 130	3	14
Bromoform	20.0	21.34		ug/L		107	70 - 137	3	14
Bromomethane	20.0	18.46		ug/L		92	53 - 150	1	19
2-Butanone (MEK)	100	100.8		ug/L		101	55 - 143	2	19
Carbon disulfide	20.0	22.85		ug/L		114	64 - 135	0	16
Carbon tetrachloride	20.0	21.11		ug/L		106	70 - 147	4	16
Chlorobenzene	20.0	22.14		ug/L		111	70 - 130	1	12
Chlorodibromomethane	20.0	21.60		ug/L		108	70 - 133	1	13
Chloroethane	20.0	20.30		ug/L		101	60 - 138	1	15
Chloroform	20.0	20.47		ug/L		102	70 - 130	0	14
Chloromethane	20.0	25.57		ug/L		128	33 - 150	1	20
2-Chlorotoluene	20.0	22.14		ug/L		111	70 - 130	3	15
4-Chlorotoluene	20.0	22.48		ug/L		112	70 - 130	5	15
cis-1,2-Dichloroethene	20.0	21.44		ug/L		107	70 - 130	0	15
cis-1,3-Dichloropropene	20.0	17.07		ug/L		85	70 - 133	15	15
1,2-Dibromo-3-Chloropropane	20.0	19.93		ug/L		100	45 - 138	6	19
1,2-Dibromoethane (EDB)	20.0	20.06		ug/L		100	70 - 130	1	13
Dibromomethane	20.0	20.26		ug/L		101	70 - 130	2	14
1,2-Dichlorobenzene	20.0	21.48		ug/L		107	70 - 130	3	12
1,3-Dichlorobenzene	20.0	22.01		ug/L		110	70 - 130	4	13
1,4-Dichlorobenzene	20.0	21.24		ug/L		106	70 - 130	3	12
Dichlorodifluoromethane	20.0	28.11		ug/L		141	48 - 150	1	16
1,1-Dichloroethane	20.0	21.48		ug/L		107	70 - 130	1	17
1,2-Dichloroethane	20.0	20.96		ug/L		105	70 - 130	1	13
1,1-Dichloroethene	20.0	22.14		ug/L		111	70 - 132	1	20
1,2-Dichloropropane	20.0	21.73		ug/L		109	70 - 130	2	15
1,3-Dichloropropane	20.0	21.05		ug/L		105	70 - 130	4	12
2,2-Dichloropropane	20.0	21.83		ug/L		109	60 - 143	2	20
1,1-Dichloropropene	20.0	21.66		ug/L		108	70 - 130	1	16
Ethylbenzene	20.0	22.45		ug/L		112	70 - 130	1	12
Hexachlorobutadiene	20.0	20.03		ug/L		100	70 - 138	2	16
2-Hexanone	100	99.47		ug/L		99	54 - 142	6	17
Isopropylbenzene	20.0	20.79		ug/L		104	70 - 131	3	13
Methylene Chloride	20.0	20.70		ug/L		104	70 - 130	1	15
4-Methyl-2-pentanone (MIBK)	100	77.55		ug/L		78	60 - 137	21	21
Methyl tert-butyl ether	20.0	20.52		ug/L		103	70 - 130	0	16
Naphthalene	20.0	21.43		ug/L		107	54 - 150	1	15
n-Butylbenzene	20.0	20.87		ug/L		104	68 - 137	3	14
N-Propylbenzene	20.0	23.34		ug/L		117	70 - 134	5	14
p-Isopropyltoluene	20.0	22.33		ug/L		112	66 - 130	3	13
sec-Butylbenzene	20.0	22.95		ug/L		115	70 - 135	3	14
Styrene	20.0	20.59		ug/L		103	70 - 130	2	12
tert-Butylbenzene	20.0	22.72		ug/L		114	70 - 130	5	14
1,1,1,2-Tetrachloroethane	20.0	20.79		ug/L		104	70 - 130	1	13

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

Lab Sample ID: LCSD 490-339934/4
Matrix: Water
Analysis Batch: 339934

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane			20.0	23.23		ug/L		116	69 - 131	6	15
Tetrachloroethene			20.0	20.57		ug/L		103	70 - 130	1	17
Toluene			20.0	17.59		ug/L		88	70 - 130	4	13
trans-1,2-Dichloroethene			20.0	23.42		ug/L		117	70 - 130	2	15
trans-1,3-Dichloropropene			20.0	16.84		ug/L		84	63 - 142	1	13
1,2,3-Trichlorobenzene			20.0	22.33		ug/L		112	46 - 150	3	16
1,2,4-Trichlorobenzene			20.0	21.41		ug/L		107	58 - 147	3	15
1,1,1-Trichloroethane			20.0	21.06		ug/L		105	70 - 135	0	15
1,1,2-Trichloroethane			20.0	20.14		ug/L		101	70 - 130	3	13
Trichloroethene			20.0	20.77		ug/L		104	70 - 130	0	14
Trichlorofluoromethane			20.0	22.17		ug/L		111	59 - 150	3	22
1,2,3-Trichloropropane			20.0	20.36		ug/L		102	70 - 131	7	14
1,2,4-Trimethylbenzene			20.0	22.85		ug/L		114	70 - 130	3	13
1,3,5-Trimethylbenzene			20.0	22.33		ug/L		112	70 - 130	7	14
Vinyl chloride			20.0	23.09		ug/L		115	57 - 137	3	15
Xylenes, Total			40.0	43.23		ug/L		108	70 - 132	1	11

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*81*		*70 - 130*

Lab Sample ID: 490-103608-4 MS
Matrix: Water
Analysis Batch: 339934

Client Sample ID: GW-060866-051016-LB-MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		100	79.26		ug/L		79	39 - 150
Benzene	ND		20.0	18.75		ug/L		94	55 - 147
Bromobenzene	ND		20.0	17.99		ug/L		90	60 - 133
Bromochloromethane	ND		20.0	16.80		ug/L		84	59 - 132
Bromodichloromethane	ND		20.0	18.19		ug/L		91	70 - 140
Bromoform	ND		20.0	16.99		ug/L		85	53 - 150
Bromomethane	ND		20.0	10.66		ug/L		53	30 - 150
2-Butanone (MEK)	ND		100	74.64		ug/L		75	50 - 143
Carbon disulfide	ND		20.0	15.87		ug/L		79	35 - 150
Carbon tetrachloride	ND		20.0	18.92		ug/L		95	56 - 150
Chlorobenzene	ND		20.0	18.36		ug/L		92	70 - 130
Chlorodibromomethane	ND		20.0	18.26		ug/L		91	66 - 140
Chloroethane	ND		20.0	16.82		ug/L		84	58 - 141
Chloroform	3.03		20.0	20.18		ug/L		86	66 - 138
Chloromethane	ND		20.0	23.01		ug/L		115	10 - 150
2-Chlorotoluene	ND		20.0	18.60		ug/L		93	67 - 138
4-Chlorotoluene	ND		20.0	18.00		ug/L		90	69 - 138
cis-1,2-Dichloroethene	ND		20.0	17.74		ug/L		89	68 - 131
cis-1,3-Dichloropropene	ND		20.0	15.81		ug/L		79	70 - 133
1,2-Dibromo-3-Chloropropane	ND		20.0	13.71		ug/L		69	38 - 138

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

Lab Sample ID: 490-103608-4 MS
Matrix: Water
Analysis Batch: 339934

Client Sample ID: GW-060866-051016-LB-MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	ND		20.0	16.86		ug/L		84	65 - 137
Dibromomethane	ND		20.0	16.05		ug/L		80	70 - 130
1,2-Dichlorobenzene	ND		20.0	16.94		ug/L		85	70 - 130
1,3-Dichlorobenzene	ND		20.0	17.66		ug/L		88	68 - 131
1,4-Dichlorobenzene	ND		20.0	17.12		ug/L		86	70 - 130
Dichlorodifluoromethane	ND		20.0	20.11		ug/L		101	10 - 150
1,1-Dichloroethane	ND		20.0	18.13		ug/L		91	61 - 139
1,2-Dichloroethane	ND		20.0	15.70		ug/L		78	64 - 136
1,1-Dichloroethene	ND		20.0	18.17		ug/L		91	54 - 150
1,2-Dichloropropane	ND		20.0	17.83		ug/L		89	67 - 130
1,3-Dichloropropane	ND		20.0	19.69		ug/L		98	70 - 130
2,2-Dichloropropane	ND		20.0	22.11		ug/L		111	50 - 146
1,1-Dichloropropene	ND		20.0	18.55		ug/L		93	54 - 150
Ethylbenzene	ND		20.0	19.06		ug/L		95	65 - 139
Hexachlorobutadiene	ND		20.0	15.70		ug/L		79	61 - 141
2-Hexanone	ND		100	88.59		ug/L		89	44 - 150
Isopropylbenzene	ND		20.0	18.07		ug/L		90	70 - 137
Methylene Chloride	ND		20.0	17.39		ug/L		87	64 - 130
4-Methyl-2-pentanone (MIBK)	ND		100	70.24		ug/L		70	50 - 140
Methyl tert-butyl ether	ND		20.0	15.89		ug/L		79	55 - 141
Naphthalene	ND		20.0	13.67		ug/L		68	32 - 150
n-Butylbenzene	ND		20.0	17.65		ug/L		88	61 - 141
N-Propylbenzene	ND		20.0	19.44		ug/L		97	53 - 150
p-Isopropyltoluene	ND		20.0	18.25		ug/L		91	66 - 137
sec-Butylbenzene	ND		20.0	19.20		ug/L		96	55 - 136
Styrene	ND		20.0	16.98		ug/L		85	70 - 130
tert-Butylbenzene	ND		20.0	18.94		ug/L		95	70 - 138
1,1,1,2-Tetrachloroethane	ND		20.0	17.38		ug/L		87	70 - 131
1,1,2,2-Tetrachloroethane	ND		20.0	17.54		ug/L		88	56 - 145
Tetrachloroethene	ND		20.0	19.19		ug/L		96	57 - 138
Toluene	ND		20.0	17.11		ug/L		84	64 - 136
trans-1,2-Dichloroethene	ND		20.0	18.79		ug/L		94	59 - 143
trans-1,3-Dichloropropene	ND		20.0	15.54		ug/L		78	63 - 142
1,2,3-Trichlorobenzene	ND		20.0	15.16		ug/L		76	36 - 150
1,2,4-Trichlorobenzene	ND		20.0	15.48		ug/L		77	47 - 147
1,1,1-Trichloroethane	ND		20.0	18.70		ug/L		94	68 - 144
1,1,2-Trichloroethane	ND		20.0	17.94		ug/L		90	70 - 130
Trichloroethene	ND		20.0	17.70		ug/L		88	63 - 135
Trichlorofluoromethane	ND		20.0	19.44		ug/L		97	44 - 150
1,2,3-Trichloropropane	ND		20.0	16.00		ug/L		80	65 - 131
1,2,4-Trimethylbenzene	ND		20.0	19.10		ug/L		96	64 - 136
1,3,5-Trimethylbenzene	ND		20.0	17.91		ug/L		90	69 - 139
Vinyl chloride	ND		20.0	17.96		ug/L		90	57 - 150
Xylenes, Total	ND		40.0	36.51		ug/L		91	69 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*

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

Lab Sample ID: 490-103608-4 MS
Matrix: Water
Analysis Batch: 339934

Client Sample ID: GW-060866-051016-LB-MW-4
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Lab Sample ID: 490-103608-4 MSD
Matrix: Water
Analysis Batch: 339934

Client Sample ID: GW-060866-051016-LB-MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		100	84.88		ug/L		85	39 - 150	7	28
Benzene	ND		20.0	20.26		ug/L		101	55 - 147	8	22
Bromobenzene	ND		20.0	20.85		ug/L		104	60 - 133	15	18
Bromochloromethane	ND		20.0	17.70		ug/L		88	59 - 132	5	21
Bromodichloromethane	ND		20.0	20.13		ug/L		101	70 - 140	10	196
Bromoform	ND		20.0	19.28		ug/L		96	53 - 150	13	20
Bromomethane	ND		20.0	11.26		ug/L		56	30 - 150	6	44
2-Butanone (MEK)	ND		100	88.13		ug/L		88	50 - 143	17	28
Carbon disulfide	ND		20.0	16.99		ug/L		85	35 - 150	7	34
Carbon tetrachloride	ND		20.0	20.36		ug/L		102	56 - 150	7	18
Chlorobenzene	ND		20.0	20.45		ug/L		102	70 - 130	11	15
Chlorodibromomethane	ND		20.0	19.54		ug/L		98	66 - 140	7	19
Chloroethane	ND		20.0	18.31		ug/L		92	58 - 141	8	31
Chloroform	3.03		20.0	21.61		ug/L		93	66 - 138	7	21
Chloromethane	ND		20.0	23.23		ug/L		116	10 - 150	1	43
2-Chlorotoluene	ND		20.0	21.21		ug/L		106	67 - 138	13	17
4-Chlorotoluene	ND		20.0	20.52		ug/L		103	69 - 138	13	15
cis-1,2-Dichloroethene	ND		20.0	19.58		ug/L		98	68 - 131	10	21
cis-1,3-Dichloropropene	ND		20.0	15.86		ug/L		79	70 - 133	0	19
1,2-Dibromo-3-Chloropropane	ND		20.0	16.96		ug/L		85	38 - 138	21	26
1,2-Dibromoethane (EDB)	ND		20.0	17.67		ug/L		88	65 - 137	5	21
Dibromomethane	ND		20.0	18.26		ug/L		91	70 - 130	13	19
1,2-Dichlorobenzene	ND		20.0	19.53		ug/L		98	70 - 130	14	15
1,3-Dichlorobenzene	ND		20.0	19.89		ug/L		99	68 - 131	12	14
1,4-Dichlorobenzene	ND		20.0	19.34		ug/L		97	70 - 130	12	14
Dichlorodifluoromethane	ND		20.0	22.18		ug/L		111	10 - 150	10	50
1,1-Dichloroethane	ND		20.0	19.76		ug/L		99	61 - 139	9	23
1,2-Dichloroethane	ND		20.0	18.28		ug/L		91	64 - 136	15	22
1,1-Dichloroethene	ND		20.0	19.31		ug/L		97	54 - 150	6	24
1,2-Dichloropropane	ND		20.0	19.83		ug/L		99	67 - 130	11	19
1,3-Dichloropropane	ND		20.0	19.45		ug/L		97	70 - 130	1	17
2,2-Dichloropropane	ND		20.0	24.00		ug/L		120	50 - 146	8	20
1,1-Dichloropropene	ND		20.0	19.60		ug/L		98	54 - 150	6	24
Ethylbenzene	ND		20.0	20.93		ug/L		105	65 - 139	9	18
Hexachlorobutadiene	ND		20.0	19.05		ug/L		95	61 - 141	19	26
2-Hexanone	ND		100	88.34		ug/L		88	44 - 150	0	21
Isopropylbenzene	ND		20.0	19.73		ug/L		99	70 - 137	9	17
Methylene Chloride	ND		20.0	18.68		ug/L		93	64 - 130	7	22
4-Methyl-2-pentanone (MIBK)	ND		100	68.17		ug/L		68	50 - 140	3	24
Methyl tert-butyl ether	ND		20.0	17.98		ug/L		90	55 - 141	12	24

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

Lab Sample ID: 490-103608-4 MSD
Matrix: Water
Analysis Batch: 339934

Client Sample ID: GW-060866-051016-LB-MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	ND		20.0	17.58		ug/L		88	32 - 150	25	40
n-Butylbenzene	ND		20.0	19.63		ug/L		98	61 - 141	11	17
N-Propylbenzene	ND		20.0	21.97		ug/L		110	53 - 150	12	18
p-Isopropyltoluene	ND		20.0	20.95		ug/L		105	66 - 137	14	16
sec-Butylbenzene	ND		20.0	21.70		ug/L		109	55 - 136	12	50
Styrene	ND		20.0	18.85		ug/L		94	70 - 130	10	16
tert-Butylbenzene	ND		20.0	21.32		ug/L		107	70 - 138	12	17
1,1,1,2-Tetrachloroethane	ND		20.0	19.58		ug/L		98	70 - 131	12	16
1,1,2,2-Tetrachloroethane	ND		20.0	20.29		ug/L		101	56 - 145	15	19
Tetrachloroethene	ND		20.0	19.39		ug/L		97	57 - 138	1	17
Toluene	ND		20.0	16.52		ug/L		81	64 - 136	4	18
trans-1,2-Dichloroethene	ND		20.0	20.33		ug/L		102	59 - 143	8	25
trans-1,3-Dichloropropene	ND		20.0	15.48		ug/L		77	63 - 142	0	18
1,2,3-Trichlorobenzene	ND		20.0	18.43		ug/L		92	36 - 150	19	43
1,2,4-Trichlorobenzene	ND		20.0	18.43		ug/L		92	47 - 147	17	24
1,1,1-Trichloroethane	ND		20.0	20.10		ug/L		101	68 - 144	7	17
1,1,2-Trichloroethane	ND		20.0	18.68		ug/L		93	70 - 130	4	18
Trichloroethene	ND		20.0	18.43		ug/L		92	63 - 135	4	17
Trichlorofluoromethane	ND		20.0	20.65		ug/L		103	44 - 150	6	32
1,2,3-Trichloropropane	ND		20.0	18.55		ug/L		93	65 - 131	15	19
1,2,4-Trimethylbenzene	ND		20.0	21.02		ug/L		105	64 - 136	10	18
1,3,5-Trimethylbenzene	ND		20.0	20.42		ug/L		102	69 - 139	13	17
Vinyl chloride	ND		20.0	19.06		ug/L		95	57 - 150	6	37
Xylenes, Total	ND		40.0	39.77		ug/L		99	69 - 132	9	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*80*		*70 - 130*

Lab Sample ID: MB 490-340079/7
Matrix: Water
Analysis Batch: 340079

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			05/14/16 16:12	1
Benzene	ND		1.00		ug/L			05/14/16 16:12	1
Bromobenzene	ND		1.00		ug/L			05/14/16 16:12	1
Bromochloromethane	ND		1.00		ug/L			05/14/16 16:12	1
Bromodichloromethane	ND		1.00		ug/L			05/14/16 16:12	1
Bromoform	ND		1.00		ug/L			05/14/16 16:12	1
Bromomethane	ND		1.00		ug/L			05/14/16 16:12	1
2-Butanone (MEK)	ND		50.0		ug/L			05/14/16 16:12	1
Carbon disulfide	ND		1.00		ug/L			05/14/16 16:12	1
Carbon tetrachloride	ND		1.00		ug/L			05/14/16 16:12	1
Chlorobenzene	ND		1.00		ug/L			05/14/16 16:12	1
Chlorodibromomethane	ND		1.00		ug/L			05/14/16 16:12	1

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

Lab Sample ID: MB 490-340079/7
Matrix: Water
Analysis Batch: 340079

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.00		ug/L			05/14/16 16:12	1
Chloroform	ND		1.00		ug/L			05/14/16 16:12	1
Chloromethane	ND		1.00		ug/L			05/14/16 16:12	1
2-Chlorotoluene	ND		1.00		ug/L			05/14/16 16:12	1
4-Chlorotoluene	ND		1.00		ug/L			05/14/16 16:12	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			05/14/16 16:12	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			05/14/16 16:12	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			05/14/16 16:12	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			05/14/16 16:12	1
Dibromomethane	ND		1.00		ug/L			05/14/16 16:12	1
1,2-Dichlorobenzene	ND		1.00		ug/L			05/14/16 16:12	1
1,3-Dichlorobenzene	ND		1.00		ug/L			05/14/16 16:12	1
1,4-Dichlorobenzene	ND		1.00		ug/L			05/14/16 16:12	1
Dichlorodifluoromethane	ND		1.00		ug/L			05/14/16 16:12	1
1,1-Dichloroethane	ND		1.00		ug/L			05/14/16 16:12	1
1,2-Dichloroethane	ND		1.00		ug/L			05/14/16 16:12	1
1,1-Dichloroethene	ND		1.00		ug/L			05/14/16 16:12	1
1,2-Dichloropropane	ND		1.00		ug/L			05/14/16 16:12	1
1,3-Dichloropropane	ND		1.00		ug/L			05/14/16 16:12	1
2,2-Dichloropropane	ND		1.00		ug/L			05/14/16 16:12	1
1,1-Dichloropropene	ND		1.00		ug/L			05/14/16 16:12	1
Ethylbenzene	ND		1.00		ug/L			05/14/16 16:12	1
Hexachlorobutadiene	ND		2.00		ug/L			05/14/16 16:12	1
2-Hexanone	ND		10.0		ug/L			05/14/16 16:12	1
Isopropylbenzene	ND		1.00		ug/L			05/14/16 16:12	1
Methylene Chloride	ND		5.00		ug/L			05/14/16 16:12	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			05/14/16 16:12	1
Methyl tert-butyl ether	ND		1.00		ug/L			05/14/16 16:12	1
Naphthalene	ND		5.00		ug/L			05/14/16 16:12	1
n-Butylbenzene	ND		1.00		ug/L			05/14/16 16:12	1
N-Propylbenzene	ND		1.00		ug/L			05/14/16 16:12	1
p-Isopropyltoluene	ND		1.00		ug/L			05/14/16 16:12	1
sec-Butylbenzene	ND		1.00		ug/L			05/14/16 16:12	1
Styrene	ND		1.00		ug/L			05/14/16 16:12	1
tert-Butylbenzene	ND		1.00		ug/L			05/14/16 16:12	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			05/14/16 16:12	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			05/14/16 16:12	1
Tetrachloroethene	ND		1.00		ug/L			05/14/16 16:12	1
Toluene	ND		1.00		ug/L			05/14/16 16:12	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			05/14/16 16:12	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			05/14/16 16:12	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			05/14/16 16:12	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			05/14/16 16:12	1
1,1,1-Trichloroethane	ND		1.00		ug/L			05/14/16 16:12	1
1,1,2-Trichloroethane	ND		1.00		ug/L			05/14/16 16:12	1
Trichloroethene	ND		1.00		ug/L			05/14/16 16:12	1
Trichlorofluoromethane	ND		1.00		ug/L			05/14/16 16:12	1
1,2,3-Trichloropropane	ND		1.00		ug/L			05/14/16 16:12	1

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

Lab Sample ID: MB 490-340079/7
Matrix: Water
Analysis Batch: 340079

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.00		ug/L			05/14/16 16:12	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			05/14/16 16:12	1
Vinyl chloride	ND		1.00		ug/L			05/14/16 16:12	1
Xylenes, Total	ND		3.00		ug/L			05/14/16 16:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*05/14/16 16:12*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*05/14/16 16:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*05/14/16 16:12*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*05/14/16 16:12*	*1*

Lab Sample ID: LCS 490-340079/3
Matrix: Water
Analysis Batch: 340079

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	106.1		ug/L		106	39 - 150
Benzene	20.0	22.69		ug/L		113	70 - 130
Bromobenzene	20.0	21.96		ug/L		110	70 - 130
Bromochloromethane	20.0	20.47		ug/L		102	70 - 130
Bromodichloromethane	20.0	22.50		ug/L		112	70 - 130
Bromoform	20.0	22.05		ug/L		110	70 - 137
Bromomethane	20.0	15.87		ug/L		79	53 - 150
2-Butanone (MEK)	100	104.2		ug/L		104	55 - 143
Carbon disulfide	20.0	22.61		ug/L		113	64 - 135
Carbon tetrachloride	20.0	22.17		ug/L		111	70 - 147
Chlorobenzene	20.0	21.98		ug/L		110	70 - 130
Chlorodibromomethane	20.0	22.15		ug/L		111	70 - 133
Chloroethane	20.0	18.39		ug/L		92	60 - 138
Chloroform	20.0	20.87		ug/L		104	70 - 130
Chloromethane	20.0	26.74		ug/L		134	33 - 150
2-Chlorotoluene	20.0	21.43		ug/L		107	70 - 130
4-Chlorotoluene	20.0	21.15		ug/L		106	70 - 130
cis-1,2-Dichloroethene	20.0	21.93		ug/L		110	70 - 130
cis-1,3-Dichloropropene	20.0	20.02		ug/L		100	70 - 133
1,2-Dibromo-3-Chloropropane	20.0	19.84		ug/L		99	45 - 138
1,2-Dibromoethane (EDB)	20.0	20.39		ug/L		102	70 - 130
Dibromomethane	20.0	21.66		ug/L		108	70 - 130
1,2-Dichlorobenzene	20.0	21.13		ug/L		106	70 - 130
1,3-Dichlorobenzene	20.0	21.59		ug/L		108	70 - 130
1,4-Dichlorobenzene	20.0	21.13		ug/L		106	70 - 130
Dichlorodifluoromethane	20.0	24.74		ug/L		124	48 - 150
1,1-Dichloroethane	20.0	21.07		ug/L		105	70 - 130
1,2-Dichloroethane	20.0	21.35		ug/L		107	70 - 130
1,1-Dichloroethene	20.0	21.91		ug/L		110	70 - 132
1,2-Dichloropropane	20.0	22.27		ug/L		111	70 - 130
1,3-Dichloropropane	20.0	21.63		ug/L		108	70 - 130
2,2-Dichloropropane	20.0	25.27		ug/L		126	60 - 143

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

Lab Sample ID: LCS 490-340079/3
Matrix: Water
Analysis Batch: 340079

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	20.0	21.67		ug/L		108	70 - 130
Ethylbenzene	20.0	22.09		ug/L		110	70 - 130
Hexachlorobutadiene	20.0	20.24		ug/L		101	70 - 138
2-Hexanone	100	102.7		ug/L		103	54 - 142
Isopropylbenzene	20.0	20.70		ug/L		103	70 - 131
Methylene Chloride	20.0	21.09		ug/L		105	70 - 130
4-Methyl-2-pentanone (MIBK)	100	81.35		ug/L		81	60 - 137
Methyl tert-butyl ether	20.0	21.23		ug/L		106	70 - 130
Naphthalene	20.0	21.19		ug/L		106	54 - 150
n-Butylbenzene	20.0	20.49		ug/L		102	68 - 137
N-Propylbenzene	20.0	22.20		ug/L		111	70 - 134
p-Isopropyltoluene	20.0	21.73		ug/L		109	66 - 130
sec-Butylbenzene	20.0	21.66		ug/L		108	70 - 135
Styrene	20.0	20.18		ug/L		101	70 - 130
tert-Butylbenzene	20.0	21.35		ug/L		107	70 - 130
1,1,1,2-Tetrachloroethane	20.0	20.91		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	20.0	22.69		ug/L		113	69 - 131
Tetrachloroethene	20.0	20.59		ug/L		103	70 - 130
Toluene	20.0	17.64		ug/L		88	70 - 130
trans-1,2-Dichloroethene	20.0	23.32		ug/L		117	70 - 130
trans-1,3-Dichloropropene	20.0	17.51		ug/L		88	63 - 142
1,2,3-Trichlorobenzene	20.0	22.67		ug/L		113	46 - 150
1,2,4-Trichlorobenzene	20.0	21.05		ug/L		105	58 - 147
1,1,1-Trichloroethane	20.0	21.29		ug/L		106	70 - 135
1,1,2-Trichloroethane	20.0	21.60		ug/L		108	70 - 130
Trichloroethene	20.0	20.76		ug/L		104	70 - 130
Trichlorofluoromethane	20.0	20.07		ug/L		100	59 - 150
1,2,3-Trichloropropane	20.0	20.10		ug/L		100	70 - 131
1,2,4-Trimethylbenzene	20.0	22.04		ug/L		110	70 - 130
1,3,5-Trimethylbenzene	20.0	20.74		ug/L		104	70 - 130
Vinyl chloride	20.0	20.52		ug/L		103	57 - 137
Xylenes, Total	40.0	42.69		ug/L		107	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*82*		*70 - 130*

Lab Sample ID: LCSD 490-340079/4
Matrix: Water
Analysis Batch: 340079

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	109.1		ug/L		109	39 - 150	3	23
Benzene	20.0	23.19		ug/L		116	70 - 130	2	12
Bromobenzene	20.0	22.30		ug/L		111	70 - 130	2	16
Bromochloromethane	20.0	20.26		ug/L		101	70 - 130	1	16

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

Lab Sample ID: LCSD 490-340079/4
Matrix: Water
Analysis Batch: 340079

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromodichloromethane	20.0	22.72		ug/L		114	70 - 130	1	14
Bromoform	20.0	22.03		ug/L		110	70 - 137	0	14
Bromomethane	20.0	17.43		ug/L		87	53 - 150	9	19
2-Butanone (MEK)	100	107.0		ug/L		107	55 - 143	3	19
Carbon disulfide	20.0	23.97		ug/L		120	64 - 135	6	16
Carbon tetrachloride	20.0	22.71		ug/L		114	70 - 147	2	16
Chlorobenzene	20.0	22.38		ug/L		112	70 - 130	2	12
Chlorodibromomethane	20.0	22.09		ug/L		110	70 - 133	0	13
Chloroethane	20.0	20.35		ug/L		102	60 - 138	10	15
Chloroform	20.0	20.85		ug/L		104	70 - 130	0	14
Chloromethane	20.0	25.75		ug/L		129	33 - 150	4	20
2-Chlorotoluene	20.0	22.38		ug/L		112	70 - 130	4	15
4-Chlorotoluene	20.0	22.27		ug/L		111	70 - 130	5	15
cis-1,2-Dichloroethene	20.0	22.16		ug/L		111	70 - 130	1	15
cis-1,3-Dichloropropene	20.0	20.12		ug/L		101	70 - 133	0	15
1,2-Dibromo-3-Chloropropane	20.0	20.08		ug/L		100	45 - 138	1	19
1,2-Dibromoethane (EDB)	20.0	20.81		ug/L		104	70 - 130	2	13
Dibromomethane	20.0	21.21		ug/L		106	70 - 130	2	14
1,2-Dichlorobenzene	20.0	21.76		ug/L		109	70 - 130	3	12
1,3-Dichlorobenzene	20.0	22.10		ug/L		111	70 - 130	2	13
1,4-Dichlorobenzene	20.0	21.08		ug/L		105	70 - 130	0	12
Dichlorodifluoromethane	20.0	25.63		ug/L		128	48 - 150	4	16
1,1-Dichloroethane	20.0	22.31		ug/L		112	70 - 130	6	17
1,2-Dichloroethane	20.0	21.68		ug/L		108	70 - 130	2	13
1,1-Dichloroethene	20.0	22.82		ug/L		114	70 - 132	4	20
1,2-Dichloropropane	20.0	21.89		ug/L		109	70 - 130	2	15
1,3-Dichloropropane	20.0	21.88		ug/L		109	70 - 130	1	12
2,2-Dichloropropane	20.0	25.88		ug/L		129	60 - 143	2	20
1,1-Dichloropropene	20.0	22.55		ug/L		113	70 - 130	4	16
Ethylbenzene	20.0	22.28		ug/L		111	70 - 130	1	12
Hexachlorobutadiene	20.0	22.02		ug/L		110	70 - 138	8	16
2-Hexanone	100	104.8		ug/L		105	54 - 142	2	17
Isopropylbenzene	20.0	20.72		ug/L		104	70 - 131	0	13
Methylene Chloride	20.0	22.24		ug/L		111	70 - 130	5	15
4-Methyl-2-pentanone (MIBK)	100	97.82		ug/L		98	60 - 137	18	21
Methyl tert-butyl ether	20.0	22.01		ug/L		110	70 - 130	4	16
Naphthalene	20.0	22.76		ug/L		114	54 - 150	7	15
n-Butylbenzene	20.0	21.48		ug/L		107	68 - 137	5	14
N-Propylbenzene	20.0	22.99		ug/L		115	70 - 134	3	14
p-Isopropyltoluene	20.0	22.36		ug/L		112	66 - 130	3	13
sec-Butylbenzene	20.0	22.89		ug/L		114	70 - 135	6	14
Styrene	20.0	20.21		ug/L		101	70 - 130	0	12
tert-Butylbenzene	20.0	21.91		ug/L		110	70 - 130	3	14
1,1,1,2-Tetrachloroethane	20.0	20.46		ug/L		102	70 - 130	2	13
1,1,2,2-Tetrachloroethane	20.0	23.63		ug/L		118	69 - 131	4	15
Tetrachloroethene	20.0	21.59		ug/L		108	70 - 130	5	17
Toluene	20.0	17.26		ug/L		86	70 - 130	2	13
trans-1,2-Dichloroethene	20.0	24.31		ug/L		122	70 - 130	4	15

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

Lab Sample ID: LCSD 490-340079/4
Matrix: Water
Analysis Batch: 340079

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene			20.0	17.14		ug/L		86	63 - 142	2	13
1,2,3-Trichlorobenzene			20.0	23.40		ug/L		117	46 - 150	3	16
1,2,4-Trichlorobenzene			20.0	22.78		ug/L		114	58 - 147	8	15
1,1,1-Trichloroethane			20.0	22.11		ug/L		111	70 - 135	4	15
1,1,2-Trichloroethane			20.0	20.51		ug/L		103	70 - 130	5	13
Trichloroethene			20.0	20.90		ug/L		105	70 - 130	1	14
Trichlorofluoromethane			20.0	20.96		ug/L		105	59 - 150	4	22
1,2,3-Trichloropropane			20.0	20.75		ug/L		104	70 - 131	3	14
1,2,4-Trimethylbenzene			20.0	22.35		ug/L		112	70 - 130	1	13
1,3,5-Trimethylbenzene			20.0	21.68		ug/L		108	70 - 130	4	14
Vinyl chloride			20.0	21.30		ug/L		106	57 - 137	4	15
Xylenes, Total			40.0	42.63		ug/L		107	70 - 132	0	11

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*80*		*70 - 130*

Lab Sample ID: 490-103694-B-2 MS
Matrix: Water
Analysis Batch: 340079

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	F2	100	91.41		ug/L		91	39 - 150
Benzene	ND	F1 F2	20.0	16.63		ug/L		83	55 - 147
Bromobenzene	ND	F1 F2	20.0	18.14		ug/L		91	60 - 133
Bromochloromethane	ND	F1 F2	20.0	15.89		ug/L		79	59 - 132
Bromodichloromethane	ND	F1	20.0	18.73		ug/L		94	70 - 140
Bromoform	ND	F2	20.0	18.13		ug/L		91	53 - 150
Bromomethane	ND	F1	20.0	7.720		ug/L		39	30 - 150
2-Butanone (MEK)	ND	F2	100	83.80		ug/L		84	50 - 143
Carbon disulfide	ND	F1 F2	20.0	9.024		ug/L		45	35 - 150
Carbon tetrachloride	ND	F1 F2	20.0	17.93		ug/L		90	56 - 150
Chlorobenzene	ND	F1 F2	20.0	17.20		ug/L		86	70 - 130
Chlorodibromomethane	ND	F1 F2	20.0	18.01		ug/L		90	66 - 140
Chloroethane	ND	F1 F2	20.0	11.34	F1	ug/L		57	58 - 141
Chloroform	ND	F1 F2	20.0	17.46		ug/L		87	66 - 138
Chloromethane	ND		20.0	13.67		ug/L		68	10 - 150
2-Chlorotoluene	ND	F1 F2	20.0	18.20		ug/L		91	67 - 138
4-Chlorotoluene	ND	F1 F2	20.0	18.03		ug/L		90	69 - 138
cis-1,2-Dichloroethene	1.08	F1 F2	20.0	18.07		ug/L		85	68 - 131
cis-1,3-Dichloropropene	ND	F1 F2	20.0	15.32		ug/L		77	70 - 133
1,2-Dibromo-3-Chloropropane	ND	F2	20.0	17.16		ug/L		86	38 - 138
1,2-Dibromoethane (EDB)	ND	F1 F2	20.0	15.34		ug/L		77	65 - 137
Dibromomethane	ND	F1 F2	20.0	16.16		ug/L		81	70 - 130
1,2-Dichlorobenzene	ND	F1 F2	20.0	17.42		ug/L		87	70 - 130
1,3-Dichlorobenzene	ND	F1 F2	20.0	17.78		ug/L		89	68 - 131

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

Lab Sample ID: 490-103694-B-2 MS
Matrix: Water
Analysis Batch: 340079

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	ND	F1 F2	20.0	17.34		ug/L		87	70 - 130
Dichlorodifluoromethane	ND	F2	20.0	16.93		ug/L		85	10 - 150
1,1-Dichloroethane	ND	F1 F2	20.0	17.24		ug/L		86	61 - 139
1,2-Dichloroethane	ND	F1 F2	20.0	16.34		ug/L		82	64 - 136
1,1-Dichloroethene	ND	F1 F2	20.0	14.48		ug/L		72	54 - 150
1,2-Dichloropropane	ND	F1 F2	20.0	17.17		ug/L		86	67 - 130
1,3-Dichloropropane	ND	F1 F2	20.0	17.49		ug/L		87	70 - 130
2,2-Dichloropropane	ND	F2	20.0	21.63		ug/L		108	50 - 146
1,1-Dichloropropene	ND	F1 F2	20.0	15.58		ug/L		78	54 - 150
Ethylbenzene	ND	F1 F2	20.0	16.98		ug/L		85	65 - 139
Hexachlorobutadiene	ND	F1 F2	20.0	15.83		ug/L		79	61 - 141
2-Hexanone	ND	F2	100	85.56		ug/L		86	44 - 150
Isopropylbenzene	ND	F1 F2	20.0	16.97		ug/L		85	70 - 137
Methylene Chloride	ND	F1 F2	20.0	16.09		ug/L		80	64 - 130
4-Methyl-2-pentanone (MIBK)	ND	F2	100	77.93		ug/L		78	50 - 140
Methyl tert-butyl ether	ND	F1 F2	20.0	17.34		ug/L		87	55 - 141
Naphthalene	ND		20.0	15.16		ug/L		76	32 - 150
n-Butylbenzene	ND	F1 F2	20.0	17.86		ug/L		89	61 - 141
N-Propylbenzene	ND	F2	20.0	18.76		ug/L		94	53 - 150
p-Isopropyltoluene	ND	F1 F2	20.0	18.48		ug/L		92	66 - 137
sec-Butylbenzene	ND		20.0	19.18		ug/L		96	55 - 136
Styrene	ND	F1 F2	20.0	16.15		ug/L		81	70 - 130
tert-Butylbenzene	ND	F1 F2	20.0	18.57		ug/L		93	70 - 138
1,1,1,2-Tetrachloroethane	ND	F1 F2	20.0	17.20		ug/L		86	70 - 131
1,1,2,2-Tetrachloroethane	ND	F2	20.0	20.01		ug/L		100	56 - 145
Tetrachloroethene	ND	F1 F2	20.0	14.84		ug/L		74	57 - 138
Toluene	ND	F1 F2	20.0	14.37		ug/L		72	64 - 136
trans-1,2-Dichloroethene	ND	F1 F2	20.0	15.33		ug/L		77	59 - 143
trans-1,3-Dichloropropene	ND	F1 F2	20.0	15.61		ug/L		78	63 - 142
1,2,3-Trichlorobenzene	ND		20.0	15.97		ug/L		80	36 - 150
1,2,4-Trichlorobenzene	ND	F2	20.0	16.53		ug/L		83	47 - 147
1,1,1-Trichloroethane	ND	F1 F2	20.0	17.52		ug/L		88	68 - 144
1,1,2-Trichloroethane	ND	F1 F2	20.0	17.53		ug/L		88	70 - 130
Trichloroethene	ND	F1 F2	20.0	15.07		ug/L		75	63 - 135
Trichlorofluoromethane	ND	F2	20.0	16.19		ug/L		81	44 - 150
1,2,3-Trichloropropane	ND	F1 F2	20.0	17.48		ug/L		87	65 - 131
1,2,4-Trimethylbenzene	ND	F1 F2	20.0	17.86		ug/L		89	64 - 136
1,3,5-Trimethylbenzene	ND	F1 F2	20.0	17.35		ug/L		87	69 - 139
Vinyl chloride	5.28	F1	20.0	18.60		ug/L		67	57 - 150
Xylenes, Total	ND	F1 F2	40.0	32.74		ug/L		82	69 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*87*		*70 - 130*

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

Lab Sample ID: 490-103694-C-2 MSD
Matrix: Water
Analysis Batch: 340079

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	F2	100	53.29	F2	ug/L		53	39 - 150	53	28
Benzene	ND	F1 F2	20.0	9.997	F1 F2	ug/L		50	55 - 147	50	22
Bromobenzene	ND	F1 F2	20.0	10.95	F1 F2	ug/L		55	60 - 133	49	18
Bromochloromethane	ND	F1 F2	20.0	9.228	F1 F2	ug/L		46	59 - 132	53	21
Bromodichloromethane	ND	F1	20.0	10.99	F1	ug/L		55	70 - 140	52	196
Bromoform	ND	F2	20.0	11.15	F2	ug/L		56	53 - 150	48	20
Bromomethane	ND	F1	20.0	5.076	F1	ug/L		25	30 - 150	41	44
2-Butanone (MEK)	ND	F2	100	52.39	F2	ug/L		52	50 - 143	46	28
Carbon disulfide	ND	F1 F2	20.0	5.302	F1 F2	ug/L		27	35 - 150	52	34
Carbon tetrachloride	ND	F1 F2	20.0	10.48	F1 F2	ug/L		52	56 - 150	52	18
Chlorobenzene	ND	F1 F2	20.0	10.46	F1 F2	ug/L		52	70 - 130	49	15
Chlorodibromomethane	ND	F1 F2	20.0	10.74	F1 F2	ug/L		54	66 - 140	51	19
Chloroethane	ND	F1 F2	20.0	7.607	F1 F2	ug/L		38	58 - 141	39	31
Chloroform	ND	F1 F2	20.0	10.54	F1 F2	ug/L		53	66 - 138	49	21
Chloromethane	ND		20.0	9.571		ug/L		48	10 - 150	35	43
2-Chlorotoluene	ND	F1 F2	20.0	11.10	F1 F2	ug/L		56	67 - 138	48	17
4-Chlorotoluene	ND	F1 F2	20.0	10.72	F1 F2	ug/L		54	69 - 138	51	15
cis-1,2-Dichloroethene	1.08	F1 F2	20.0	11.31	F1 F2	ug/L		51	68 - 131	46	21
cis-1,3-Dichloropropene	ND	F1 F2	20.0	9.434	F1 F2	ug/L		47	70 - 133	48	19
1,2-Dibromo-3-Chloropropane	ND	F2	20.0	10.85	F2	ug/L		54	38 - 138	45	26
1,2-Dibromoethane (EDB)	ND	F1 F2	20.0	9.624	F1 F2	ug/L		48	65 - 137	46	21
Dibromomethane	ND	F1 F2	20.0	9.790	F1 F2	ug/L		49	70 - 130	49	19
1,2-Dichlorobenzene	ND	F1 F2	20.0	10.97	F1 F2	ug/L		55	70 - 130	45	15
1,3-Dichlorobenzene	ND	F1 F2	20.0	10.84	F1 F2	ug/L		54	68 - 131	48	14
1,4-Dichlorobenzene	ND	F1 F2	20.0	10.22	F1 F2	ug/L		51	70 - 130	52	14
Dichlorodifluoromethane	ND	F2	20.0	9.879	F2	ug/L		49	10 - 150	53	50
1,1-Dichloroethane	ND	F1 F2	20.0	10.51	F1 F2	ug/L		53	61 - 139	48	23
1,2-Dichloroethane	ND	F1 F2	20.0	9.987	F1 F2	ug/L		50	64 - 136	48	22
1,1-Dichloroethene	ND	F1 F2	20.0	8.918	F1 F2	ug/L		45	54 - 150	48	24
1,2-Dichloropropane	ND	F1 F2	20.0	10.51	F1 F2	ug/L		53	67 - 130	48	19
1,3-Dichloropropane	ND	F1 F2	20.0	10.63	F1 F2	ug/L		53	70 - 130	49	17
2,2-Dichloropropane	ND	F2	20.0	12.97	F2	ug/L		65	50 - 146	50	20
1,1-Dichloropropene	ND	F1 F2	20.0	9.266	F1 F2	ug/L		46	54 - 150	51	24
Ethylbenzene	ND	F1 F2	20.0	10.24	F1 F2	ug/L		51	65 - 139	50	18
Hexachlorobutadiene	ND	F1 F2	20.0	11.29	F1 F2	ug/L		56	61 - 141	33	26
2-Hexanone	ND	F2	100	54.87	F2	ug/L		55	44 - 150	44	21
Isopropylbenzene	ND	F1 F2	20.0	9.917	F1 F2	ug/L		50	70 - 137	52	17
Methylene Chloride	ND	F1 F2	20.0	9.471	F1 F2	ug/L		47	64 - 130	52	22
4-Methyl-2-pentanone (MIBK)	ND	F2	100	49.98	F2	ug/L		50	50 - 140	44	24
Methyl tert-butyl ether	ND	F1 F2	20.0	10.52	F1 F2	ug/L		53	55 - 141	49	24
Naphthalene	ND		20.0	10.91		ug/L		55	32 - 150	33	40
n-Butylbenzene	ND	F1 F2	20.0	10.88	F1 F2	ug/L		54	61 - 141	49	17
N-Propylbenzene	ND	F2	20.0	11.32	F2	ug/L		57	53 - 150	49	18
p-Isopropyltoluene	ND	F1 F2	20.0	10.97	F1 F2	ug/L		55	66 - 137	51	16
sec-Butylbenzene	ND		20.0	11.54		ug/L		58	55 - 136	50	50
Styrene	ND	F1 F2	20.0	9.737	F1 F2	ug/L		49	70 - 130	50	16
tert-Butylbenzene	ND	F1 F2	20.0	11.04	F1 F2	ug/L		55	70 - 138	51	17
1,1,1,2-Tetrachloroethane	ND	F1 F2	20.0	10.87	F1 F2	ug/L		54	70 - 131	45	16

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

Lab Sample ID: 490-103694-C-2 MSD
Matrix: Water
Analysis Batch: 340079

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	ND	F2	20.0	12.05	F2	ug/L		60	56 - 145	50	19
Tetrachloroethene	ND	F1 F2	20.0	9.638	F1 F2	ug/L		48	57 - 138	43	17
Toluene	ND	F1 F2	20.0	9.069	F1 F2	ug/L		45	64 - 136	45	18
trans-1,2-Dichloroethene	ND	F1 F2	20.0	9.003	F1 F2	ug/L		45	59 - 143	52	25
trans-1,3-Dichloropropene	ND	F1 F2	20.0	9.492	F1 F2	ug/L		47	63 - 142	49	18
1,2,3-Trichlorobenzene	ND		20.0	11.67		ug/L		58	36 - 150	31	43
1,2,4-Trichlorobenzene	ND	F2	20.0	11.05	F2	ug/L		55	47 - 147	40	24
1,1,1-Trichloroethane	ND	F1 F2	20.0	10.58	F1 F2	ug/L		53	68 - 144	49	17
1,1,2-Trichloroethane	ND	F1 F2	20.0	11.92	F1 F2	ug/L		60	70 - 130	38	18
Trichloroethene	ND	F1 F2	20.0	9.088	F1 F2	ug/L		45	63 - 135	50	17
Trichlorofluoromethane	ND	F2	20.0	9.593	F2	ug/L		48	44 - 150	51	32
1,2,3-Trichloropropane	ND	F1 F2	20.0	10.60	F1 F2	ug/L		53	65 - 131	49	19
1,2,4-Trimethylbenzene	ND	F1 F2	20.0	10.75	F1 F2	ug/L		54	64 - 136	50	18
1,3,5-Trimethylbenzene	ND	F1 F2	20.0	10.45	F1 F2	ug/L		52	69 - 139	50	17
Vinyl chloride	5.28	F1	20.0	13.25	F1	ug/L		40	57 - 150	34	37
Xylenes, Total	ND	F1 F2	40.0	19.46	F1 F2	ug/L		49	69 - 132	51	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

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

Lab Sample ID: MB 490-340765/1-A
Matrix: Water
Analysis Batch: 323824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 340765

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
Acenaphthylene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
Anthracene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
Benzo[a]anthracene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
Benzo[a]pyrene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
Benzo[b]fluoranthene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
Benzo[g,h,i]perylene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
Benzo[k]fluoranthene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
Bis(2-chloroethoxy)methane	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Bis(2-chloroethyl)ether	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
bis (2-chloroisopropyl) ether	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Bis(2-ethylhexyl) phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
4-Bromophenyl phenyl ether	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Butyl benzyl phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Carbazole	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
4-Chloroaniline	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
4-Chloro-3-methylphenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
2-Chloronaphthalene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1

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

Lab Sample ID: MB 490-340765/1-A
Matrix: Water
Analysis Batch: 323824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 340765

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
4-Chlorophenyl phenyl ether	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Chrysene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
Cresols	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Dibenz(a,h)anthracene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
Dibenzofuran	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
1,2-Dichlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
1,3-Dichlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
1,4-Dichlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
3,3'-Dichlorobenzidine	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
2,4-Dichlorophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Diethyl phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
2,4-Dimethylphenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Dimethyl phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Di-n-butyl phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
4,6-Dinitro-2-methylphenol	ND		25.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
2,4-Dinitrophenol	ND		25.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
2,4-Dinitrotoluene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
2,6-Dinitrotoluene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Di-n-octyl phthalate	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Fluoranthene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
Fluorene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
Hexachlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Hexachlorobutadiene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Hexachlorocyclopentadiene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Hexachloroethane	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Indeno[1,2,3-cd]pyrene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
Isophorone	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
1-Methylnaphthalene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
2-Methylnaphthalene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
2-Methylphenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
3 & 4 Methylphenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Naphthalene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
2-Nitroaniline	ND		25.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
3-Nitroaniline	ND		25.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
4-Nitroaniline	ND		25.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Nitrobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
2-Nitrophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
4-Nitrophenol	ND		25.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
N-Nitrosodi-n-propylamine	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
n-Nitrosodiphenylamine(as diphenylamine)	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Pentachlorophenol	ND		25.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Phenanthrene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
Phenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
Pyrene	ND		2.00		ug/L		05/17/16 16:13	05/18/16 17:21	1
1,2,4-Trichlorobenzene	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1
2,4,5-Trichlorophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1

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

Lab Sample ID: MB 490-340765/1-A
Matrix: Water
Analysis Batch: 323824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 340765

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	ND		10.0		ug/L		05/17/16 16:13	05/18/16 17:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*78*		*29 - 120*	*05/17/16 16:13*	*05/18/16 17:21*	*1*
2-Fluorophenol (Surr)	*54*		*10 - 120*	*05/17/16 16:13*	*05/18/16 17:21*	*1*
Nitrobenzene-d5 (Surr)	*72*		*27 - 120*	*05/17/16 16:13*	*05/18/16 17:21*	*1*
Phenol-d5 (Surr)	*37*		*10 - 120*	*05/17/16 16:13*	*05/18/16 17:21*	*1*
Terphenyl-d14 (Surr)	*99*		*13 - 120*	*05/17/16 16:13*	*05/18/16 17:21*	*1*
2,4,6-Tribromophenol (Surr)	*77*		*10 - 120*	*05/17/16 16:13*	*05/18/16 17:21*	*1*

Lab Sample ID: LCS 490-340765/2-A
Matrix: Water
Analysis Batch: 323824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 340765

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	40.0	33.19		ug/L		83	46 - 120
Acenaphthylene	40.0	33.06		ug/L		83	48 - 120
Anthracene	40.0	34.59		ug/L		86	58 - 130
Benzo[a]anthracene	40.0	35.16		ug/L		88	57 - 120
Benzo[a]pyrene	40.0	33.87		ug/L		85	57 - 124
Benzo[b]fluoranthene	40.0	34.59		ug/L		86	51 - 125
Benzo[g,h,i]perylene	40.0	34.67		ug/L		87	51 - 123
Benzo[k]fluoranthene	40.0	35.59		ug/L		89	51 - 120
Bis(2-chloroethoxy)methane	40.0	34.26		ug/L		86	44 - 120
Bis(2-chloroethyl)ether	40.0	27.44		ug/L		69	47 - 120
bis (2-chloroisopropyl) ether	40.0	35.44		ug/L		89	44 - 120
Bis(2-ethylhexyl) phthalate	40.0	38.53		ug/L		96	47 - 138
4-Bromophenyl phenyl ether	40.0	34.84		ug/L		87	47 - 127
Butyl benzyl phthalate	40.0	37.88		ug/L		95	51 - 146
Carbazole	40.0	35.67		ug/L		89	54 - 123
4-Chloroaniline	40.0	29.84		ug/L		75	44 - 120
4-Chloro-3-methylphenol	40.0	36.40		ug/L		91	44 - 120
2-Chloronaphthalene	40.0	32.81		ug/L		82	39 - 120
2-Chlorophenol	40.0	32.09		ug/L		80	40 - 120
4-Chlorophenyl phenyl ether	40.0	32.52		ug/L		81	50 - 120
Chrysene	40.0	34.77		ug/L		87	55 - 120
Cresols	80.0	62.05		ug/L		78	33 - 120
Dibenz(a,h)anthracene	40.0	34.89		ug/L		87	50 - 125
Dibenzofuran	40.0	33.01		ug/L		83	50 - 120
1,2-Dichlorobenzene	40.0	31.58		ug/L		79	32 - 120
1,3-Dichlorobenzene	40.0	31.23		ug/L		78	32 - 120
1,4-Dichlorobenzene	40.0	30.95		ug/L		77	31 - 120
3,3'-Dichlorobenzidine	40.0	34.53		ug/L		86	46 - 129
2,4-Dichlorophenol	40.0	32.81		ug/L		82	38 - 120
Diethyl phthalate	40.0	35.27		ug/L		88	54 - 128
2,4-Dimethylphenol	40.0	31.55		ug/L		79	21 - 126
Dimethyl phthalate	40.0	34.71		ug/L		87	53 - 127
Di-n-butyl phthalate	40.0	37.67		ug/L		94	54 - 140

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

Lab Sample ID: LCS 490-340765/2-A
Matrix: Water
Analysis Batch: 323824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 340765

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,6-Dinitro-2-methylphenol	80.0	68.75		ug/L		86	19 - 150
2,4-Dinitrophenol	80.0	60.74		ug/L		76	20 - 150
2,4-Dinitrotoluene	40.0	37.02		ug/L		93	46 - 132
2,6-Dinitrotoluene	40.0	36.66		ug/L		92	54 - 128
Di-n-octyl phthalate	40.0	37.26		ug/L		93	50 - 142
Fluoranthene	40.0	35.13		ug/L		88	56 - 120
Fluorene	40.0	33.27		ug/L		83	52 - 120
Hexachlorobenzene	40.0	35.37		ug/L		88	48 - 131
Hexachlorobutadiene	40.0	31.21		ug/L		78	28 - 120
Hexachlorocyclopentadiene	40.0	28.62		ug/L		72	17 - 120
Hexachloroethane	40.0	31.95		ug/L		80	30 - 120
Indeno[1,2,3-cd]pyrene	40.0	34.92		ug/L		87	54 - 125
Isophorone	40.0	32.79		ug/L		82	47 - 120
1-Methylnaphthalene	40.0	32.09		ug/L		80	36 - 120
2-Methylnaphthalene	40.0	32.55		ug/L		81	31 - 120
2-Methylphenol	40.0	32.45		ug/L		81	38 - 120
3 & 4 Methylphenol	40.0	29.60		ug/L		74	33 - 120
Naphthalene	40.0	32.11		ug/L		80	37 - 120
2-Nitroaniline	40.0	36.25		ug/L		91	46 - 131
3-Nitroaniline	40.0	34.39		ug/L		86	54 - 121
4-Nitroaniline	40.0	39.07		ug/L		98	55 - 123
Nitrobenzene	40.0	32.08		ug/L		80	36 - 120
2-Nitrophenol	40.0	17.57		ug/L		44	32 - 120
4-Nitrophenol	80.0	34.15		ug/L		43	10 - 120
N-Nitrosodi-n-propylamine	40.0	34.41		ug/L		86	51 - 120
n-Nitrosodiphenylamine(as diphenylamine)	80.0	69.58		ug/L		87	58 - 149
Pentachlorophenol	80.0	69.11		ug/L		86	21 - 150
Phenanthrene	40.0	35.14		ug/L		88	56 - 120
Phenol	40.0	15.91		ug/L		40	14 - 120
Pyrene	40.0	34.65		ug/L		87	53 - 129
1,2,4-Trichlorobenzene	40.0	31.79		ug/L		79	30 - 120
2,4,5-Trichlorophenol	40.0	34.48		ug/L		86	40 - 129
2,4,6-Trichlorophenol	40.0	34.68		ug/L		87	39 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*76*		*29 - 120*
2-Fluorophenol (Surr)	*55*		*10 - 120*
Nitrobenzene-d5 (Surr)	*82*		*27 - 120*
Phenol-d5 (Surr)	*37*		*10 - 120*
Terphenyl-d14 (Surr)	*84*		*13 - 120*
2,4,6-Tribromophenol (Surr)	*81*		*10 - 120*

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

Lab Sample ID: MB 490-340911/8
Matrix: Water
Analysis Batch: 340911

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			05/18/16 13:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*		*05/18/16 13:35*	*1*

Lab Sample ID: LCS 490-340911/4
Matrix: Water
Analysis Batch: 340911

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12			1000	936.8		ug/L		94	39 - 143		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*118*		*50 - 150*

Lab Sample ID: LCSD 490-340911/5
Matrix: Water
Analysis Batch: 340911

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12			1000	930.8		ug/L		93	39 - 143	1	18

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*116*		*50 - 150*

Lab Sample ID: 490-103856-E-4 MSD
Matrix: Water
Analysis Batch: 340911

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12	ND		1000	989.8		ug/L		99	39 - 143	4	18

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*115*		*50 - 150*

Lab Sample ID: 490-103856-F-4 MS
Matrix: Water
Analysis Batch: 340911

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12	ND		1000	1027		ug/L		103	39 - 143		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*121*		*50 - 150*

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

Lab Sample ID: 490-103608-6 DU
Matrix: Water
Analysis Batch: 340911

Client Sample ID: GW-060866-051016-LB-MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C6-C12	ND			ND		ug/L				NC	18

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*102*		*50 - 150*

Lab Sample ID: MB 490-341272/8
Matrix: Water
Analysis Batch: 341272

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			05/19/16 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*82*		*50 - 150*		*05/19/16 12:12*	*1*

Lab Sample ID: LCS 490-341272/6
Matrix: Water
Analysis Batch: 341272

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12			1000	969.9		ug/L		97	39 - 143		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*83*		*50 - 150*

Lab Sample ID: LCSD 490-341272/7
Matrix: Water
Analysis Batch: 341272

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12			1000	929.5		ug/L		93	39 - 143	4	18

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*84*		*50 - 150*

Lab Sample ID: 490-103465-B-2 DU
Matrix: Water
Analysis Batch: 341272

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C6-C12	ND			ND		ug/L				NC	18

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*83*		*50 - 150*

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

Lab Sample ID: MB 490-341323/8
Matrix: Water
Analysis Batch: 341323

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			05/19/16 13:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*101*		*50 - 150*		*05/19/16 13:18*	*1*

Lab Sample ID: LCS 490-341323/5
Matrix: Water
Analysis Batch: 341323

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12			1000	1025		ug/L		102	39 - 143		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*136*		*50 - 150*

Lab Sample ID: LCSD 490-341323/6
Matrix: Water
Analysis Batch: 341323

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12			1000	990.3		ug/L		99	39 - 143	3	18

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*126*		*50 - 150*

Lab Sample ID: 490-103843-F-12 MS
Matrix: Water
Analysis Batch: 341323

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12	2.601		1000	923.4		ug/L		92	39 - 143		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*105*		*50 - 150*

Lab Sample ID: 490-103843-G-12 MSD
Matrix: Water
Analysis Batch: 341323

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12	2.601		1000	937.4		ug/L		94	39 - 143	2	18

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*109*		*50 - 150*

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

Lab Sample ID: MB 490-340308/1-A
Matrix: Water
Analysis Batch: 340546

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 340308

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.500		ug/L		05/16/16 11:30	05/17/16 14:27	1
PCB-1221	ND		0.500		ug/L		05/16/16 11:30	05/17/16 14:27	1
PCB-1232	ND		0.500		ug/L		05/16/16 11:30	05/17/16 14:27	1
PCB-1242	ND		0.500		ug/L		05/16/16 11:30	05/17/16 14:27	1
PCB-1248	ND		0.500		ug/L		05/16/16 11:30	05/17/16 14:27	1
PCB-1254	ND		0.500		ug/L		05/16/16 11:30	05/17/16 14:27	1
PCB-1260	ND		0.500		ug/L		05/16/16 11:30	05/17/16 14:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*54*		*10 - 150*	*05/16/16 11:30*	*05/17/16 14:27*	*1*
Tetrachloro-m-xylene	*38*		*10 - 150*	*05/16/16 11:30*	*05/17/16 14:27*	*1*

Lab Sample ID: LCS 490-340308/2-A
Matrix: Water
Analysis Batch: 340546

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 340308

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1242			4.00	2.609		ug/L		65	10 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*39*		*10 - 150*
Tetrachloro-m-xylene	*34*		*10 - 150*

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

Lab Sample ID: MB 490-341329/1-A
Matrix: Water
Analysis Batch: 341294

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 341329

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	536.4		100		ug/L		05/19/16 09:54	05/19/16 21:20	1
C24-C40	241.8		100		ug/L		05/19/16 09:54	05/19/16 21:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*57*		*50 - 150*	*05/19/16 09:54*	*05/19/16 21:20*	*1*

Lab Sample ID: LCS 490-341329/2-A
Matrix: Water
Analysis Batch: 341294

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 341329

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C24			1000	707.8		ug/L		71	51 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*64*		*50 - 150*

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

Lab Sample ID: 490-103608-1 DU — **Client Sample ID: GW-060866-051116-LB-MW-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 341294 — **Prep Batch: 341329**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C10-C24	1440	B		1404		ug/L				2	41
C24-C40	ND			ND		ug/L				NC	41

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*69*		*50 - 150*

Lab Sample ID: MB 490-341927/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 341929 — **Prep Batch: 341927**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		100		ug/L		05/21/16 09:32	05/21/16 16:12	1
C24-C40	ND		100		ug/L		05/21/16 09:32	05/21/16 16:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*77*		*50 - 150*	*05/21/16 09:32*	*05/21/16 16:12*	*1*

Lab Sample ID: LCS 490-341927/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 341929 — **Prep Batch: 341927**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C24			1000	939.0		ug/L		94	51 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*91*		*50 - 150*

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-340856/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 341184 — **Prep Batch: 340856**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00200		mg/L		05/17/16 19:37	05/18/16 14:07	1

Lab Sample ID: LCS 490-340856/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 341184 — **Prep Batch: 340856**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			0.100	0.1019		mg/L		102	80 - 120		

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-103608-1 MS
Matrix: Water
Analysis Batch: 341184

Client Sample ID: GW-060866-051116-LB-MW-1
Prep Type: Dissolved
Prep Batch: 340856

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	ND	F1	0.100	0.02351	F1	mg/L		23	75 - 125

Lab Sample ID: 490-103608-1 MSD
Matrix: Water
Analysis Batch: 341184

Client Sample ID: GW-060866-051116-LB-MW-1
Prep Type: Dissolved
Prep Batch: 340856

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	ND	F1	0.100	0.02427	F1	mg/L		24	75 - 125	3	20

GC/MS VOA

Analysis Batch: 339716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103490-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-103490-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-103608-1	GW-060866-051116-LB-MW-1	Total/NA	Water	8260B	
490-103608-2	GW-060866-051116-LB-MW-2	Total/NA	Water	8260B	
490-103608-3	GW-060866-051016-LB-MW-3	Total/NA	Water	8260B	
490-103608-10	TB	Total/NA	Water	8260B	
LCS 490-339716/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-339716/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-339716/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 339934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-4	GW-060866-051016-LB-MW-4	Total/NA	Water	8260B	
490-103608-4 MS	GW-060866-051016-LB-MW-4	Total/NA	Water	8260B	
490-103608-4 MSD	GW-060866-051016-LB-MW-4	Total/NA	Water	8260B	
490-103608-5	GW-060866-051016-LB-MW-5	Total/NA	Water	8260B	
490-103608-6	GW-060866-051016-LB-MW-6	Total/NA	Water	8260B	
490-103608-7	GW-060866-051016-LB-MW-7	Total/NA	Water	8260B	
490-103608-8	GW-060866-051016-LB-MW-8	Total/NA	Water	8260B	
490-103608-9	GW-060866-051116-LB-MW-9	Total/NA	Water	8260B	
LCS 490-339934/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-339934/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-339934/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 340079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-2	GW-060866-051116-LB-MW-2	Total/NA	Water	8260B	
490-103694-B-2 MS	Matrix Spike	Total/NA	Water	8260B	
490-103694-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-340079/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-340079/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-340079/7	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Analysis Batch: 323824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-2	GW-060866-051116-LB-MW-2	Total/NA	Water	8270D	340765
490-103608-5	GW-060866-051016-LB-MW-5	Total/NA	Water	8270D	340765
490-103608-6	GW-060866-051016-LB-MW-6	Total/NA	Water	8270D	340765
LCS 490-340765/2-A	Lab Control Sample	Total/NA	Water	8270D	340765
MB 490-340765/1-A	Method Blank	Total/NA	Water	8270D	340765

Prep Batch: 340765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-2	GW-060866-051116-LB-MW-2	Total/NA	Water	3510C	
490-103608-5	GW-060866-051016-LB-MW-5	Total/NA	Water	3510C	
490-103608-6	GW-060866-051016-LB-MW-6	Total/NA	Water	3510C	
LCS 490-340765/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-340765/1-A	Method Blank	Total/NA	Water	3510C	

GC VOA

Analysis Batch: 340911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-2	GW-060866-051116-LB-MW-2	Total/NA	Water	NWTPH-Gx	
490-103608-3	GW-060866-051016-LB-MW-3	Total/NA	Water	NWTPH-Gx	
490-103608-4	GW-060866-051016-LB-MW-4	Total/NA	Water	NWTPH-Gx	
490-103608-6	GW-060866-051016-LB-MW-6	Total/NA	Water	NWTPH-Gx	
490-103608-6 DU	GW-060866-051016-LB-MW-6	Total/NA	Water	NWTPH-Gx	
490-103608-7	GW-060866-051016-LB-MW-7	Total/NA	Water	NWTPH-Gx	
490-103608-8	GW-060866-051016-LB-MW-8	Total/NA	Water	NWTPH-Gx	
490-103608-10	TB	Total/NA	Water	NWTPH-Gx	
490-103856-E-4 MSD	Matrix Spike Duplicate	Total/NA	Water	NWTPH-Gx	
490-103856-F-4 MS	Matrix Spike	Total/NA	Water	NWTPH-Gx	
LCS 490-340911/4	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 490-340911/5	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
MB 490-340911/8	Method Blank	Total/NA	Water	NWTPH-Gx	

Analysis Batch: 341272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103465-B-2 DU	Duplicate	Total/NA	Water	NWTPH-Gx	
490-103608-9	GW-060866-051116-LB-MW-9	Total/NA	Water	NWTPH-Gx	
LCS 490-341272/6	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 490-341272/7	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
MB 490-341272/8	Method Blank	Total/NA	Water	NWTPH-Gx	

Analysis Batch: 341323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-1	GW-060866-051116-LB-MW-1	Total/NA	Water	NWTPH-Gx	
490-103608-5	GW-060866-051016-LB-MW-5	Total/NA	Water	NWTPH-Gx	
490-103843-F-12 MS	Matrix Spike	Total/NA	Water	NWTPH-Gx	
490-103843-G-12 MSD	Matrix Spike Duplicate	Total/NA	Water	NWTPH-Gx	
LCS 490-341323/5	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 490-341323/6	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
MB 490-341323/8	Method Blank	Total/NA	Water	NWTPH-Gx	

GC Semi VOA

Prep Batch: 340308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-2	GW-060866-051116-LB-MW-2	Total/NA	Water	3510C	
490-103608-5	GW-060866-051016-LB-MW-5	Total/NA	Water	3510C	
LCS 490-340308/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-340308/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 340546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-2	GW-060866-051116-LB-MW-2	Total/NA	Water	8082A	340308
490-103608-5	GW-060866-051016-LB-MW-5	Total/NA	Water	8082A	340308
LCS 490-340308/2-A	Lab Control Sample	Total/NA	Water	8082A	340308
MB 490-340308/1-A	Method Blank	Total/NA	Water	8082A	340308

GC Semi VOA (Continued)

Analysis Batch: 341294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-1	GW-060866-051116-LB-MW-1	Total/NA	Water	NWTPH-Dx	341329
490-103608-1 DU	GW-060866-051116-LB-MW-1	Total/NA	Water	NWTPH-Dx	341329
LCS 490-341329/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	341329
MB 490-341329/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	341329

Prep Batch: 341329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-1	GW-060866-051116-LB-MW-1	Total/NA	Water	3510C	
490-103608-1 DU	GW-060866-051116-LB-MW-1	Total/NA	Water	3510C	
LCS 490-341329/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-341329/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 341927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-2	GW-060866-051116-LB-MW-2	Total/NA	Water	3510C	
490-103608-3	GW-060866-051016-LB-MW-3	Total/NA	Water	3510C	
490-103608-4	GW-060866-051016-LB-MW-4	Total/NA	Water	3510C	
490-103608-5	GW-060866-051016-LB-MW-5	Total/NA	Water	3510C	
490-103608-6	GW-060866-051016-LB-MW-6	Total/NA	Water	3510C	
490-103608-7	GW-060866-051016-LB-MW-7	Total/NA	Water	3510C	
490-103608-8	GW-060866-051016-LB-MW-8	Total/NA	Water	3510C	
490-103608-9	GW-060866-051116-LB-MW-9	Total/NA	Water	3510C	
LCS 490-341927/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-341927/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 341929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-2	GW-060866-051116-LB-MW-2	Total/NA	Water	NWTPH-Dx	341927
490-103608-2	GW-060866-051116-LB-MW-2	Total/NA	Water	NWTPH-Dx	341927
490-103608-3	GW-060866-051016-LB-MW-3	Total/NA	Water	NWTPH-Dx	341927
490-103608-4	GW-060866-051016-LB-MW-4	Total/NA	Water	NWTPH-Dx	341927
490-103608-5	GW-060866-051016-LB-MW-5	Total/NA	Water	NWTPH-Dx	341927
490-103608-6	GW-060866-051016-LB-MW-6	Total/NA	Water	NWTPH-Dx	341927
490-103608-7	GW-060866-051016-LB-MW-7	Total/NA	Water	NWTPH-Dx	341927
490-103608-8	GW-060866-051016-LB-MW-8	Total/NA	Water	NWTPH-Dx	341927
490-103608-9	GW-060866-051116-LB-MW-9	Total/NA	Water	NWTPH-Dx	341927
LCS 490-341927/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	341927
MB 490-341927/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	341927

Metals

Prep Batch: 340856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-1	GW-060866-051116-LB-MW-1	Dissolved	Water	3005A	
490-103608-1 MS	GW-060866-051116-LB-MW-1	Dissolved	Water	3005A	
490-103608-1 MSD	GW-060866-051116-LB-MW-1	Dissolved	Water	3005A	
490-103608-2	GW-060866-051116-LB-MW-2	Dissolved	Water	3005A	
490-103608-3	GW-060866-051016-LB-MW-3	Dissolved	Water	3005A	
490-103608-4	GW-060866-051016-LB-MW-4	Dissolved	Water	3005A	
490-103608-5	GW-060866-051016-LB-MW-5	Dissolved	Water	3005A	

Metals (Continued)

Prep Batch: 340856 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-6	GW-060866-051016-LB-MW-6	Dissolved	Water	3005A	
490-103608-7	GW-060866-051016-LB-MW-7	Dissolved	Water	3005A	
490-103608-8	GW-060866-051016-LB-MW-8	Dissolved	Water	3005A	
490-103608-9	GW-060866-051116-LB-MW-9	Dissolved	Water	3005A	
LCS 490-340856/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 490-340856/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 341184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-1	GW-060866-051116-LB-MW-1	Dissolved	Water	6020A	340856
490-103608-1 MS	GW-060866-051116-LB-MW-1	Dissolved	Water	6020A	340856
490-103608-1 MSD	GW-060866-051116-LB-MW-1	Dissolved	Water	6020A	340856
490-103608-2	GW-060866-051116-LB-MW-2	Dissolved	Water	6020A	340856
490-103608-3	GW-060866-051016-LB-MW-3	Dissolved	Water	6020A	340856
LCS 490-340856/2-A	Lab Control Sample	Total Recoverable	Water	6020A	340856
MB 490-340856/1-A	Method Blank	Total Recoverable	Water	6020A	340856

Analysis Batch: 341303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-103608-4	GW-060866-051016-LB-MW-4	Dissolved	Water	6020A	340856
490-103608-5	GW-060866-051016-LB-MW-5	Dissolved	Water	6020A	340856
490-103608-6	GW-060866-051016-LB-MW-6	Dissolved	Water	6020A	340856
490-103608-7	GW-060866-051016-LB-MW-7	Dissolved	Water	6020A	340856
490-103608-8	GW-060866-051016-LB-MW-8	Dissolved	Water	6020A	340856
490-103608-9	GW-060866-051116-LB-MW-9	Dissolved	Water	6020A	340856

Client Sample ID: GW-060866-051116-LB-MW-1

Lab Sample ID: 490-103608-1

Date Collected: 05/11/16 09:52

Matrix: Water

Date Received: 05/12/16 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	339716	05/13/16 20:42	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	341323	05/19/16 14:39	AK1	TAL NSH
Total/NA	Prep	3510C			1040 mL	1 mL	341329	05/19/16 09:54	ET	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1040 mL	1 mL	341294	05/20/16 00:43	MDW	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	340856	05/17/16 19:37	RDF	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	341184	05/18/16 14:18	KKK	TAL NSH

Client Sample ID: GW-060866-051116-LB-MW-2

Lab Sample ID: 490-103608-2

Date Collected: 05/11/16 08:37

Matrix: Water

Date Received: 05/12/16 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	339716	05/13/16 21:09	AK1	TAL NSH
Total/NA	Analysis	8260B		5	5 mL	5 mL	340079	05/14/16 22:02	AK1	TAL NSH
Total/NA	Prep	3510C			260 mL	1 mL	340765	05/17/16 16:13	MRM	TAL NSH
Total/NA	Analysis	8270D		1	260 mL	1 mL	323824	05/18/16 18:39	WDS	TAL NSH
Total/NA	Analysis	NWTPH-Gx		10	5 mL	5 mL	340911	05/19/16 01:29	A1B	TAL NSH
Total/NA	Prep	3510C			260 mL	1 mL	340308	05/16/16 11:30	MRM	TAL NSH
Total/NA	Analysis	8082A		1	260 mL	1 mL	340546	05/17/16 14:59	MGH	TAL NSH
Total/NA	Prep	3510C			1080 mL	1 mL	341927	05/21/16 09:32	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1080 mL	1 mL	341929	05/21/16 19:01	GMH	TAL NSH
Total/NA	Prep	3510C			1080 mL	1 mL	341927	05/21/16 09:32	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Dx		2	1080 mL	1 mL	341929	05/21/16 21:16	GMH	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	340856	05/17/16 19:37	RDF	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	341184	05/18/16 14:46	KKK	TAL NSH

Client Sample ID: GW-060866-051016-LB-MW-3

Lab Sample ID: 490-103608-3

Date Collected: 05/10/16 11:55

Matrix: Water

Date Received: 05/12/16 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	339716	05/13/16 21:36	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		10	5 mL	5 mL	340911	05/19/16 02:09	A1B	TAL NSH
Total/NA	Prep	3510C			1000 mL	1 mL	341927	05/21/16 09:32	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1000 mL	1 mL	341929	05/21/16 19:18	GMH	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	340856	05/17/16 19:37	RDF	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	341184	05/18/16 14:52	KKK	TAL NSH

Client Sample ID: GW-060866-051016-LB-MW-4

Lab Sample ID: 490-103608-4

Date Collected: 05/10/16 13:00
Matrix: Water
Date Received: 05/12/16 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	339934	05/14/16 02:59	KS	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	340911	05/18/16 17:34	A1B	TAL NSH
Total/NA	Prep	3510C			1080 mL	1 mL	341927	05/21/16 09:32	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1080 mL	1 mL	341929	05/21/16 19:35	GMH	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	340856	05/17/16 19:37	RDF	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	341303	05/18/16 16:57	KKK	TAL NSH

Client Sample ID: GW-060866-051016-LB-MW-5

Lab Sample ID: 490-103608-5

Date Collected: 05/10/16 09:36
Matrix: Water
Date Received: 05/12/16 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	339934	05/14/16 03:26	KS	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	340765	05/17/16 16:13	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	323824	05/18/16 19:06	WDS	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	341323	05/19/16 15:19	AK1	TAL NSH
Total/NA	Prep	3510C			260 mL	1 mL	340308	05/16/16 11:30	MRM	TAL NSH
Total/NA	Analysis	8082A		1	260 mL	1 mL	340546	05/17/16 15:14	MGH	TAL NSH
Total/NA	Prep	3510C			1080 mL	1 mL	341927	05/21/16 09:32	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1080 mL	1 mL	341929	05/21/16 19:52	GMH	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	340856	05/17/16 19:37	RDF	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	341303	05/18/16 17:02	KKK	TAL NSH

Client Sample ID: GW-060866-051016-LB-MW-6

Lab Sample ID: 490-103608-6

Date Collected: 05/10/16 14:02
Matrix: Water
Date Received: 05/12/16 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	339934	05/14/16 03:53	KS	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	340765	05/17/16 16:13	MRM	TAL NSH
Total/NA	Analysis	8270D		1	250 mL	1 mL	323824	05/18/16 19:32	WDS	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	340911	05/18/16 18:13	A1B	TAL NSH
Total/NA	Prep	3510C			1060 mL	1 mL	341927	05/21/16 09:32	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1060 mL	1 mL	341929	05/21/16 20:09	GMH	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	340856	05/17/16 19:37	RDF	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	341303	05/18/16 17:08	KKK	TAL NSH

Client Sample ID: GW-060866-051016-LB-MW-7

Lab Sample ID: 490-103608-7

Date Collected: 05/10/16 15:07
Matrix: Water
Date Received: 05/12/16 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	339934	05/14/16 04:19	KS	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	340911	05/18/16 19:32	A1B	TAL NSH
Total/NA	Prep	3510C			1070 mL	1 mL	341927	05/21/16 09:32	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1070 mL	1 mL	341929	05/21/16 20:26	GMH	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	340856	05/17/16 19:37	RDF	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	341303	05/18/16 17:14	KKK	TAL NSH

Client Sample ID: GW-060866-051016-LB-MW-8

Lab Sample ID: 490-103608-8

Date Collected: 05/10/16 10:50
Matrix: Water
Date Received: 05/12/16 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	339934	05/14/16 04:46	KS	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	340911	05/18/16 20:12	A1B	TAL NSH
Total/NA	Prep	3510C			1060 mL	1 mL	341927	05/21/16 09:32	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1060 mL	1 mL	341929	05/21/16 20:43	GMH	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	340856	05/17/16 19:37	RDF	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	341303	05/18/16 17:19	KKK	TAL NSH

Client Sample ID: GW-060866-051116-LB-MW-9

Lab Sample ID: 490-103608-9

Date Collected: 05/11/16 10:55
Matrix: Water
Date Received: 05/12/16 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	339934	05/14/16 05:13	KS	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	341272	05/19/16 21:34	AK1	TAL NSH
Total/NA	Prep	3510C			1060 mL	1 mL	341927	05/21/16 09:32	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1	1060 mL	1 mL	341929	05/21/16 20:59	GMH	TAL NSH
Dissolved	Prep	3005A			50 mL	50 mL	340856	05/17/16 19:37	RDF	TAL NSH
Dissolved	Analysis	6020A		1	50 mL	50 mL	341303	05/18/16 17:25	KKK	TAL NSH

Client Sample ID: TB

Lab Sample ID: 490-103608-10

Date Collected: 05/10/16 08:00
Matrix: Water
Date Received: 05/12/16 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	339716	05/13/16 17:34	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	340911	05/18/16 14:55	A1B	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: GHD Services Inc.
Project/Site: 701 Bozarth Ave., Woodland, WA

TestAmerica Job ID: 490-103608-1
SDG: 060866

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NSH
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH

Protocol References:

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: GHD Services Inc.
Project/Site: 701 Bozarth Ave., Woodland, WA

TestAmerica Job ID: 490-103608-1
SDG: 060866

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Washington	State Program	10	C789	07-19-16

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-103608 Chain of Custody

Cooler Received/Opened On 5/12/2016 @ 1020

Time Samples Removed From Cooler 0920 5/13/16 Time Samples Placed In Storage 1317 (2 Hour Window)

1. Tracking # 3430 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID 14740456 pH Strip Lot HC564992 Chlorine Strip Lot 1211515B _

2. Temperature of rep. sample or temp blank when opened: 2.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (intial) AES

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) AES

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) AES

I certify that I attached a label with the unique LIMS number to each container (intial) AES

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..# N/A

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 490
103608

Cooler Received/Opened On 5/12/2016 @ 1020

Time Samples Removed From Cooler 0920 5/13/16 Time Samples Placed In Storage 1317 (2 Hour Window)

1. Tracking # 3420 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID 17610176 pH Strip Lot HC564992 Chlorine Strip Lot 1211515B

2. Temperature of rep. sample or temp blank when opened: 2.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 front left

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) BS

7. Were custody seals on containers: YES NO and intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (intial) AES

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) AES

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) AES

I certify that I attached a label with the unique LIMS number to each container (intial) AES

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# N/A

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

Shell Oil Products US Chain Of Custody Record

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (_____)
☐ Other (_____)

Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☑ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☐ OTHER _____	

Print Bill To Contact Name: Brian Peters

PO #:

PlaNet Site or Project ID:

GSAP Project ID:

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 5/11/16

PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services

LOG CODE: BTSS

ADDRESS: 1680 Rogers Ave., San Jose, CA

PROJECT CONTACT (Hardcopy or PDF Report to): Brian Peters

TELEPHONE: 206-438-2371

FAX:

Bill To Contact E-MAIL: brian.peters@ghd.com

SITE ADDRESS: Street and City: 701 Bozarth Ave., Woodland

State: WA

GHD Project / Task Number:

EDF DELIVERABLE TO (Name, Company, Office Location): Brian Peters, GHD, Lynnwood, WA

PHONE NO.: 425-563-6506

E-MAIL: brian.peters@aecom.com

AECOM Other ID

SAMPLER NAME(S) (Print): LEE BORES

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☑ UST AGENCY: Washington Dept of Ecology

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☐ LEVEL 4 ☐ OTHER (SPECIFY) _____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☐ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

UNIT COST

LAB-56 BTEX	St LAB-123 - WA NW Dx Water	LAB-35 MTBE	LAB-36 TBA	LAB-36 TBA	LAB-37 DIPE	LAB-38 TAME	LAB-39 ETBE

NON-UNIT COST

WA - NWTPH-Gx	Dissolved Lead (6020A) (FF)	Naphthalene (8260B)	EPA Method 8260 Full	EPA Method 8270	EPA Method 8082A

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	LAB-56 BTEX	St LAB-123	LAB-35 MTBE	LAB-36 TBA	LAB-36 TBA	LAB-37 DIPE	LAB-38 TAME	LAB-39 ETBE	WA - NWTPH-Gx	Dissolved Lead (6020A) (FF)	Naphthalene (8260B)	EPA 8260 Full	EPA 8270	EPA 8082A	Container PID Readings or Laboratory Notes
	GW-0608666-051116-LB-MW-1	5/11/16	0952	W6	X	X				9	X	X							X	X	X				Loc: 490 103608
	GW-0608666-051116-LB-MW-2	↓	0837	W6	X	X		X		13	X	X							X	X	X	X	X	X	
	GW-0608666-051016-LB-MW-3	5/10/16	1155	W6	X	X				9	X	X							X	X	X				
	GW-0608666-051016-LB-MW-4		1300	W6	X	X				9	X	X							X	X	X				
	GW-0608666-051016-LB-MW-5		0936	W6	X	X		X		13	X	X							X	X	X	X	X	X	
	GW-0608666-051016-LB-MW-6		1402	W6	X	X		X		11	X	X							X	X	X	X	X		
	GW-0608666-051016-LB-MW-7		1507	W6	X	X				9	X	X							X	X	X				
	GW-0608666-051016-LB-MW-8	↓	1050	W6	X	X				9	X	X							X	X	X				
	GW-0608666-051116-LB-MW-9	5/11/16	1055	W6	X	X				9	X	X							X	X	X	X			
	TB	5/10/16	0800	W6	X					2	X								X						ON HOLD

Relinquished by: (Signature)	Received by: (Signature) SHIPPED VIA FEDEX	Date: 5/11/16	Time:
Relinquished by: (Signature)	Received by: (Signature) Anthony Q Stvartek	Date: 5/12/16 5/13/16	Time: 1020
Relinquished by: (Signature)	Received by: (Signature)	Date: (ADS 5/13/16)	Time:

Version: 14Dec15

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 490-103608-1
SDG Number: 060866

Login Number: 103608
List Number: 1
Creator: Stvartak, Anthony Q

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-157307-1
TestAmerica SDG: 701 Bozarth Ave, Woodland WA
Client Project/Site: Shell Woodland

For:
GHD Services Inc.
20818 44th Ave W
Suite 190
Lynnwood, Washington 98036

Attn: Brian Peters

Roxanne Cisneros

Authorized for release by:
8/23/2018 11:07:36 AM

Roxanne Cisneros, Senior Project Manager
(615)301-5761
roxanne.cisneros@testamericainc.com

Table of Contents

Sample Summary

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157307-1
SDG: 701 Bozarth Ave, Woodland WA

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-157307-1	S-060866-8818-DT-A 5.0	Solid	08/08/18 12:45	08/11/18 10:45
490-157307-2	S-060866-8818-DT-A 10.0	Solid	08/08/18 12:55	08/11/18 10:45
490-157307-3	S-060866-8818-DT-A 15.0	Solid	08/08/18 13:10	08/11/18 10:45
490-157307-4	S-060866-8818-DT-B 5.0	Solid	08/08/18 09:15	08/11/18 10:45
490-157307-5	S-060866-8818-DT-B 10.0	Solid	08/08/18 09:25	08/11/18 10:45
490-157307-6	S-060866-8818-DT-B 15.0	Solid	08/08/18 09:35	08/11/18 10:45
490-157307-7	S-060866-8818-DT-C 5.0	Solid	08/08/18 15:45	08/11/18 10:45
490-157307-8	S-060866-8818-DT-C 10.0	Solid	08/08/18 15:55	08/11/18 10:45
490-157307-9	S-060866-8818-DT-C 15.0	Solid	08/08/18 16:00	08/11/18 10:45
490-157307-10	S-060866-8918-DT-D 5.0	Solid	08/09/18 10:00	08/11/18 10:45
490-157307-11	S-060866-8918-DT-D 10.0	Solid	08/09/18 10:10	08/11/18 10:45
490-157307-12	S-060866-8918-DT-D 15.0'	Solid	08/09/18 10:22	08/11/18 10:45
490-157307-13	S-060866-8918-DT-E 5.0	Solid	08/09/18 08:25	08/11/18 10:45
490-157307-14	S-060866-8918-DT-E 10.0	Solid	08/09/18 08:35	08/11/18 10:45
490-157307-15	S-060866-8918-DT-E 15.0	Solid	08/09/18 08:45	08/11/18 10:45
490-157307-16	S-060866-8918-DT-F 5.0	Solid	08/09/18 11:50	08/11/18 10:45
490-157307-17	S-060866-8918-DT-F 10.0	Solid	08/09/18 12:00	08/11/18 10:45
490-157307-18	S-060866-8918-DT-F 15.0	Solid	08/09/18 12:07	08/11/18 10:45
490-157307-19	S-060866-8918-DT-G 5.0	Solid	08/09/18 10:55	08/11/18 10:45
490-157307-20	S-060866-8918-DT-G 10.0	Solid	08/09/18 11:05	08/11/18 10:45
490-157307-21	S-060866-8918-DT-G 15.0	Solid	08/09/18 11:15	08/11/18 10:45
490-157307-22	S-060866-8818-DT-H 5.0	Solid	08/08/18 16:55	08/11/18 10:45
490-157307-23	S-060866-8818-DT-H 10.0	Solid	08/08/18 17:00	08/11/18 10:45
490-157307-24	S-060866-8818-DT-H 15.0	Solid	08/08/18 17:10	08/11/18 10:45
490-157307-25	S-060866-8918-DT-I 5.0	Solid	08/09/18 07:00	08/11/18 10:45
490-157307-26	S-060866-8918-DT-I 10.0	Solid	08/09/18 07:10	08/11/18 10:45
490-157307-27	S-060866-8918-DT-I 15.0	Solid	08/09/18 07:20	08/11/18 10:45
490-157307-28	GW-060866-8918-DT-I	Water	08/09/18 14:05	08/11/18 10:45
490-157307-29	Trip Blanks	Solid	08/09/18 00:01	08/11/18 10:45

Job ID: 490-157307-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-157307-1

Comments
No additional comments.

Receipt
The samples were received on 8/11/2018 10:45 AM; the samples arrived in good condition, properly preserved and, where requ on ice. The temperatures of the 3 coolers at receipt time were 3.1º C, 3.9º C and 4.0º C.

Receipt Exceptions
157307-30 is a trip blank that was received empty.

GC/MS VOA
Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associat with analytical batch 490-535580.

Method(s) 8260B: The method blank for analytical batch 490-535435 contained Carbon Disulfide above the reporting limit (RL). This analyte was not reported.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 490-535435 recovered outside control limits for the following analytes: 4-Methyl-2-Pentanone. This analyte was not reported.

Method(s) 8260B: The following samples were diluted due to the nature of the sample matrix: S-060866-8918-DT-D 5.0 (490-157307-10), S-060866-8918-DT-E 10.0 (490-157307-14), S-060866-8918-DT-G 5.0 (490-157307-19) and S-060866-8918- 10.0 (490-157307-26). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: Surrogate recovery was outside control limits for the following sample: S-060866-8918-DT-D 5.0 (490-157307 and S-060866-8918-DT-G 5.0 (490-157307-19). 4-Bromofluorobenzene surrogate is not associated with reported analytes. Data has been reported.

Method(s) 8260B: Surrogate recovery for the following samples were outside control limits: S-060866-8918-DT-E 5.0 (490-157307-13), S-060866-8918-DT-E 10.0 (490-157307-14), S-060866-8818-DT-H 5.0 (490-157307-22), S-060866-8818-DT- (490-157307-23), S-060866-8918-DT-I 5.0 (490-157307-25), S-060866-8918-DT-I 10.0 (490-157307-26), (490-157307-B-26-A I and (490-157307-B-26-A MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Surrogate recovery for the following samples were outside control limits: S-060866-8918-DT-F 5.0 (490-157307-16), S-060866-8818-DT-H 15.0 (490-157307-24) and S-060866-8918-DT-I 15.0 (490-157307-27). Evidence of ma interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associat with analytical batch 490-535747.

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample: S-060866-8918-DT-D 5.0 (490-157307-10). The sample(s) shows evidence of matrix interference.

Method(s) 8260B: Surrogate recovery for the following sample was outside control limits: S-060866-8918-DT-D 5.0 (490-157307-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associat with analytical batch 490-535841.

Job ID: 490-157307-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Method(s) 8260B: The laboratory control sample duplicate (LCSD) for analytical batch 490-535837 recovered outside control lim for the following analyte(s): Chloroethane. Chloroethane has been identified as a poor performing analyte when analyzed using method; therefore, re-extraction/re-analysis was not performed.

Method(s) 8260B: Surrogate recovery for the following sample was outside control limits: S-060866-8918-DT-F 10.0 (490-157307-17). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The following sample was diluted due to the nature of the sample matrix: S-060866-8918-DT-G 10.0 (490-157307-20). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-536438.

Method(s) 8260B: Surrogate recovery for the following sample was outside control limits: S-060866-8918-DT-D 5.0 (490-157307-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC VOA

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

GC Semi VOA

Method(s) NWTPH-Dx: There was insufficient contamination present for analyte C24-C40 to perform a pattern match for the following samples: S-060866-8818-DT-A 10.0 (490-157307-2), S-060866-8818-DT-A 15.0 (490-157307-3), S-060866-8818-DT- 10.0 (490-157307-5) and S-060866-8818-DT-B 15.0 (490-157307-6).

Method(s) NWTPH-Dx: The following samples contained a hydrocarbon pattern for analyte C24-C40 which does not match a typical Total Petroleum Hydrocarbon (TPH) pattern used by the laboratory for quantitative purposes: S-060866-8918-DT-D 10.0 (490-157307-11) and S-060866-8918-DT-E 15.0 (490-157307-15).

Method(s) NWTPH-Dx: There was insufficient contamination present for analyte C10-C24 to perform a pattern match for the following samples: S-060866-8818-DT-B 5.0 (490-157307-4) and (490-157307-G-4-B DU). The following samples contained a hydrocarbon pattern for analyte C24-C40 which does not match a typical Total Petroleum Hydrocarbon (TPH) pattern used by th laboratory for quantitative purposes: S-060866-8818-DT-B 5.0 (490-157307-4) and (490-157307-G-4-B DU).

Method(s) NWTPH-Dx: The following samples were diluted due to the abundance of target analytes: S-060866-8918-DT-D 5.0 (490-157307-10), S-060866-8918-DT-E 5.0 (490-157307-13), S-060866-8918-DT-E 10.0 (490-157307-14), S-060866-8918-DT- (490-157307-16), S-060866-8918-DT-F 10.0 (490-157307-17), S-060866-8918-DT-F 15.0 (490-157307-18) and (490-157307-G DU). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method(s) NWTPH-Dx: Surrogate recovery for the following sample was outside control limits: S-060866-8918-DT-G 5.0 (490-157307-19). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) NWTPH-Dx: The following sample was diluted to bring the concentration of target analytes within the calibration rang S-060866-8918-DT-G 5.0 (490-157307-19). Elevated reporting limits (RLs) are provided.

Method(s) NWTPH-Dx: The following samples contained a hydrocarbon pattern that most closely resembles the Kerosene and Motor oil products used by the laboratory for quantitative purposes: S-060866-8918-DT-D 5.0 (490-157307-10), S-060866-8918-DT-F 5.0 (490-157307-16), S-060866-8918-DT-F 10.0 (490-157307-17), S-060866-8918-DT-F 15.0 (490-1573(

Job ID: 490-157307-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

S-060866-8918-DT-G 5.0 (490-157307-19) and (490-157307-G-16-B DU).

Method(s) NWTPH-Dx: The following samples contained a hydrocarbon pattern for analyte C10-C24 that most closely resemble Kerosene product used by the laboratory for quantitative purposes: S-060866-8918-DT-E 5.0 (490-157307-13) and S-060866-8918-DT-E 10.0 (490-157307-14). The following samples contained a hydrocarbon pattern for analyte C24-C40 whic does not match a typical Total Petroleum Hydrocarbon (TPH) pattern used by the laboratory for quantitative purposes: S-060866-8918-DT-E 5.0 (490-157307-13) and S-060866-8918-DT-E 10.0 (490-157307-14).

Method(s) NWTPH-Dx: The sample duplicate (DUP) precision for preparation batch 490-536301 and analytical batch 490-53668 was outside control limits. Sample non-homogeneity is suspected.

Method(s) NWTPH-Dx: The following samples were diluted due to the abundance of target analytes: S-060866-8818-DT-H 5.0 (490-157307-22), S-060866-8818-DT-H 10.0 (490-157307-23), S-060866-8918-DT-I 5.0 (490-157307-25), S-060866-8918-DT-I (490-157307-26) and (490-157307-G-25-B DU). As such, surrogate recoveries are below the calibration range or are not report and elevated reporting limits (RLs) are provided.

Method(s) NWTPH-Dx: Surrogate recovery for the following sample was outside control limits: S-060866-8818-DT-H 15.0 (490-157307-24). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) NWTPH-Dx: The following sample was diluted to bring the concentration of target analytes within the calibration rang S-060866-8818-DT-H 15.0 (490-157307-24). Elevated reporting limits (RLs) are provided.

Method(s) NWTPH-Dx: The following samples contained a hydrocarbon pattern that most closely resembles the Kerosene and Motor oil products used by the laboratory for quantitative purposes: S-060866-8918-DT-G 10.0 (490-157307-20), S-060866-8818-DT-H 5.0 (490-157307-22), S-060866-8818-DT-H 10.0 (490-157307-23), S-060866-8818-DT-H 15.0 (490-1573 S-060866-8918-DT-I 5.0 (490-157307-25), S-060866-8918-DT-I 10.0 (490-157307-26) and (490-157307-G-25-B DU).

Method(s) NWTPH-Dx: The following sample contained a hydrocarbon pattern for analyte C10-C24 that most closely resembles Kerosene product used by the laboratory for quantitative purposes: S-060866-8918-DT-I 15.0 (490-157307-27). The following sample contained a hydrocarbon pattern for analyte C24-C40 which does not match a typical Total Petroleum Hydrocarbon (TPI pattern used by the laboratory for quantitative purposes: S-060866-8918-DT-I 15.0 (490-157307-27).

Method(s) NWTPH-Dx: The following sample contained a hydrocarbon pattern for analyte C24-C40 which does not match a typi Total Petroleum Hydrocarbon (TPH) pattern used by the laboratory for quantitative purposes: S-060866-8918-DT-G 15.0 (490-157307-21).

Method(s) NWTPH-Dx: There was insufficient contamination present to perform a pattern match for the following sample: GW-060866-8918-DT-I (490-157307-28).

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

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

VOA Prep
Method(s) 5035: The septum had fallen into the sample. S-060866-8918-DT-F 10.0 (490-157307-17)

Method(s) 5035: The septum had sunk into the sample. S-060866-8818-DT-A 5.0 (490-157307-1)

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits
*	ISTD response or retention time outside acceptable limits
E	Result exceeded calibration range.
*	LCS or LCSD is outside acceptance limits.

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F3	Duplicate RPD exceeds the control limit

Glossary

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

Client Sample ID: S-060866-8818-DT-A 5.0
Date Collected: 08/08/18 12:45
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-1
Matrix: Solid
Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00222		mg/Kg	☼	08/08/18 14:45	08/13/18 19:24	1
Ethylbenzene	ND		0.00222		mg/Kg	☼	08/08/18 14:45	08/13/18 19:24	1
Toluene	ND		0.00222		mg/Kg	☼	08/08/18 14:45	08/13/18 19:24	1
Xylenes, Total	ND		0.00666		mg/Kg	☼	08/08/18 14:45	08/13/18 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*08/08/18 14:45*	*08/13/18 19:24*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*	*08/08/18 14:45*	*08/13/18 19:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*	*08/08/18 14:45*	*08/13/18 19:24*	*1*
Toluene-d8 (Surr)	*113*		*70 - 130*	*08/08/18 14:45*	*08/13/18 19:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	13.9		6.05		mg/Kg	☼	08/08/18 14:45	08/14/18 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*50 - 150*	*08/08/18 14:45*	*08/14/18 00:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		4.73		mg/Kg	☼	08/15/18 15:42	08/16/18 13:55	1
C24-C40	ND		4.73		mg/Kg	☼	08/15/18 15:42	08/16/18 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*61*		*50 - 150*	*08/15/18 15:42*	*08/16/18 13:55*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84.5		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8818-DT-A 10.0

Date Collected: 08/08/18 12:55
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-2

Matrix: Solid
Percent Solids: 74.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00299		mg/Kg	☼	08/08/18 14:55	08/13/18 19:52	1
Ethylbenzene	ND		0.00299		mg/Kg	☼	08/08/18 14:55	08/13/18 19:52	1
Toluene	ND		0.00299		mg/Kg	☼	08/08/18 14:55	08/13/18 19:52	1
Xylenes, Total	ND		0.00897		mg/Kg	☼	08/08/18 14:55	08/13/18 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*08/08/18 14:55*	*08/13/18 19:52*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*08/08/18 14:55*	*08/13/18 19:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*	*08/08/18 14:55*	*08/13/18 19:52*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/08/18 14:55*	*08/13/18 19:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		7.96		mg/Kg	☼	08/08/18 14:55	08/14/18 01:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*50 - 150*	*08/08/18 14:55*	*08/14/18 01:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		5.30		mg/Kg	☼	08/15/18 15:42	08/16/18 14:13	1
C24-C40	**5.61**		5.30		mg/Kg	☼	08/15/18 15:42	08/16/18 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*69*		*50 - 150*	*08/15/18 15:42*	*08/16/18 14:13*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**74.2**		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8818-DT-A 15.0

Date Collected: 08/08/18 13:10
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-3

Matrix: Solid
Percent Solids: 75.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00235		mg/Kg	☼	08/08/18 15:10	08/13/18 20:20	1
Ethylbenzene	ND		0.00235		mg/Kg	☼	08/08/18 15:10	08/13/18 20:20	1
Toluene	ND		0.00235		mg/Kg	☼	08/08/18 15:10	08/13/18 20:20	1
Xylenes, Total	ND		0.00705		mg/Kg	☼	08/08/18 15:10	08/13/18 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*08/08/18 15:10*	*08/13/18 20:20*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*08/08/18 15:10*	*08/13/18 20:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*	*08/08/18 15:10*	*08/13/18 20:20*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*08/08/18 15:10*	*08/13/18 20:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		7.49		mg/Kg	☼	08/08/18 15:10	08/14/18 02:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*	*08/08/18 15:10*	*08/14/18 02:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		5.19		mg/Kg	☼	08/15/18 15:42	08/16/18 14:31	1
C24-C40	**6.08**		5.19		mg/Kg	☼	08/15/18 15:42	08/16/18 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*76*		*50 - 150*	*08/15/18 15:42*	*08/16/18 14:31*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**75.9**		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8818-DT-B 5.0

Date Collected: 08/08/18 09:15
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-4

Matrix: Solid
Percent Solids: 77.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00218**		0.00205		mg/Kg	☼	08/08/18 11:15	08/13/18 20:48	1
Ethylbenzene	ND		0.00205		mg/Kg	☼	08/08/18 11:15	08/13/18 20:48	1
Toluene	ND		0.00205		mg/Kg	☼	08/08/18 11:15	08/13/18 20:48	1
Xylenes, Total	ND		0.00614		mg/Kg	☼	08/08/18 11:15	08/13/18 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*08/08/18 11:15*	*08/13/18 20:48*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*08/08/18 11:15*	*08/13/18 20:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*	*08/08/18 11:15*	*08/13/18 20:48*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/08/18 11:15*	*08/13/18 20:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		7.14		mg/Kg	☼	08/08/18 11:15	08/14/18 02:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*	*08/08/18 11:15*	*08/14/18 02:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**5.50**		5.15		mg/Kg	☼	08/15/18 15:42	08/16/18 14:49	1
C24-C40	**17.7**		5.15		mg/Kg	☼	08/15/18 15:42	08/16/18 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*94*		*50 - 150*	*08/15/18 15:42*	*08/16/18 14:49*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**77.3**		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8818-DT-B 10.0

Date Collected: 08/08/18 09:25
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-5

Matrix: Solid
Percent Solids: 68.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00256		mg/Kg	☼	08/08/18 11:25	08/13/18 21:16	1
Ethylbenzene	ND		0.00256		mg/Kg	☼	08/08/18 11:25	08/13/18 21:16	1
Toluene	ND		0.00256		mg/Kg	☼	08/08/18 11:25	08/13/18 21:16	1
Xylenes, Total	ND		0.00769		mg/Kg	☼	08/08/18 11:25	08/13/18 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*08/08/18 11:25*	*08/13/18 21:16*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*	*08/08/18 11:25*	*08/13/18 21:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*	*08/08/18 11:25*	*08/13/18 21:16*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/08/18 11:25*	*08/13/18 21:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		9.29		mg/Kg	☼	08/08/18 11:25	08/14/18 03:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*	*08/08/18 11:25*	*08/14/18 03:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		5.82		mg/Kg	☼	08/15/18 15:42	08/16/18 15:26	1
C24-C40	**6.12**		5.82		mg/Kg	☼	08/15/18 15:42	08/16/18 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*77*		*50 - 150*	*08/15/18 15:42*	*08/16/18 15:26*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**68.0**		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8818-DT-B 15.0

Date Collected: 08/08/18 09:35
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-6

Matrix: Solid
Percent Solids: 75.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00217		mg/Kg	☼	08/08/18 11:35	08/13/18 21:44	1
Ethylbenzene	ND		0.00217		mg/Kg	☼	08/08/18 11:35	08/13/18 21:44	1
Toluene	ND		0.00217		mg/Kg	☼	08/08/18 11:35	08/13/18 21:44	1
Xylenes, Total	ND		0.00651		mg/Kg	☼	08/08/18 11:35	08/13/18 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*08/08/18 11:35*	*08/13/18 21:44*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*08/08/18 11:35*	*08/13/18 21:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*	*08/08/18 11:35*	*08/13/18 21:44*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/08/18 11:35*	*08/13/18 21:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		7.30		mg/Kg	☼	08/08/18 11:35	08/14/18 04:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*	*08/08/18 11:35*	*08/14/18 04:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		5.21		mg/Kg	☼	08/15/18 15:42	08/16/18 15:44	1
C24-C40	ND		5.21		mg/Kg	☼	08/15/18 15:42	08/16/18 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*61*		*50 - 150*	*08/15/18 15:42*	*08/16/18 15:44*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**75.8**		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8818-DT-C 5.0

Date Collected: 08/08/18 15:45
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-7

Matrix: Solid
Percent Solids: 73.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00212		mg/Kg	☼	08/08/18 17:45	08/13/18 22:12	1
Ethylbenzene	ND		0.00212		mg/Kg	☼	08/08/18 17:45	08/13/18 22:12	1
Toluene	ND		0.00212		mg/Kg	☼	08/08/18 17:45	08/13/18 22:12	1
Xylenes, Total	ND		0.00637		mg/Kg	☼	08/08/18 17:45	08/13/18 22:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*08/08/18 17:45*	*08/13/18 22:12*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*08/08/18 17:45*	*08/13/18 22:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*	*08/08/18 17:45*	*08/13/18 22:12*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/08/18 17:45*	*08/13/18 22:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		8.18		mg/Kg	☼	08/08/18 17:45	08/14/18 04:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*	*08/08/18 17:45*	*08/14/18 04:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		5.40		mg/Kg	☼	08/15/18 15:42	08/16/18 16:02	1
C24-C40	ND		5.40		mg/Kg	☼	08/15/18 15:42	08/16/18 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*53*		*50 - 150*	*08/15/18 15:42*	*08/16/18 16:02*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**73.7**		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8818-DT-C 10.0

Date Collected: 08/08/18 15:55
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-8

Matrix: Solid
Percent Solids: 71.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00288**		0.00241		mg/Kg	☼	08/08/18 17:55	08/14/18 02:52	1
Ethylbenzene	ND		0.00241		mg/Kg	☼	08/08/18 17:55	08/14/18 02:52	1
Toluene	ND		0.00241		mg/Kg	☼	08/08/18 17:55	08/14/18 02:52	1
Xylenes, Total	ND		0.00724		mg/Kg	☼	08/08/18 17:55	08/14/18 02:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*08/08/18 17:55*	*08/14/18 02:52*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*08/08/18 17:55*	*08/14/18 02:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*	*08/08/18 17:55*	*08/14/18 02:52*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/08/18 17:55*	*08/14/18 02:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		9.16		mg/Kg	☼	08/08/18 17:55	08/14/18 05:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*50 - 150*	*08/08/18 17:55*	*08/14/18 05:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		5.58		mg/Kg	☼	08/15/18 15:42	08/16/18 16:20	1
C24-C40	ND		5.58		mg/Kg	☼	08/15/18 15:42	08/16/18 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*59*		*50 - 150*	*08/15/18 15:42*	*08/16/18 16:20*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**71.5**		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8818-DT-C 15.0

Date Collected: 08/08/18 16:00
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-9

Matrix: Solid
Percent Solids: 71.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00255		mg/Kg	☼	08/08/18 18:00	08/14/18 03:19	1
Ethylbenzene	ND		0.00255		mg/Kg	☼	08/08/18 18:00	08/14/18 03:19	1
Toluene	ND		0.00255		mg/Kg	☼	08/08/18 18:00	08/14/18 03:19	1
Xylenes, Total	ND		0.00764		mg/Kg	☼	08/08/18 18:00	08/14/18 03:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*08/08/18 18:00*	*08/14/18 03:19*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*08/08/18 18:00*	*08/14/18 03:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*	*08/08/18 18:00*	*08/14/18 03:19*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/08/18 18:00*	*08/14/18 03:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		8.76		mg/Kg	☼	08/08/18 18:00	08/14/18 05:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*	*08/08/18 18:00*	*08/14/18 05:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		5.54		mg/Kg	☼	08/15/18 15:42	08/16/18 16:39	1
C24-C40	**5.65**		5.54		mg/Kg	☼	08/15/18 15:42	08/16/18 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*57*		*50 - 150*	*08/15/18 15:42*	*08/16/18 16:39*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**71.2**		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8918-DT-D 5.0

Date Collected: 08/09/18 10:00
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-10

Matrix: Solid
Percent Solids: 78.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0510		0.00241		mg/Kg	☼	08/09/18 12:00	08/17/18 17:19	1
Ethylbenzene	3.67		0.163		mg/Kg	☼	08/09/18 12:00	08/14/18 02:01	1
Toluene	0.0449		0.00229		mg/Kg	☼	08/09/18 12:00	08/14/18 14:56	1
Xylenes, Total	0.566		0.00688		mg/Kg	☼	08/09/18 12:00	08/14/18 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*168*	*X*	*70 - 130*	*08/09/18 12:00*	*08/14/18 02:01*	*1*
4-Bromofluorobenzene (Surr)	*1062*	*X*	*70 - 130*	*08/09/18 12:00*	*08/14/18 14:56*	*1*
4-Bromofluorobenzene (Surr)	*329*	*X*	*70 - 130*	*08/09/18 12:00*	*08/17/18 17:19*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*	*08/09/18 12:00*	*08/14/18 02:01*	*1*
Dibromofluoromethane (Surr)	*179*	*X **	*70 - 130*	*08/09/18 12:00*	*08/14/18 14:56*	*1*
Dibromofluoromethane (Surr)	*152*	*X*	*70 - 130*	*08/09/18 12:00*	*08/17/18 17:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*	*08/09/18 12:00*	*08/14/18 02:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*194*	*X **	*70 - 130*	*08/09/18 12:00*	*08/14/18 14:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*131*	*X*	*70 - 130*	*08/09/18 12:00*	*08/17/18 17:19*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*	*08/09/18 12:00*	*08/14/18 02:01*	*1*
Toluene-d8 (Surr)	*556*	*X*	*70 - 130*	*08/09/18 12:00*	*08/14/18 14:56*	*1*
Toluene-d8 (Surr)	*387*	*X*	*70 - 130*	*08/09/18 12:00*	*08/17/18 17:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	2140		742		mg/Kg	☼	08/09/18 12:00	08/14/18 09:21	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*	*08/09/18 12:00*	*08/14/18 09:21*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	6640		249		mg/Kg	☼	08/15/18 15:42	08/17/18 13:07	50
C24-C40	1880		249		mg/Kg	☼	08/15/18 15:42	08/17/18 13:07	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*0*	*X*	*50 - 150*	*08/15/18 15:42*	*08/17/18 13:07*	*50*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	78.5		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8918-DT-D 10.0
Date Collected: 08/09/18 10:10
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-11
Matrix: Solid
Percent Solids: 69.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0604		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Benzene	**0.00749**		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Bromobenzene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Bromochloromethane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Bromodichloromethane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Bromoform	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Bromomethane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
2-Butanone (MEK)	ND		0.0604		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Carbon disulfide	ND		0.00604		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Carbon tetrachloride	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Chlorobenzene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Chlorodibromomethane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Chloroethane	ND		0.00604		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Chloroform	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Chloromethane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
2-Chlorotoluene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
4-Chlorotoluene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
cis-1,2-Dichloroethene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
cis-1,3-Dichloropropene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,2-Dibromo-3-Chloropropane	ND		0.00604		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,2-Dibromoethane (EDB)	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Dibromomethane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,2-Dichlorobenzene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,3-Dichlorobenzene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,4-Dichlorobenzene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Dichlorodifluoromethane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,1-Dichloroethane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,2-Dichloroethane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,1-Dichloroethene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,2-Dichloropropane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,3-Dichloropropane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
2,2-Dichloropropane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,1-Dichloropropene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Ethylbenzene	**0.00720**		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Hexachlorobutadiene	ND		0.00604		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
2-Hexanone	ND		0.0604		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Isopropylbenzene	**0.0232**		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Methylene Chloride	ND		0.0121		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
4-Methyl-2-pentanone (MIBK)	ND		0.0604		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Methyl tert-butyl ether	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Naphthalene	ND		0.00604		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
n-Butylbenzene	**0.0115**		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
N-Propylbenzene	**0.0526**		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
p-Isopropyltoluene	**0.00258**		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
sec-Butylbenzene	**0.00798**		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Styrene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
tert-Butylbenzene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,1,1,2-Tetrachloroethane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,1,2,2-Tetrachloroethane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1

Client Sample ID: S-060866-8918-DT-D 10.0
Date Collected: 08/09/18 10:10
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-11
Matrix: Solid
Percent Solids: 69.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Toluene	**0.00424**		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
trans-1,2-Dichloroethene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
trans-1,3-Dichloropropene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,2,3-Trichlorobenzene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,2,4-Trichlorobenzene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,1,1-Trichloroethane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,1,2-Trichloroethane	ND		0.00604		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Trichloroethene	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Trichlorofluoromethane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,2,3-Trichloropropane	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,2,4-Trimethylbenzene	**0.119**		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
1,3,5-Trimethylbenzene	**0.0354**		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Vinyl chloride	ND		0.00242		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1
Xylenes, Total	**0.199**		0.00725		mg/Kg	☼	08/09/18 12:10	08/14/18 03:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*08/09/18 12:10*	*08/14/18 03:47*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*08/09/18 12:10*	*08/14/18 03:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*	*08/09/18 12:10*	*08/14/18 03:47*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*08/09/18 12:10*	*08/14/18 03:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**1670**		93.9		mg/Kg	☼	08/09/18 12:10	08/14/18 09:56	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*50 - 150*	*08/09/18 12:10*	*08/14/18 09:56*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		5.75		mg/Kg	☼	08/15/18 15:42	08/16/18 17:15	1
C24-C40	**11.8**		5.75		mg/Kg	☼	08/15/18 15:42	08/16/18 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*65*		*50 - 150*	*08/15/18 15:42*	*08/16/18 17:15*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**30.7**		0.1		%			08/13/18 13:55	1
Percent Solids	**69.3**		0.1		%			08/13/18 13:55	1

Client Sample ID: S-060866-8918-DT-D 15.0'
Date Collected: 08/09/18 10:22
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-12
Matrix: Solid
Percent Solids: 68.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0621		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Benzene	**0.00770**		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Bromobenzene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Bromochloromethane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Bromodichloromethane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Bromoform	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Bromomethane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
2-Butanone (MEK)	ND		0.0621		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Carbon disulfide	ND		0.00621		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Carbon tetrachloride	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Chlorobenzene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Chlorodibromomethane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Chloroethane	ND		0.00621		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Chloroform	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Chloromethane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
2-Chlorotoluene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
4-Chlorotoluene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
cis-1,2-Dichloroethene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
cis-1,3-Dichloropropene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,2-Dibromo-3-Chloropropane	ND		0.00621		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,2-Dibromoethane (EDB)	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Dibromomethane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,2-Dichlorobenzene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,3-Dichlorobenzene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,4-Dichlorobenzene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Dichlorodifluoromethane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,1-Dichloroethane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,2-Dichloroethane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,1-Dichloroethene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,2-Dichloropropane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,3-Dichloropropane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
2,2-Dichloropropane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,1-Dichloropropene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Ethylbenzene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Hexachlorobutadiene	ND		0.00621		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
2-Hexanone	ND		0.0621		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Isopropylbenzene	**0.0192**		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Methylene Chloride	ND		0.0124		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
4-Methyl-2-pentanone (MIBK)	ND		0.0621		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Methyl tert-butyl ether	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Naphthalene	ND		0.00621		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
n-Butylbenzene	**0.00547**		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
N-Propylbenzene	**0.0367**		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
p-Isopropyltoluene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
sec-Butylbenzene	**0.00505**		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Styrene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
tert-Butylbenzene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,1,1,2-Tetrachloroethane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,1,2,2-Tetrachloroethane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1

Client Sample ID: S-060866-8918-DT-D 15.0'
Date Collected: 08/09/18 10:22
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-12
Matrix: Solid
Percent Solids: 68.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Toluene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
trans-1,2-Dichloroethene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
trans-1,3-Dichloropropene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,2,3-Trichlorobenzene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,2,4-Trichlorobenzene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,1,1-Trichloroethane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,1,2-Trichloroethane	ND		0.00621		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Trichloroethene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Trichlorofluoromethane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,2,3-Trichloropropane	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,2,4-Trimethylbenzene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
1,3,5-Trimethylbenzene	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Vinyl chloride	ND		0.00248		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1
Xylenes, Total	ND		0.00745		mg/Kg	☼	08/09/18 12:22	08/14/18 04:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*08/09/18 12:22*	*08/14/18 04:15*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*08/09/18 12:22*	*08/14/18 04:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*	*08/09/18 12:22*	*08/14/18 04:15*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*08/09/18 12:22*	*08/14/18 04:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**16.0**		13.4		mg/Kg	☼	08/09/18 12:22	08/14/18 11:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*50 - 150*	*08/09/18 12:22*	*08/14/18 11:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		5.77		mg/Kg	☼	08/15/18 15:42	08/16/18 17:34	1
C24-C40	ND		5.77		mg/Kg	☼	08/15/18 15:42	08/16/18 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*68*		*50 - 150*	*08/15/18 15:42*	*08/16/18 17:34*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**31.1**		0.1		%			08/13/18 13:55	1
Percent Solids	**68.9**		0.1		%			08/13/18 13:55	1

Client Sample ID: S-060866-8918-DT-E 5.0

Date Collected: 08/09/18 08:25
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-13

Matrix: Solid
Percent Solids: 71.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.683		0.163		mg/Kg	☼	08/09/18 10:25	08/14/18 02:30	1
Ethylbenzene	198		3.27		mg/Kg	☼	08/09/18 10:25	08/14/18 14:10	20
Toluene	0.695		0.163		mg/Kg	☼	08/09/18 10:25	08/14/18 02:30	1
Xylenes, Total	344		9.80		mg/Kg	☼	08/09/18 10:25	08/14/18 14:10	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*248*	*X*	*70 - 130*	*08/09/18 10:25*	*08/14/18 02:30*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*08/09/18 10:25*	*08/14/18 14:10*	*20*
Dibromofluoromethane (Surr)	*94*		*70 - 130*	*08/09/18 10:25*	*08/14/18 02:30*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*	*08/09/18 10:25*	*08/14/18 14:10*	*20*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*	*08/09/18 10:25*	*08/14/18 02:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*	*08/09/18 10:25*	*08/14/18 14:10*	*20*
Toluene-d8 (Surr)	*95*		*70 - 130*	*08/09/18 10:25*	*08/14/18 02:30*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*	*08/09/18 10:25*	*08/14/18 14:10*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	3700		858		mg/Kg	☼	08/09/18 10:25	08/14/18 08:10	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*50 - 150*	*08/09/18 10:25*	*08/14/18 08:10*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	4130		281		mg/Kg	☼	08/15/18 15:42	08/17/18 13:43	50
C24-C40	2410		281		mg/Kg	☼	08/15/18 15:42	08/17/18 13:43	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*0*	*X*	*50 - 150*	*08/15/18 15:42*	*08/17/18 13:43*	*50*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	71.0		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8918-DT-E 10.0
Date Collected: 08/09/18 08:35
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-14
Matrix: Solid
Percent Solids: 76.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		3.80		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Benzene	**0.504**		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Bromobenzene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Bromochloromethane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Bromodichloromethane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Bromoform	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Bromomethane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
2-Butanone (MEK)	ND		3.80		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Carbon disulfide	ND		0.380		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Carbon tetrachloride	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Chlorobenzene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Chlorodibromomethane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Chloroethane	ND		0.380		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Chloroform	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Chloromethane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
2-Chlorotoluene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
4-Chlorotoluene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
cis-1,2-Dichloroethene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
cis-1,3-Dichloropropene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,2-Dibromo-3-Chloropropane	ND		0.380		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,2-Dibromoethane (EDB)	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Dibromomethane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,2-Dichlorobenzene	**1.23**		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,3-Dichlorobenzene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,4-Dichlorobenzene	**0.538**		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Dichlorodifluoromethane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,1-Dichloroethane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,2-Dichloroethane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,1-Dichloroethene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,2-Dichloropropane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,3-Dichloropropane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
2,2-Dichloropropane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,1-Dichloropropene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Ethylbenzene	**80.9**		3.04		mg/Kg	☼	08/09/18 10:35	08/14/18 15:11	20
Hexachlorobutadiene	ND		0.380		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
2-Hexanone	ND		3.80		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Isopropylbenzene	**14.5**		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Methylene Chloride	ND		0.760		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
4-Methyl-2-pentanone (MIBK)	ND		3.80		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Methyl tert-butyl ether	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Naphthalene	**26.0**		0.380		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
n-Butylbenzene	**16.7**		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
N-Propylbenzene	**35.2**		3.04		mg/Kg	☼	08/09/18 10:35	08/14/18 15:11	20
p-Isopropyltoluene	**6.65**		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
sec-Butylbenzene	**7.39**		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Styrene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
tert-Butylbenzene	**0.454**		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,1,1,2-Tetrachloroethane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,1,2,2-Tetrachloroethane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1

Client Sample ID: S-060866-8918-DT-E 10.0
Date Collected: 08/09/18 08:35
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-14
Matrix: Solid
Percent Solids: 76.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Toluene	**0.233**		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
trans-1,2-Dichloroethene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
trans-1,3-Dichloropropene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,2,3-Trichlorobenzene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,2,4-Trichlorobenzene	**1.07**		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,1,1-Trichloroethane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,1,2-Trichloroethane	ND		0.380		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Trichloroethene	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Trichlorofluoromethane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,2,3-Trichloropropane	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
1,2,4-Trimethylbenzene	**203**		3.04		mg/Kg	☼	08/09/18 10:35	08/14/18 15:11	20
1,3,5-Trimethylbenzene	**65.3**		3.04		mg/Kg	☼	08/09/18 10:35	08/14/18 15:11	20
Vinyl chloride	ND		0.152		mg/Kg	☼	08/09/18 10:35	08/14/18 02:59	1
Xylenes, Total	**288**		9.11		mg/Kg	☼	08/09/18 10:35	08/14/18 15:11	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*176*	*X*	*70 - 130*	*08/09/18 10:35*	*08/14/18 02:59*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*08/09/18 10:35*	*08/14/18 15:11*	*20*
Dibromofluoromethane (Surr)	*93*		*70 - 130*	*08/09/18 10:35*	*08/14/18 02:59*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*	*08/09/18 10:35*	*08/14/18 15:11*	*20*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*	*08/09/18 10:35*	*08/14/18 02:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*	*08/09/18 10:35*	*08/14/18 15:11*	*20*
Toluene-d8 (Surr)	*92*		*70 - 130*	*08/09/18 10:35*	*08/14/18 02:59*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*	*08/09/18 10:35*	*08/14/18 15:11*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**3110**		806		mg/Kg	☼	08/09/18 10:35	08/14/18 08:45	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*	*08/09/18 10:35*	*08/14/18 08:45*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**6210**		128		mg/Kg	☼	08/15/18 15:42	08/17/18 14:20	25
C24-C40	**3230**		128		mg/Kg	☼	08/15/18 15:42	08/17/18 14:20	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*0*	*X*	*50 - 150*	*08/15/18 15:42*	*08/17/18 14:20*	*25*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**23.2**		0.1		%			08/13/18 13:55	1
Percent Solids	**76.8**		0.1		%			08/13/18 13:55	1

Client Sample ID: S-060866-8918-DT-E 15.0
Date Collected: 08/09/18 08:45
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-15
Matrix: Solid
Percent Solids: 71.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0582		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Benzene	**0.120**		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Bromobenzene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Bromochloromethane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Bromodichloromethane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Bromoform	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Bromomethane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
2-Butanone (MEK)	ND		0.0582		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Carbon disulfide	ND		0.00582		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Carbon tetrachloride	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Chlorobenzene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Chlorodibromomethane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Chloroethane	**0.00632**		0.00582		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Chloroform	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Chloromethane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
2-Chlorotoluene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
4-Chlorotoluene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
cis-1,2-Dichloroethene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
cis-1,3-Dichloropropene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,2-Dibromo-3-Chloropropane	ND		0.00582		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,2-Dibromoethane (EDB)	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Dibromomethane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,2-Dichlorobenzene	**0.00379**		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,3-Dichlorobenzene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,4-Dichlorobenzene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Dichlorodifluoromethane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,1-Dichloroethane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,2-Dichloroethane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,1-Dichloroethene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,2-Dichloropropane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,3-Dichloropropane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
2,2-Dichloropropane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,1-Dichloropropene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Ethylbenzene	**0.931**		0.162		mg/Kg	☼	08/09/18 10:45	08/14/18 18:32	1
Hexachlorobutadiene	ND		0.00582		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
2-Hexanone	ND		0.0582		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Isopropylbenzene	**0.0519**		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Methylene Chloride	ND		0.0116		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
4-Methyl-2-pentanone (MIBK)	ND		0.0582		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Methyl tert-butyl ether	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Naphthalene	**0.0502**		0.00582		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
n-Butylbenzene	**0.0228**		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
N-Propylbenzene	**0.111**		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
p-Isopropyltoluene	**0.0103**		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
sec-Butylbenzene	**0.0123**		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Styrene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
tert-Butylbenzene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,1,1,2-Tetrachloroethane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,1,2,2-Tetrachloroethane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1

Client Sample ID: S-060866-8918-DT-E 15.0
Date Collected: 08/09/18 08:45
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-15
Matrix: Solid
Percent Solids: 71.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Toluene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
trans-1,2-Dichloroethene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
trans-1,3-Dichloropropene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,2,3-Trichlorobenzene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,2,4-Trichlorobenzene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,1,1-Trichloroethane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,1,2-Trichloroethane	ND		0.00582		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Trichloroethene	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Trichlorofluoromethane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,2,3-Trichloropropane	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
1,2,4-Trimethylbenzene	**1.18**		0.162		mg/Kg	☼	08/09/18 10:45	08/14/18 18:32	1
1,3,5-Trimethylbenzene	**0.152**		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Vinyl chloride	ND		0.00233		mg/Kg	☼	08/09/18 10:45	08/14/18 04:43	1
Xylenes, Total	**2.17**		0.487		mg/Kg	☼	08/09/18 10:45	08/14/18 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*08/09/18 10:45*	*08/14/18 04:43*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*08/09/18 10:45*	*08/14/18 18:32*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*08/09/18 10:45*	*08/14/18 04:43*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*	*08/09/18 10:45*	*08/14/18 18:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*	*08/09/18 10:45*	*08/14/18 04:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*	*08/09/18 10:45*	*08/14/18 18:32*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*	*08/09/18 10:45*	*08/14/18 04:43*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*	*08/09/18 10:45*	*08/14/18 18:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**46.1**		8.67		mg/Kg	☼	08/09/18 10:45	08/15/18 02:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*	*08/09/18 10:45*	*08/15/18 02:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		5.54		mg/Kg	☼	08/15/18 15:42	08/16/18 19:05	1
C24-C40	**8.45**		5.54		mg/Kg	☼	08/15/18 15:42	08/16/18 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*73*		*50 - 150*	*08/15/18 15:42*	*08/16/18 19:05*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**28.3**		0.1		%			08/13/18 13:55	1
Percent Solids	**71.7**		0.1		%			08/13/18 13:55	1

Client Sample ID: S-060866-8918-DT-F 5.0

Date Collected: 08/09/18 11:50
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-16

Matrix: Solid
Percent Solids: 67.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0432		0.00277		mg/Kg	☼	08/09/18 13:50	08/14/18 05:11	1
Ethylbenzene	21.7		1.90		mg/Kg	☼	08/09/18 13:50	08/14/18 19:29	10
Toluene	0.0659		0.00277		mg/Kg	☼	08/09/18 13:50	08/14/18 05:11	1
Xylenes, Total	125		5.71		mg/Kg	☼	08/09/18 13:50	08/14/18 19:29	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*245*	*X*	*70 - 130*	*08/09/18 13:50*	*08/14/18 05:11*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*08/09/18 13:50*	*08/14/18 19:29*	*10*
Dibromofluoromethane (Surr)	*108*		*70 - 130*	*08/09/18 13:50*	*08/14/18 05:11*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*	*08/09/18 13:50*	*08/14/18 19:29*	*10*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*	*08/09/18 13:50*	*08/14/18 05:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*	*08/09/18 13:50*	*08/14/18 19:29*	*10*
Toluene-d8 (Surr)	*240*	*X*	*70 - 130*	*08/09/18 13:50*	*08/14/18 05:11*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*	*08/09/18 13:50*	*08/14/18 19:29*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	2860		183		mg/Kg	☼	08/09/18 13:50	08/15/18 16:37	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*	*08/09/18 13:50*	*08/15/18 16:37*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	3130		118		mg/Kg	☼	08/15/18 15:42	08/17/18 14:38	20
C24-C40	1280		118		mg/Kg	☼	08/15/18 15:42	08/17/18 14:38	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*0*	*X*	*50 - 150*	*08/15/18 15:42*	*08/17/18 14:38*	*20*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	67.7		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8918-DT-F 10.0

Date Collected: 08/09/18 12:00
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-17

Matrix: Solid
Percent Solids: 74.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.897		0.150		mg/Kg	☼	08/09/18 14:00	08/15/18 15:59	1
Ethylbenzene	74.1		3.00		mg/Kg	☼	08/09/18 14:00	08/15/18 16:28	20
Toluene	112		3.00		mg/Kg	☼	08/09/18 14:00	08/15/18 16:28	20
Xylenes, Total	462		9.01		mg/Kg	☼	08/09/18 14:00	08/15/18 16:28	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*186*	*X*	*70 - 130*	*08/09/18 14:00*	*08/15/18 15:59*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/09/18 14:00*	*08/15/18 16:28*	*20*
Dibromofluoromethane (Surr)	*90*		*70 - 130*	*08/09/18 14:00*	*08/15/18 15:59*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*08/09/18 14:00*	*08/15/18 16:28*	*20*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*	*08/09/18 14:00*	*08/15/18 15:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*	*08/09/18 14:00*	*08/15/18 16:28*	*20*
Toluene-d8 (Surr)	*96*		*70 - 130*	*08/09/18 14:00*	*08/15/18 15:59*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/09/18 14:00*	*08/15/18 16:28*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	6860		702		mg/Kg	☼	08/09/18 14:00	08/15/18 18:36	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*	*08/09/18 14:00*	*08/15/18 18:36*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	3740		133		mg/Kg	☼	08/15/18 15:42	08/17/18 15:14	25
C24-C40	983		133		mg/Kg	☼	08/15/18 15:42	08/17/18 15:14	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*0*	*X*	*50 - 150*	*08/15/18 15:42*	*08/17/18 15:14*	*25*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	74.9		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8918-DT-F 15.0

Date Collected: 08/09/18 12:07
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-18

Matrix: Solid
Percent Solids: 74.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.303		0.148		mg/Kg	☼	08/09/18 14:07	08/14/18 03:28	1
Ethylbenzene	16.7		0.148		mg/Kg	☼	08/09/18 14:07	08/14/18 03:28	1
Toluene	34.1		2.96		mg/Kg	☼	08/09/18 14:07	08/14/18 15:39	20
Xylenes, Total	115		8.88		mg/Kg	☼	08/09/18 14:07	08/14/18 15:39	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*08/09/18 14:07*	*08/14/18 03:28*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*08/09/18 14:07*	*08/14/18 15:39*	*20*
Dibromofluoromethane (Surr)	*95*		*70 - 130*	*08/09/18 14:07*	*08/14/18 03:28*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*08/09/18 14:07*	*08/14/18 15:39*	*20*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*	*08/09/18 14:07*	*08/14/18 03:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*	*08/09/18 14:07*	*08/14/18 15:39*	*20*
Toluene-d8 (Surr)	*95*		*70 - 130*	*08/09/18 14:07*	*08/14/18 03:28*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*	*08/09/18 14:07*	*08/14/18 15:39*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	970		74.4		mg/Kg	☼	08/09/18 14:07	08/15/18 14:42	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*101*		*50 - 150*	*08/09/18 14:07*	*08/15/18 14:42*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	3100		134		mg/Kg	☼	08/15/18 15:42	08/17/18 15:51	25
C24-C40	586		134		mg/Kg	☼	08/15/18 15:42	08/17/18 15:51	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*0*	*X*	*50 - 150*	*08/15/18 15:42*	*08/17/18 15:51*	*25*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	74.2		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8918-DT-G 5.0

Date Collected: 08/09/18 10:55
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-19

Matrix: Solid
Percent Solids: 65.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.272		0.185		mg/Kg	☼	08/09/18 12:55	08/14/18 03:57	1
Ethylbenzene	18.0		0.185		mg/Kg	☼	08/09/18 12:55	08/14/18 03:57	1
Toluene	ND		0.185		mg/Kg	☼	08/09/18 12:55	08/14/18 03:57	1
Xylenes, Total	29.6		0.556		mg/Kg	☼	08/09/18 12:55	08/14/18 03:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*141*	*X*	*70 - 130*	*08/09/18 12:55*	*08/14/18 03:57*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*	*08/09/18 12:55*	*08/14/18 03:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*	*08/09/18 12:55*	*08/14/18 03:57*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*	*08/09/18 12:55*	*08/14/18 03:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	2710		205		mg/Kg	☼	08/09/18 12:55	08/15/18 17:17	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*	*08/09/18 12:55*	*08/15/18 17:17*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	709		59.9		mg/Kg	☼	08/15/18 15:42	08/17/18 16:09	10
C24-C40	340		59.9		mg/Kg	☼	08/15/18 15:42	08/17/18 16:09	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*48*	*X*	*50 - 150*	*08/15/18 15:42*	*08/17/18 16:09*	*10*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	65.7		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8918-DT-G 10.0

Date Collected: 08/09/18 11:05
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-20

Matrix: Solid
Percent Solids: 75.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.169		mg/Kg	☼	08/09/18 13:05	08/15/18 15:02	1
Ethylbenzene	**6.36**		0.169		mg/Kg	☼	08/09/18 13:05	08/15/18 15:02	1
Toluene	ND		0.169		mg/Kg	☼	08/09/18 13:05	08/15/18 15:02	1
Xylenes, Total	**10.8**		0.506		mg/Kg	☼	08/09/18 13:05	08/15/18 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*08/09/18 13:05*	*08/15/18 15:02*	*1*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*08/09/18 13:05*	*08/15/18 15:02*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*08/09/18 13:05*	*08/15/18 15:02*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*08/09/18 13:05*	*08/15/18 15:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*	*08/09/18 13:05*	*08/15/18 15:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*	*08/09/18 13:05*	*08/15/18 15:02*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*	*08/09/18 13:05*	*08/15/18 15:02*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*	*08/09/18 13:05*	*08/15/18 15:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**1040**		91.5		mg/Kg	☼	08/09/18 13:05	08/15/18 15:19	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*	*08/09/18 13:05*	*08/15/18 15:19*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**1350**		53.2		mg/Kg	☼	08/16/18 15:46	08/18/18 13:12	10
C24-C40	**495**		53.2		mg/Kg	☼	08/16/18 15:46	08/18/18 13:12	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*51*		*50 - 150*	*08/16/18 15:46*	*08/18/18 13:12*	*10*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**75.1**		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8918-DT-G 15.0

Date Collected: 08/09/18 11:15
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-21

Matrix: Solid
Percent Solids: 73.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.271**		0.00222		mg/Kg	☼	08/09/18 13:15	08/14/18 06:07	1
Ethylbenzene	**0.962**		0.155		mg/Kg	☼	08/09/18 13:15	08/14/18 19:00	1
Toluene	ND		0.00222		mg/Kg	☼	08/09/18 13:15	08/14/18 06:07	1
Xylenes, Total	**0.287**		0.00665		mg/Kg	☼	08/09/18 13:15	08/14/18 06:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*08/09/18 13:15*	*08/14/18 06:07*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*08/09/18 13:15*	*08/14/18 19:00*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*	*08/09/18 13:15*	*08/14/18 06:07*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*	*08/09/18 13:15*	*08/14/18 19:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*	*08/09/18 13:15*	*08/14/18 06:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*	*08/09/18 13:15*	*08/14/18 19:00*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*	*08/09/18 13:15*	*08/14/18 06:07*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*	*08/09/18 13:15*	*08/14/18 19:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**28.0**		7.66		mg/Kg	☼	08/09/18 13:15	08/15/18 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*	*08/09/18 13:15*	*08/15/18 13:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		5.35		mg/Kg	☼	08/16/18 15:46	08/18/18 12:00	1
C24-C40	**6.88**		5.35		mg/Kg	☼	08/16/18 15:46	08/18/18 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*85*		*50 - 150*	*08/16/18 15:46*	*08/18/18 12:00*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**73.2**		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8818-DT-H 5.0

Date Collected: 08/08/18 16:55
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-22

Matrix: Solid
Percent Solids: 70.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.11		0.196		mg/Kg	☼	08/08/18 18:55	08/14/18 04:27	1
Ethylbenzene	90.9		3.92		mg/Kg	☼	08/08/18 18:55	08/14/18 16:08	20
Toluene	125		3.92		mg/Kg	☼	08/08/18 18:55	08/14/18 16:08	20
Xylenes, Total	603		11.8		mg/Kg	☼	08/08/18 18:55	08/14/18 16:08	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*163*	*X*	*70 - 130*	*08/08/18 18:55*	*08/14/18 04:27*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*08/08/18 18:55*	*08/14/18 16:08*	*20*
Dibromofluoromethane (Surr)	*91*		*70 - 130*	*08/08/18 18:55*	*08/14/18 04:27*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*	*08/08/18 18:55*	*08/14/18 16:08*	*20*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*	*08/08/18 18:55*	*08/14/18 04:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*	*08/08/18 18:55*	*08/14/18 16:08*	*20*
Toluene-d8 (Surr)	*93*		*70 - 130*	*08/08/18 18:55*	*08/14/18 04:27*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*	*08/08/18 18:55*	*08/14/18 16:08*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	5750		178		mg/Kg	☼	08/08/18 18:55	08/15/18 17:57	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*	*08/08/18 18:55*	*08/15/18 17:57*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	9040		281		mg/Kg	☼	08/16/18 15:46	08/18/18 13:30	50
C24-C40	3480		281		mg/Kg	☼	08/16/18 15:46	08/18/18 13:30	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*0*	*X*	*50 - 150*	*08/16/18 15:46*	*08/18/18 13:30*	*50*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	70.5		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8818-DT-H 10.0

Date Collected: 08/08/18 17:00
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-23

Matrix: Solid
Percent Solids: 74.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3.08		0.189		mg/Kg	☼	08/08/18 19:00	08/14/18 04:56	1
Ethylbenzene	184		3.78		mg/Kg	☼	08/08/18 19:00	08/14/18 16:37	20
Toluene	278		3.78		mg/Kg	☼	08/08/18 19:00	08/14/18 16:37	20
Xylenes, Total	1040		22.7		mg/Kg	☼	08/08/18 19:00	08/15/18 15:31	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*323*	*X*	*70 - 130*	*08/08/18 19:00*	*08/14/18 04:56*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*08/08/18 19:00*	*08/14/18 16:37*	*20*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*08/08/18 19:00*	*08/15/18 15:31*	*40*
Dibromofluoromethane (Surr)	*91*		*70 - 130*	*08/08/18 19:00*	*08/14/18 04:56*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*	*08/08/18 19:00*	*08/14/18 16:37*	*20*
Dibromofluoromethane (Surr)	*104*		*70 - 130*	*08/08/18 19:00*	*08/15/18 15:31*	*40*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*	*08/08/18 19:00*	*08/14/18 04:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*	*08/08/18 19:00*	*08/14/18 16:37*	*20*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*	*08/08/18 19:00*	*08/15/18 15:31*	*40*
Toluene-d8 (Surr)	*96*		*70 - 130*	*08/08/18 19:00*	*08/14/18 04:56*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*	*08/08/18 19:00*	*08/14/18 16:37*	*20*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/08/18 19:00*	*08/15/18 15:31*	*40*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	25700		975		mg/Kg	☼	08/08/18 19:00	08/15/18 19:15	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*	*08/08/18 19:00*	*08/15/18 19:15*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	5220		133		mg/Kg	☼	08/16/18 15:46	08/18/18 13:48	25
C24-C40	1430		133		mg/Kg	☼	08/16/18 15:46	08/18/18 13:48	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*0*	*X*	*50 - 150*	*08/16/18 15:46*	*08/18/18 13:48*	*25*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	74.3		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8818-DT-H 15.0

Date Collected: 08/08/18 17:10
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-24

Matrix: Solid
Percent Solids: 71.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.110		0.00222		mg/Kg	☼	08/08/18 19:10	08/14/18 06:35	1
Ethylbenzene	3.95		0.170		mg/Kg	☼	08/08/18 19:10	08/17/18 14:27	1
Toluene	5.78		0.170		mg/Kg	☼	08/08/18 19:10	08/17/18 14:27	1
Xylenes, Total	28.9		0.509		mg/Kg	☼	08/08/18 19:10	08/17/18 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*283*	*X*	*70 - 130*	*08/08/18 19:10*	*08/14/18 06:35*	*1*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*08/08/18 19:10*	*08/17/18 14:27*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*	*08/08/18 19:10*	*08/14/18 06:35*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*	*08/08/18 19:10*	*08/17/18 14:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*	*08/08/18 19:10*	*08/14/18 06:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*	*08/08/18 19:10*	*08/17/18 14:27*	*1*
Toluene-d8 (Surr)	*227*	*X*	*70 - 130*	*08/08/18 19:10*	*08/14/18 06:35*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*08/08/18 19:10*	*08/17/18 14:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	1410		80.7		mg/Kg	☼	08/08/18 19:10	08/15/18 15:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*	*08/08/18 19:10*	*08/15/18 15:58*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	779		28.0		mg/Kg	☼	08/16/18 15:46	08/18/18 14:25	5
C24-C40	290		28.0		mg/Kg	☼	08/16/18 15:46	08/18/18 14:25	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*49*	*X*	*50 - 150*	*08/16/18 15:46*	*08/18/18 14:25*	*5*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	71.4		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8918-DT-I 5.0

Date Collected: 08/09/18 07:00
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-25

Matrix: Solid
Percent Solids: 74.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.500		0.207		mg/Kg	☼	08/09/18 09:00	08/14/18 05:24	1
Ethylbenzene	153		4.14		mg/Kg	☼	08/09/18 09:00	08/14/18 17:05	20
Toluene	75.4		4.14		mg/Kg	☼	08/09/18 09:00	08/14/18 17:05	20
Xylenes, Total	1080		12.4		mg/Kg	☼	08/09/18 09:00	08/14/18 17:05	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*301*	*X*	*70 - 130*	*08/09/18 09:00*	*08/14/18 05:24*	*1*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*08/09/18 09:00*	*08/14/18 17:05*	*20*
Dibromofluoromethane (Surr)	*94*		*70 - 130*	*08/09/18 09:00*	*08/14/18 05:24*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*08/09/18 09:00*	*08/14/18 17:05*	*20*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*	*08/09/18 09:00*	*08/14/18 05:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*	*08/09/18 09:00*	*08/14/18 17:05*	*20*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/09/18 09:00*	*08/14/18 05:24*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*	*08/09/18 09:00*	*08/14/18 17:05*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	18500		898		mg/Kg	☼	08/09/18 09:00	08/15/18 19:54	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*	*08/09/18 09:00*	*08/15/18 19:54*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	15500		536		mg/Kg	☼	08/16/18 15:46	08/18/18 14:43	100
C24-C40	7160		536		mg/Kg	☼	08/16/18 15:46	08/18/18 14:43	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*0*	*X*	*50 - 150*	*08/16/18 15:46*	*08/18/18 14:43*	*100*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	74.7		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8918-DT-I 10.0

Date Collected: 08/09/18 07:10
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-26

Matrix: Solid
Percent Solids: 75.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.920		0.158		mg/Kg	☼	08/09/18 09:10	08/14/18 05:53	1
Ethylbenzene	83.1		3.16		mg/Kg	☼	08/09/18 09:10	08/14/18 17:34	20
Toluene	78.7		3.16		mg/Kg	☼	08/09/18 09:10	08/14/18 17:34	20
Xylenes, Total	510		9.47		mg/Kg	☼	08/09/18 09:10	08/14/18 17:34	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*268*	*X*	*70 - 130*	*08/09/18 09:10*	*08/14/18 05:53*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/09/18 09:10*	*08/14/18 17:34*	*20*
Dibromofluoromethane (Surr)	*92*		*70 - 130*	*08/09/18 09:10*	*08/14/18 05:53*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*	*08/09/18 09:10*	*08/14/18 17:34*	*20*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*	*08/09/18 09:10*	*08/14/18 05:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*	*08/09/18 09:10*	*08/14/18 17:34*	*20*
Toluene-d8 (Surr)	*95*		*70 - 130*	*08/09/18 09:10*	*08/14/18 05:53*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*	*08/09/18 09:10*	*08/14/18 17:34*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	7700		766		mg/Kg	☼	08/09/18 09:10	08/15/18 20:31	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*98*		*50 - 150*	*08/09/18 09:10*	*08/15/18 20:31*	*100*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	5470		209		mg/Kg	☼	08/16/18 15:46	08/19/18 10:07	40
C24-C40	1920		104		mg/Kg	☼	08/16/18 15:46	08/18/18 15:19	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*0*	*X*	*50 - 150*	*08/16/18 15:46*	*08/18/18 15:19*	*20*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	75.5		0.1		%			08/14/18 12:30	1

Client Sample ID: S-060866-8918-DT-I 15.0

Date Collected: 08/09/18 07:20
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-27

Matrix: Solid
Percent Solids: 69.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.169		0.00226		mg/Kg	☼	08/09/18 09:20	08/14/18 07:03	1
Ethylbenzene	1.45		0.176		mg/Kg	☼	08/09/18 09:20	08/17/18 14:56	1
Toluene	0.233		0.00226		mg/Kg	☼	08/09/18 09:20	08/14/18 07:03	1
Xylenes, Total	8.92		0.527		mg/Kg	☼	08/09/18 09:20	08/17/18 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*202*	*X*	*70 - 130*	*08/09/18 09:20*	*08/14/18 07:03*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/09/18 09:20*	*08/17/18 14:56*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*	*08/09/18 09:20*	*08/14/18 07:03*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*	*08/09/18 09:20*	*08/17/18 14:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*	*08/09/18 09:20*	*08/14/18 07:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*	*08/09/18 09:20*	*08/17/18 14:56*	*1*
Toluene-d8 (Surr)	*229*	*X*	*70 - 130*	*08/09/18 09:20*	*08/14/18 07:03*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*	*08/09/18 09:20*	*08/17/18 14:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	88.8		8.80		mg/Kg	☼	08/09/18 09:20	08/15/18 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*	*08/09/18 09:20*	*08/15/18 14:05*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	16.0		5.74		mg/Kg	☼	08/16/18 15:46	08/18/18 12:18	1
C24-C40	14.6		5.74		mg/Kg	☼	08/16/18 15:46	08/18/18 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*85*		*50 - 150*	*08/16/18 15:46*	*08/18/18 12:18*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	69.6		0.1		%			08/14/18 12:30	1

Client Sample ID: GW-060866-8918-DT-I

Date Collected: 08/09/18 14:05
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-28

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			08/13/18 21:09	1
Benzene	ND		1.00		ug/L			08/11/18 18:36	1
Bromobenzene	ND		1.00		ug/L			08/13/18 21:09	1
Bromochloromethane	ND		1.00		ug/L			08/13/18 21:09	1
Bromodichloromethane	ND		1.00		ug/L			08/13/18 21:09	1
Bromoform	ND		1.00		ug/L			08/13/18 21:09	1
Bromomethane	ND		1.00		ug/L			08/13/18 21:09	1
2-Butanone (MEK)	ND		50.0		ug/L			08/13/18 21:09	1
Carbon disulfide	ND		1.00		ug/L			08/13/18 21:09	1
Carbon tetrachloride	ND		1.00		ug/L			08/13/18 21:09	1
Chlorobenzene	ND		1.00		ug/L			08/13/18 21:09	1
Chlorodibromomethane	ND		1.00		ug/L			08/13/18 21:09	1
Chloroethane	ND		1.00		ug/L			08/13/18 21:09	1
Chloroform	ND		1.00		ug/L			08/13/18 21:09	1
Chloromethane	ND		1.00		ug/L			08/13/18 21:09	1
2-Chlorotoluene	ND		1.00		ug/L			08/13/18 21:09	1
4-Chlorotoluene	ND		1.00		ug/L			08/13/18 21:09	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			08/13/18 21:09	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			08/13/18 21:09	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			08/13/18 21:09	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			08/13/18 21:09	1
Dibromomethane	ND		1.00		ug/L			08/13/18 21:09	1
1,2-Dichlorobenzene	ND		1.00		ug/L			08/13/18 21:09	1
1,3-Dichlorobenzene	ND		1.00		ug/L			08/13/18 21:09	1
1,4-Dichlorobenzene	ND		1.00		ug/L			08/13/18 21:09	1
Dichlorodifluoromethane	ND		1.00		ug/L			08/13/18 21:09	1
1,1-Dichloroethane	ND		1.00		ug/L			08/13/18 21:09	1
1,2-Dichloroethane	ND		1.00		ug/L			08/13/18 21:09	1
1,1-Dichloroethene	ND		1.00		ug/L			08/13/18 21:09	1
1,2-Dichloropropane	ND		1.00		ug/L			08/13/18 21:09	1
1,3-Dichloropropane	ND		1.00		ug/L			08/13/18 21:09	1
2,2-Dichloropropane	ND		1.00		ug/L			08/13/18 21:09	1
1,1-Dichloropropene	ND		1.00		ug/L			08/13/18 21:09	1
Ethylbenzene	**10.2**		1.00		ug/L			08/11/18 18:36	1
Hexachlorobutadiene	ND		2.00		ug/L			08/13/18 21:09	1
2-Hexanone	ND		10.0		ug/L			08/13/18 21:09	1
Isopropylbenzene	**2.60**		1.00		ug/L			08/13/18 21:09	1
Methylene Chloride	**9.32**		5.00		ug/L			08/13/18 21:09	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			08/13/18 21:09	1
Methyl tert-butyl ether	ND		1.00		ug/L			08/13/18 21:09	1
Naphthalene	ND		5.00		ug/L			08/13/18 21:09	1
n-Butylbenzene	**1.31**		1.00		ug/L			08/13/18 21:09	1
N-Propylbenzene	**4.65**		1.00		ug/L			08/13/18 21:09	1
p-Isopropyltoluene	ND		1.00		ug/L			08/13/18 21:09	1
sec-Butylbenzene	ND		1.00		ug/L			08/13/18 21:09	1
Styrene	ND		1.00		ug/L			08/13/18 21:09	1
tert-Butylbenzene	ND		1.00		ug/L			08/13/18 21:09	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			08/13/18 21:09	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			08/13/18 21:09	1

Client Sample ID: GW-060866-8918-DT-I

Date Collected: 08/09/18 14:05
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-28

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00		ug/L			08/13/18 21:09	1
Toluene	**14.0**		1.00		ug/L			08/11/18 18:36	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			08/13/18 21:09	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			08/13/18 21:09	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			08/13/18 21:09	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			08/13/18 21:09	1
1,1,1-Trichloroethane	ND		1.00		ug/L			08/13/18 21:09	1
1,1,2-Trichloroethane	ND		1.00		ug/L			08/13/18 21:09	1
Trichloroethene	ND		1.00		ug/L			08/13/18 21:09	1
Trichlorofluoromethane	ND		1.00		ug/L			08/13/18 21:09	1
1,2,3-Trichloropropane	ND		1.00		ug/L			08/13/18 21:09	1
1,2,4-Trimethylbenzene	**26.2**		1.00		ug/L			08/13/18 21:09	1
1,3,5-Trimethylbenzene	**10.7**		1.00		ug/L			08/13/18 21:09	1
Vinyl chloride	ND		1.00		ug/L			08/13/18 21:09	1
Xylenes, Total	**65.8**		3.00		ug/L			08/11/18 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*		*08/11/18 18:36*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/13/18 21:09*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/11/18 18:36*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*08/13/18 21:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*08/11/18 18:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*08/13/18 21:09*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/11/18 18:36*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/13/18 21:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**524**		100		ug/L			08/15/18 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*109*		*50 - 150*		*08/15/18 15:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**126**		104		ug/L		08/21/18 09:15	08/22/18 17:05	1
C24-C40	ND		104		ug/L		08/21/18 09:15	08/22/18 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*71*		*50 - 150*	*08/21/18 09:15*	*08/22/18 17:05*	*1*

Client Sample ID: Trip Blanks

Date Collected: 08/09/18 00:01
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-29

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0500		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Benzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Bromobenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Bromochloromethane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Bromodichloromethane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Bromoform	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Bromomethane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
2-Butanone (MEK)	ND		0.0500		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Carbon disulfide	ND		0.00500		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Carbon tetrachloride	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Chlorobenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Chlorodibromomethane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Chloroethane	ND		0.00500		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Chloroform	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Chloromethane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
2-Chlorotoluene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
4-Chlorotoluene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
cis-1,2-Dichloroethene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
cis-1,3-Dichloropropene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,2-Dibromo-3-Chloropropane	ND		0.00500		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,2-Dibromoethane (EDB)	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Dibromomethane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,2-Dichlorobenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,3-Dichlorobenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,4-Dichlorobenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Dichlorodifluoromethane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,1-Dichloroethane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,2-Dichloroethane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,1-Dichloroethene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,2-Dichloropropane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,3-Dichloropropane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
2,2-Dichloropropane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,1-Dichloropropene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Ethylbenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Hexachlorobutadiene	ND		0.00500		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
2-Hexanone	ND		0.0500		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Isopropylbenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Methylene Chloride	ND		0.0100		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
4-Methyl-2-pentanone (MIBK)	ND		0.0500		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Methyl tert-butyl ether	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Naphthalene	ND		0.00500		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
n-Butylbenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
N-Propylbenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
p-Isopropyltoluene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
sec-Butylbenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Styrene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
tert-Butylbenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,1,1,2-Tetrachloroethane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,1,2,2-Tetrachloroethane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1

Client Sample ID: Trip Blanks
Date Collected: 08/09/18 00:01
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-29
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Toluene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
trans-1,2-Dichloroethene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
trans-1,3-Dichloropropene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,2,3-Trichlorobenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,2,4-Trichlorobenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,1,1-Trichloroethane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,1,2-Trichloroethane	ND		0.00500		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Trichloroethene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Trichlorofluoromethane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,2,3-Trichloropropane	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,2,4-Trimethylbenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
1,3,5-Trimethylbenzene	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Vinyl chloride	ND		0.00200		mg/Kg		08/09/18 02:01	08/14/18 02:24	1
Xylenes, Total	ND		0.00600		mg/Kg		08/09/18 02:01	08/14/18 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*08/09/18 02:01*	*08/14/18 02:24*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*	*08/09/18 02:01*	*08/14/18 02:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*	*08/09/18 02:01*	*08/14/18 02:24*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/09/18 02:01*	*08/14/18 02:24*	*1*

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

Lab Sample ID: MB 490-535435/6
Matrix: Water
Analysis Batch: 535435

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			08/11/18 15:01	1
Benzene	ND		1.00		ug/L			08/11/18 15:01	1
Bromobenzene	ND		1.00		ug/L			08/11/18 15:01	1
Bromochloromethane	ND		1.00		ug/L			08/11/18 15:01	1
Bromodichloromethane	ND		1.00		ug/L			08/11/18 15:01	1
Bromoform	ND		1.00		ug/L			08/11/18 15:01	1
Bromomethane	ND		1.00		ug/L			08/11/18 15:01	1
2-Butanone (MEK)	ND		50.0		ug/L			08/11/18 15:01	1
Carbon disulfide	2.785		1.00		ug/L			08/11/18 15:01	1
Carbon tetrachloride	ND		1.00		ug/L			08/11/18 15:01	1
Chlorobenzene	ND		1.00		ug/L			08/11/18 15:01	1
Chlorodibromomethane	ND		1.00		ug/L			08/11/18 15:01	1
Chloroethane	ND		1.00		ug/L			08/11/18 15:01	1
Chloroform	ND		1.00		ug/L			08/11/18 15:01	1
Chloromethane	ND		1.00		ug/L			08/11/18 15:01	1
2-Chlorotoluene	ND		1.00		ug/L			08/11/18 15:01	1
4-Chlorotoluene	ND		1.00		ug/L			08/11/18 15:01	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			08/11/18 15:01	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			08/11/18 15:01	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			08/11/18 15:01	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			08/11/18 15:01	1
Dibromomethane	ND		1.00		ug/L			08/11/18 15:01	1
1,2-Dichlorobenzene	ND		1.00		ug/L			08/11/18 15:01	1
1,3-Dichlorobenzene	ND		1.00		ug/L			08/11/18 15:01	1
1,4-Dichlorobenzene	ND		1.00		ug/L			08/11/18 15:01	1
Dichlorodifluoromethane	ND		1.00		ug/L			08/11/18 15:01	1
1,1-Dichloroethane	ND		1.00		ug/L			08/11/18 15:01	1
1,2-Dichloroethane	ND		1.00		ug/L			08/11/18 15:01	1
1,1-Dichloroethene	ND		1.00		ug/L			08/11/18 15:01	1
1,2-Dichloropropane	ND		1.00		ug/L			08/11/18 15:01	1
1,3-Dichloropropane	ND		1.00		ug/L			08/11/18 15:01	1
2,2-Dichloropropane	ND		1.00		ug/L			08/11/18 15:01	1
1,1-Dichloropropene	ND		1.00		ug/L			08/11/18 15:01	1
Ethylbenzene	ND		1.00		ug/L			08/11/18 15:01	1
Hexachlorobutadiene	ND		2.00		ug/L			08/11/18 15:01	1
2-Hexanone	ND		10.0		ug/L			08/11/18 15:01	1
Isopropylbenzene	ND		1.00		ug/L			08/11/18 15:01	1
Methylene Chloride	ND		5.00		ug/L			08/11/18 15:01	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			08/11/18 15:01	1
Methyl tert-butyl ether	ND		1.00		ug/L			08/11/18 15:01	1
Naphthalene	ND		5.00		ug/L			08/11/18 15:01	1
n-Butylbenzene	ND		1.00		ug/L			08/11/18 15:01	1
N-Propylbenzene	ND		1.00		ug/L			08/11/18 15:01	1
p-Isopropyltoluene	ND		1.00		ug/L			08/11/18 15:01	1
sec-Butylbenzene	ND		1.00		ug/L			08/11/18 15:01	1
Styrene	ND		1.00		ug/L			08/11/18 15:01	1
tert-Butylbenzene	ND		1.00		ug/L			08/11/18 15:01	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			08/11/18 15:01	1

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

Lab Sample ID: MB 490-535435/6
Matrix: Water
Analysis Batch: 535435

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			08/11/18 15:01	1
Tetrachloroethene	ND		1.00		ug/L			08/11/18 15:01	1
Toluene	ND		1.00		ug/L			08/11/18 15:01	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			08/11/18 15:01	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			08/11/18 15:01	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			08/11/18 15:01	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			08/11/18 15:01	1
1,1,1-Trichloroethane	ND		1.00		ug/L			08/11/18 15:01	1
1,1,2-Trichloroethane	ND		1.00		ug/L			08/11/18 15:01	1
Trichloroethene	ND		1.00		ug/L			08/11/18 15:01	1
Trichlorofluoromethane	ND		1.00		ug/L			08/11/18 15:01	1
1,2,3-Trichloropropane	ND		1.00		ug/L			08/11/18 15:01	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			08/11/18 15:01	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			08/11/18 15:01	1
Vinyl chloride	ND		1.00		ug/L			08/11/18 15:01	1
Xylenes, Total	ND		3.00		ug/L			08/11/18 15:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*		*08/11/18 15:01*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*08/11/18 15:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*08/11/18 15:01*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/11/18 15:01*	*1*

Lab Sample ID: LCS 490-535435/3
Matrix: Water
Analysis Batch: 535435

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	121.3		ug/L		121	39 - 150
Benzene	20.0	20.77		ug/L		104	70 - 130
Bromobenzene	20.0	22.64		ug/L		113	70 - 130
Bromochloromethane	20.0	19.83		ug/L		99	70 - 130
Bromodichloromethane	20.0	21.42		ug/L		107	70 - 130
Bromoform	20.0	18.73		ug/L		94	70 - 137
Bromomethane	20.0	22.50		ug/L		112	53 - 150
2-Butanone (MEK)	100	120.5		ug/L		120	55 - 143
Carbon disulfide	20.0	26.73		ug/L		134	64 - 135
Carbon tetrachloride	20.0	20.49		ug/L		102	70 - 147
Chlorobenzene	20.0	20.52		ug/L		103	70 - 130
Chlorodibromomethane	20.0	19.84		ug/L		99	70 - 133
Chloroethane	20.0	22.10		ug/L		110	60 - 138
Chloroform	20.0	20.57		ug/L		103	70 - 130
Chloromethane	20.0	21.49		ug/L		107	33 - 150
2-Chlorotoluene	20.0	21.90		ug/L		110	70 - 130
4-Chlorotoluene	20.0	24.51		ug/L		123	70 - 130
cis-1,2-Dichloroethene	20.0	18.96		ug/L		95	70 - 130
cis-1,3-Dichloropropene	20.0	22.53		ug/L		113	70 - 133
1,2-Dibromo-3-Chloropropane	20.0	21.57		ug/L		108	45 - 138

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

Lab Sample ID: LCS 490-535435/3
Matrix: Water
Analysis Batch: 535435

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	20.0	22.57		ug/L		113	70 - 130
Dibromomethane	20.0	20.53		ug/L		103	70 - 130
1,2-Dichlorobenzene	20.0	21.21		ug/L		106	70 - 130
1,3-Dichlorobenzene	20.0	20.87		ug/L		104	70 - 130
1,4-Dichlorobenzene	20.0	20.55		ug/L		103	70 - 130
Dichlorodifluoromethane	20.0	15.74		ug/L		79	48 - 150
1,1-Dichloroethane	20.0	21.33		ug/L		107	70 - 130
1,2-Dichloroethane	20.0	21.59		ug/L		108	70 - 130
1,1-Dichloroethene	20.0	20.25		ug/L		101	70 - 132
1,2-Dichloropropane	20.0	21.87		ug/L		109	70 - 130
1,3-Dichloropropane	20.0	23.10		ug/L		115	70 - 130
2,2-Dichloropropane	20.0	23.80		ug/L		119	60 - 143
1,1-Dichloropropene	20.0	21.20		ug/L		106	70 - 130
Ethylbenzene	20.0	20.64		ug/L		103	70 - 130
Hexachlorobutadiene	20.0	18.45		ug/L		92	70 - 138
2-Hexanone	100	129.1		ug/L		129	54 - 142
Isopropylbenzene	20.0	19.49		ug/L		97	70 - 131
Methylene Chloride	20.0	20.59		ug/L		103	70 - 130
4-Methyl-2-pentanone (MIBK)	100	139.7	*	ug/L		140	60 - 137
Methyl tert-butyl ether	20.0	22.28		ug/L		111	70 - 130
Naphthalene	20.0	22.52		ug/L		113	54 - 150
n-Butylbenzene	20.0	21.98		ug/L		110	68 - 137
N-Propylbenzene	20.0	22.97		ug/L		115	70 - 134
p-Isopropyltoluene	20.0	20.80		ug/L		104	66 - 130
sec-Butylbenzene	20.0	20.98		ug/L		105	70 - 135
Styrene	20.0	19.53		ug/L		98	70 - 130
tert-Butylbenzene	20.0	20.26		ug/L		101	70 - 130
1,1,1,2-Tetrachloroethane	20.0	19.87		ug/L		99	70 - 130
1,1,2,2-Tetrachloroethane	20.0	24.84		ug/L		124	69 - 131
Tetrachloroethene	20.0	18.81		ug/L		94	70 - 130
Toluene	20.0	19.39		ug/L		97	70 - 130
trans-1,2-Dichloroethene	20.0	22.60		ug/L		113	70 - 130
trans-1,3-Dichloropropene	20.0	21.31		ug/L		107	63 - 142
1,2,3-Trichlorobenzene	20.0	19.22		ug/L		96	46 - 150
1,2,4-Trichlorobenzene	20.0	17.47		ug/L		87	58 - 147
1,1,1-Trichloroethane	20.0	20.54		ug/L		103	70 - 135
1,1,2-Trichloroethane	20.0	21.46		ug/L		107	70 - 130
Trichloroethene	20.0	18.90		ug/L		95	70 - 130
Trichlorofluoromethane	20.0	20.48		ug/L		102	59 - 150
1,2,3-Trichloropropane	20.0	24.75		ug/L		124	70 - 131
1,2,4-Trimethylbenzene	20.0	20.97		ug/L		105	70 - 130
1,3,5-Trimethylbenzene	20.0	23.02		ug/L		115	70 - 130
Vinyl chloride	20.0	24.01		ug/L		120	57 - 137
Xylenes, Total	40.0	42.02		ug/L		105	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*

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

Lab Sample ID: LCS 490-535435/3
Matrix: Water
Analysis Batch: 535435

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: 490-157279-A-10 MS
Matrix: Water
Analysis Batch: 535435

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		100	114.2		ug/L		111	39 - 150
Benzene	ND		20.0	20.06		ug/L		100	55 - 147
Bromobenzene	ND		20.0	23.45		ug/L		117	60 - 133
Bromochloromethane	ND		20.0	19.04		ug/L		95	59 - 132
Bromodichloromethane	ND		20.0	20.35		ug/L		102	70 - 140
Bromoform	ND		20.0	18.69		ug/L		93	53 - 150
Bromomethane	ND		20.0	17.61		ug/L		88	30 - 150
2-Butanone (MEK)	ND		100	111.4		ug/L		111	50 - 143
Carbon disulfide	1.39	B	20.0	23.09		ug/L		109	35 - 150
Carbon tetrachloride	ND		20.0	21.53		ug/L		108	56 - 150
Chlorobenzene	ND		20.0	20.25		ug/L		101	70 - 130
Chlorodibromomethane	ND		20.0	19.13		ug/L		96	66 - 140
Chloroethane	ND		20.0	22.74		ug/L		114	58 - 141
Chloroform	ND		20.0	20.53		ug/L		103	66 - 138
Chloromethane	ND		20.0	21.16		ug/L		106	10 - 150
2-Chlorotoluene	ND		20.0	21.75		ug/L		109	67 - 138
4-Chlorotoluene	ND	F2	20.0	23.37		ug/L		117	69 - 138
cis-1,2-Dichloroethene	ND		20.0	19.15		ug/L		96	68 - 131
cis-1,3-Dichloropropene	ND		20.0	21.20		ug/L		106	70 - 133
1,2-Dibromo-3-Chloropropane	ND		20.0	20.13		ug/L		101	38 - 138
1,2-Dibromoethane (EDB)	ND		20.0	22.19		ug/L		111	65 - 137
Dibromomethane	ND		20.0	19.61		ug/L		98	70 - 130
1,2-Dichlorobenzene	ND		20.0	21.54		ug/L		108	70 - 130
1,3-Dichlorobenzene	ND	F2	20.0	20.27		ug/L		101	68 - 131
1,4-Dichlorobenzene	ND	F2	20.0	18.43		ug/L		92	70 - 130
Dichlorodifluoromethane	ND		20.0	14.32		ug/L		72	10 - 150
1,1-Dichloroethane	ND		20.0	21.64		ug/L		108	61 - 139
1,2-Dichloroethane	ND		20.0	20.20		ug/L		101	64 - 136
1,1-Dichloroethene	ND		20.0	21.35		ug/L		107	54 - 150
1,2-Dichloropropane	ND		20.0	20.75		ug/L		104	67 - 130
1,3-Dichloropropane	ND	F1	20.0	24.17		ug/L		121	70 - 130
2,2-Dichloropropane	ND		20.0	21.60		ug/L		108	50 - 146
1,1-Dichloropropene	ND		20.0	21.57		ug/L		108	54 - 150
Ethylbenzene	ND		20.0	21.81		ug/L		109	65 - 139
Hexachlorobutadiene	ND		20.0	17.60		ug/L		88	61 - 141
2-Hexanone	ND	F1	100	151.9	F1	ug/L		152	44 - 150
Isopropylbenzene	ND		20.0	20.25		ug/L		101	70 - 137
Methylene Chloride	ND		20.0	19.29		ug/L		96	64 - 130
4-Methyl-2-pentanone (MIBK)	ND	* F1	100	141.0	F1	ug/L		141	50 - 140
Methyl tert-butyl ether	ND		20.0	21.42		ug/L		107	55 - 141

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

Lab Sample ID: 490-157279-A-10 MS
Matrix: Water
Analysis Batch: 535435

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	ND		20.0	24.73		ug/L		124	32 - 150
n-Butylbenzene	ND		20.0	21.62		ug/L		108	61 - 141
N-Propylbenzene	ND		20.0	23.43		ug/L		117	53 - 150
p-Isopropyltoluene	ND		20.0	20.44		ug/L		102	66 - 137
sec-Butylbenzene	ND		20.0	20.54		ug/L		103	55 - 136
Styrene	ND		20.0	20.01		ug/L		100	70 - 130
tert-Butylbenzene	ND		20.0	20.22		ug/L		101	70 - 138
1,1,1,2-Tetrachloroethane	ND		20.0	19.31		ug/L		97	70 - 131
1,1,2,2-Tetrachloroethane	ND		20.0	25.87		ug/L		129	56 - 145
Tetrachloroethene	ND		20.0	19.22		ug/L		96	57 - 138
Toluene	ND		20.0	19.81		ug/L		99	64 - 136
trans-1,2-Dichloroethene	ND		20.0	22.99		ug/L		115	59 - 143
trans-1,3-Dichloropropene	ND		20.0	20.25		ug/L		101	63 - 142
1,2,3-Trichlorobenzene	ND		20.0	19.12		ug/L		96	36 - 150
1,2,4-Trichlorobenzene	ND		20.0	18.34		ug/L		92	47 - 147
1,1,1-Trichloroethane	ND		20.0	21.05		ug/L		105	68 - 144
1,1,2-Trichloroethane	ND		20.0	21.42		ug/L		107	70 - 130
Trichloroethene	ND		20.0	19.10		ug/L		95	63 - 135
Trichlorofluoromethane	ND		20.0	22.09		ug/L		110	44 - 150
1,2,3-Trichloropropane	ND	F1	20.0	24.69		ug/L		123	65 - 131
1,2,4-Trimethylbenzene	ND		20.0	20.74		ug/L		104	64 - 136
1,3,5-Trimethylbenzene	ND	F2	20.0	21.76		ug/L		109	69 - 139
Vinyl chloride	ND	F1	20.0	25.67		ug/L		128	57 - 150
Xylenes, Total	ND		40.0	44.03		ug/L		110	69 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: 490-157279-A-10 MSD
Matrix: Water
Analysis Batch: 535435

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		100	136.0		ug/L		133	39 - 150	17	28
Benzene	ND		20.0	23.12		ug/L		116	55 - 147	14	22
Bromobenzene	ND		20.0	26.02		ug/L		130	60 - 133	10	18
Bromochloromethane	ND		20.0	22.06		ug/L		110	59 - 132	15	21
Bromodichloromethane	ND		20.0	23.72		ug/L		119	70 - 140	15	196
Bromoform	ND		20.0	20.75		ug/L		104	53 - 150	10	20
Bromomethane	ND		20.0	23.45		ug/L		117	30 - 150	28	44
2-Butanone (MEK)	ND		100	127.9		ug/L		128	50 - 143	14	28
Carbon disulfide	1.39	B	20.0	26.80		ug/L		127	35 - 150	15	34
Carbon tetrachloride	ND		20.0	24.16		ug/L		121	56 - 150	12	18
Chlorobenzene	ND		20.0	23.06		ug/L		115	70 - 130	13	15
Chlorodibromomethane	ND		20.0	21.09		ug/L		105	66 - 140	10	19

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

Lab Sample ID: 490-157279-A-10 MSD
Matrix: Water
Analysis Batch: 535435

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroethane	ND		20.0	26.07		ug/L		130	58 - 141	14	31
Chloroform	ND		20.0	23.05		ug/L		115	66 - 138	12	21
Chloromethane	ND		20.0	25.16		ug/L		126	10 - 150	17	43
2-Chlorotoluene	ND		20.0	22.97		ug/L		115	67 - 138	5	17
4-Chlorotoluene	ND	F2	20.0	27.43	F2	ug/L		137	69 - 138	16	15
cis-1,2-Dichloroethene	ND		20.0	21.79		ug/L		109	68 - 131	13	21
cis-1,3-Dichloropropene	ND		20.0	23.85		ug/L		119	70 - 133	12	19
1,2-Dibromo-3-Chloropropane	ND		20.0	25.14		ug/L		126	38 - 138	22	26
1,2-Dibromoethane (EDB)	ND		20.0	24.49		ug/L		122	65 - 137	10	21
Dibromomethane	ND		20.0	22.53		ug/L		113	70 - 130	14	19
1,2-Dichlorobenzene	ND		20.0	24.62		ug/L		123	70 - 130	13	15
1,3-Dichlorobenzene	ND	F2	20.0	23.72	F2	ug/L		119	68 - 131	16	14
1,4-Dichlorobenzene	ND	F2	20.0	22.40	F2	ug/L		112	70 - 130	19	14
Dichlorodifluoromethane	ND		20.0	17.60		ug/L		88	10 - 150	21	50
1,1-Dichloroethane	ND		20.0	24.94		ug/L		125	61 - 139	14	23
1,2-Dichloroethane	ND		20.0	21.88		ug/L		109	64 - 136	8	22
1,1-Dichloroethene	ND		20.0	25.45		ug/L		127	54 - 150	17	24
1,2-Dichloropropane	ND		20.0	23.91		ug/L		120	67 - 130	14	19
1,3-Dichloropropane	ND	F1	20.0	26.89	F1	ug/L		134	70 - 130	11	17
2,2-Dichloropropane	ND		20.0	24.70		ug/L		123	50 - 146	13	20
1,1-Dichloropropene	ND		20.0	24.58		ug/L		123	54 - 150	13	24
Ethylbenzene	ND		20.0	24.77		ug/L		124	65 - 139	13	18
Hexachlorobutadiene	ND		20.0	22.40		ug/L		112	61 - 141	24	26
2-Hexanone	ND	F1	100	175.0	F1	ug/L		175	44 - 150	14	21
Isopropylbenzene	ND		20.0	23.01		ug/L		115	70 - 137	13	17
Methylene Chloride	ND		20.0	22.77		ug/L		114	64 - 130	17	22
4-Methyl-2-pentanone (MIBK)	ND	* F1	100	157.9	F1	ug/L		158	50 - 140	11	24
Methyl tert-butyl ether	ND		20.0	24.38		ug/L		122	55 - 141	13	24
Naphthalene	ND		20.0	29.86		ug/L		149	32 - 150	19	40
n-Butylbenzene	ND		20.0	24.81		ug/L		124	61 - 141	14	17
N-Propylbenzene	ND		20.0	26.71		ug/L		134	53 - 150	13	18
p-Isopropyltoluene	ND		20.0	23.83		ug/L		119	66 - 137	15	16
sec-Butylbenzene	ND		20.0	24.59		ug/L		123	55 - 136	18	50
Styrene	ND		20.0	23.22		ug/L		116	70 - 130	15	16
tert-Butylbenzene	ND		20.0	23.30		ug/L		116	70 - 138	14	17
1,1,1,2-Tetrachloroethane	ND		20.0	21.68		ug/L		108	70 - 131	12	16
1,1,2,2-Tetrachloroethane	ND		20.0	28.51		ug/L		143	56 - 145	10	19
Tetrachloroethene	ND		20.0	21.74		ug/L		109	57 - 138	12	17
Toluene	ND		20.0	22.05		ug/L		110	64 - 136	11	18
trans-1,2-Dichloroethene	ND		20.0	25.94		ug/L		130	59 - 143	12	25
trans-1,3-Dichloropropene	ND		20.0	22.85		ug/L		114	63 - 142	12	18
1,2,3-Trichlorobenzene	ND		20.0	25.68		ug/L		128	36 - 150	29	43
1,2,4-Trichlorobenzene	ND		20.0	22.57		ug/L		113	47 - 147	21	24
1,1,1-Trichloroethane	ND		20.0	24.19		ug/L		121	68 - 144	14	17
1,1,2-Trichloroethane	ND		20.0	23.74		ug/L		119	70 - 130	10	18
Trichloroethene	ND		20.0	22.00		ug/L		110	63 - 135	14	17
Trichlorofluoromethane	ND		20.0	26.76		ug/L		134	44 - 150	19	32
1,2,3-Trichloropropane	ND	F1	20.0	26.65	F1	ug/L		133	65 - 131	8	19

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

Lab Sample ID: 490-157279-A-10 MSD
Matrix: Water
Analysis Batch: 535435

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	ND		20.0	23.93		ug/L		120	64 - 136	14	18
1,3,5-Trimethylbenzene	ND	F2	20.0	26.29	F2	ug/L		131	69 - 139	19	17
Vinyl chloride	ND	F1	20.0	30.73	F1	ug/L		154	57 - 150	18	37
Xylenes, Total	ND		40.0	50.44		ug/L		126	69 - 132	14	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: MB 490-535580/8
Matrix: Solid
Analysis Batch: 535580

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			08/13/18 13:49	1
Ethylbenzene	ND		0.00200		mg/Kg			08/13/18 13:49	1
Toluene	ND		0.00200		mg/Kg			08/13/18 13:49	1
Xylenes, Total	ND		0.00600		mg/Kg			08/13/18 13:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/13/18 13:49*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/13/18 13:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/13/18 13:49*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/13/18 13:49*	*1*

Lab Sample ID: LCS 490-535580/4
Matrix: Solid
Analysis Batch: 535580

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05577		mg/Kg		112	70 - 130
Ethylbenzene	0.0500	0.05456		mg/Kg		109	70 - 130
Toluene	0.0500	0.05520		mg/Kg		110	70 - 130
Xylenes, Total	0.100	0.1099		mg/Kg		110	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

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

Lab Sample ID: LCSD 490-535580/5
Matrix: Solid
Analysis Batch: 535580

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05441		mg/Kg		109	70 - 130	2	37
Ethylbenzene			0.0500	0.05225		mg/Kg		104	70 - 130	4	38
Toluene			0.0500	0.05266		mg/Kg		105	70 - 130	5	40
Xylenes, Total			0.100	0.1054		mg/Kg		105	70 - 130	4	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 490-535627/6
Matrix: Water
Analysis Batch: 535627

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			08/13/18 13:33	1
Benzene	ND		1.00		ug/L			08/13/18 13:33	1
Bromobenzene	ND		1.00		ug/L			08/13/18 13:33	1
Bromochloromethane	ND		1.00		ug/L			08/13/18 13:33	1
Bromodichloromethane	ND		1.00		ug/L			08/13/18 13:33	1
Bromoform	ND		1.00		ug/L			08/13/18 13:33	1
Bromomethane	ND		1.00		ug/L			08/13/18 13:33	1
2-Butanone (MEK)	ND		50.0		ug/L			08/13/18 13:33	1
Carbon disulfide	ND		1.00		ug/L			08/13/18 13:33	1
Carbon tetrachloride	ND		1.00		ug/L			08/13/18 13:33	1
Chlorobenzene	ND		1.00		ug/L			08/13/18 13:33	1
Chlorodibromomethane	ND		1.00		ug/L			08/13/18 13:33	1
Chloroethane	ND		1.00		ug/L			08/13/18 13:33	1
Chloroform	ND		1.00		ug/L			08/13/18 13:33	1
Chloromethane	ND		1.00		ug/L			08/13/18 13:33	1
2-Chlorotoluene	ND		1.00		ug/L			08/13/18 13:33	1
4-Chlorotoluene	ND		1.00		ug/L			08/13/18 13:33	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			08/13/18 13:33	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			08/13/18 13:33	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			08/13/18 13:33	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			08/13/18 13:33	1
Dibromomethane	ND		1.00		ug/L			08/13/18 13:33	1
1,2-Dichlorobenzene	ND		1.00		ug/L			08/13/18 13:33	1
1,3-Dichlorobenzene	ND		1.00		ug/L			08/13/18 13:33	1
1,4-Dichlorobenzene	ND		1.00		ug/L			08/13/18 13:33	1
Dichlorodifluoromethane	ND		1.00		ug/L			08/13/18 13:33	1
1,1-Dichloroethane	ND		1.00		ug/L			08/13/18 13:33	1
1,2-Dichloroethane	ND		1.00		ug/L			08/13/18 13:33	1
1,1-Dichloroethene	ND		1.00		ug/L			08/13/18 13:33	1
1,2-Dichloropropane	ND		1.00		ug/L			08/13/18 13:33	1
1,3-Dichloropropane	ND		1.00		ug/L			08/13/18 13:33	1
2,2-Dichloropropane	ND		1.00		ug/L			08/13/18 13:33	1

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

Lab Sample ID: MB 490-535627/6
Matrix: Water
Analysis Batch: 535627

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.00		ug/L			08/13/18 13:33	1
Ethylbenzene	ND		1.00		ug/L			08/13/18 13:33	1
Hexachlorobutadiene	ND		2.00		ug/L			08/13/18 13:33	1
2-Hexanone	ND		10.0		ug/L			08/13/18 13:33	1
Isopropylbenzene	ND		1.00		ug/L			08/13/18 13:33	1
Methylene Chloride	ND		5.00		ug/L			08/13/18 13:33	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			08/13/18 13:33	1
Methyl tert-butyl ether	ND		1.00		ug/L			08/13/18 13:33	1
Naphthalene	ND		5.00		ug/L			08/13/18 13:33	1
n-Butylbenzene	ND		1.00		ug/L			08/13/18 13:33	1
N-Propylbenzene	ND		1.00		ug/L			08/13/18 13:33	1
p-Isopropyltoluene	ND		1.00		ug/L			08/13/18 13:33	1
sec-Butylbenzene	ND		1.00		ug/L			08/13/18 13:33	1
Styrene	ND		1.00		ug/L			08/13/18 13:33	1
tert-Butylbenzene	ND		1.00		ug/L			08/13/18 13:33	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			08/13/18 13:33	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			08/13/18 13:33	1
Tetrachloroethene	ND		1.00		ug/L			08/13/18 13:33	1
Toluene	ND		1.00		ug/L			08/13/18 13:33	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			08/13/18 13:33	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			08/13/18 13:33	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			08/13/18 13:33	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			08/13/18 13:33	1
1,1,1-Trichloroethane	ND		1.00		ug/L			08/13/18 13:33	1
1,1,2-Trichloroethane	ND		1.00		ug/L			08/13/18 13:33	1
Trichloroethene	ND		1.00		ug/L			08/13/18 13:33	1
Trichlorofluoromethane	ND		1.00		ug/L			08/13/18 13:33	1
1,2,3-Trichloropropane	ND		1.00		ug/L			08/13/18 13:33	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			08/13/18 13:33	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			08/13/18 13:33	1
Vinyl chloride	ND		1.00		ug/L			08/13/18 13:33	1
Xylenes, Total	ND		3.00		ug/L			08/13/18 13:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/13/18 13:33*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*08/13/18 13:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*08/13/18 13:33*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/13/18 13:33*	*1*

Lab Sample ID: LCS 490-535627/3
Matrix: Water
Analysis Batch: 535627

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	121.8		ug/L		122	39 - 150
Benzene	20.0	24.26		ug/L		121	70 - 130
Bromobenzene	20.0	21.75		ug/L		109	70 - 130
Bromochloromethane	20.0	22.06		ug/L		110	70 - 130

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

Lab Sample ID: LCS 490-535627/3
Matrix: Water
Analysis Batch: 535627

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	20.0	24.07		ug/L		120	70 - 130
Bromoform	20.0	21.25		ug/L		106	70 - 137
Bromomethane	20.0	18.75		ug/L		94	53 - 150
2-Butanone (MEK)	100	114.7		ug/L		115	55 - 143
Carbon disulfide	20.0	24.50		ug/L		122	64 - 135
Carbon tetrachloride	20.0	23.56		ug/L		118	70 - 147
Chlorobenzene	20.0	21.29		ug/L		106	70 - 130
Chlorodibromomethane	20.0	22.83		ug/L		114	70 - 133
Chloroethane	20.0	22.62		ug/L		113	60 - 138
Chloroform	20.0	24.07		ug/L		120	70 - 130
Chloromethane	20.0	23.03		ug/L		115	33 - 150
2-Chlorotoluene	20.0	21.18		ug/L		106	70 - 130
4-Chlorotoluene	20.0	20.98		ug/L		105	70 - 130
cis-1,2-Dichloroethene	20.0	22.52		ug/L		113	70 - 130
cis-1,3-Dichloropropene	20.0	21.74		ug/L		109	70 - 133
1,2-Dibromo-3-Chloropropane	20.0	20.44		ug/L		102	45 - 138
1,2-Dibromoethane (EDB)	20.0	22.26		ug/L		111	70 - 130
Dibromomethane	20.0	23.84		ug/L		119	70 - 130
1,2-Dichlorobenzene	20.0	20.88		ug/L		104	70 - 130
1,3-Dichlorobenzene	20.0	20.59		ug/L		103	70 - 130
1,4-Dichlorobenzene	20.0	20.82		ug/L		104	70 - 130
Dichlorodifluoromethane	20.0	20.58		ug/L		103	48 - 150
1,1-Dichloroethane	20.0	22.54		ug/L		113	70 - 130
1,2-Dichloroethane	20.0	24.37		ug/L		122	70 - 130
1,1-Dichloroethene	20.0	23.45		ug/L		117	70 - 132
1,2-Dichloropropane	20.0	23.79		ug/L		119	70 - 130
1,3-Dichloropropane	20.0	22.92		ug/L		115	70 - 130
2,2-Dichloropropane	20.0	24.07		ug/L		120	60 - 143
1,1-Dichloropropene	20.0	23.34		ug/L		117	70 - 130
Ethylbenzene	20.0	20.73		ug/L		104	70 - 130
Hexachlorobutadiene	20.0	17.88		ug/L		89	70 - 138
2-Hexanone	100	118.0		ug/L		118	54 - 142
Isopropylbenzene	20.0	20.05		ug/L		100	70 - 131
Methylene Chloride	20.0	21.15		ug/L		106	70 - 130
4-Methyl-2-pentanone (MIBK)	100	114.8		ug/L		115	60 - 137
Methyl tert-butyl ether	20.0	25.51		ug/L		128	70 - 130
Naphthalene	20.0	19.63		ug/L		98	54 - 150
n-Butylbenzene	20.0	19.33		ug/L		97	68 - 137
N-Propylbenzene	20.0	20.30		ug/L		102	70 - 134
p-Isopropyltoluene	20.0	19.50		ug/L		98	66 - 130
sec-Butylbenzene	20.0	19.59		ug/L		98	70 - 135
Styrene	20.0	21.53		ug/L		108	70 - 130
tert-Butylbenzene	20.0	19.62		ug/L		98	70 - 130
1,1,1,2-Tetrachloroethane	20.0	21.93		ug/L		110	70 - 130
1,1,2,2-Tetrachloroethane	20.0	23.78		ug/L		119	69 - 131
Tetrachloroethene	20.0	19.77		ug/L		99	70 - 130
Toluene	20.0	21.02		ug/L		105	70 - 130
trans-1,2-Dichloroethene	20.0	24.65		ug/L		123	70 - 130

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

Lab Sample ID: LCS 490-535627/3
Matrix: Water
Analysis Batch: 535627

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	20.0	22.74		ug/L		114	63 - 142
1,2,3-Trichlorobenzene	20.0	19.18		ug/L		96	46 - 150
1,2,4-Trichlorobenzene	20.0	19.05		ug/L		95	58 - 147
1,1,1-Trichloroethane	20.0	24.09		ug/L		120	70 - 135
1,1,2-Trichloroethane	20.0	23.10		ug/L		115	70 - 130
Trichloroethene	20.0	22.96		ug/L		115	70 - 130
Trichlorofluoromethane	20.0	24.13		ug/L		121	59 - 150
1,2,3-Trichloropropane	20.0	23.78		ug/L		119	70 - 131
1,2,4-Trimethylbenzene	20.0	20.56		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	20.0	20.28		ug/L		101	70 - 130
Vinyl chloride	20.0	23.28		ug/L		116	57 - 137
Xylenes, Total	40.0	41.47		ug/L		104	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 490-535627/4
Matrix: Water
Analysis Batch: 535627

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	115.5		ug/L		116	39 - 150	5	23
Benzene	20.0	23.88		ug/L		119	70 - 130	2	12
Bromobenzene	20.0	21.47		ug/L		107	70 - 130	1	16
Bromochloromethane	20.0	22.97		ug/L		115	70 - 130	4	16
Bromodichloromethane	20.0	23.70		ug/L		118	70 - 130	2	14
Bromoform	20.0	22.70		ug/L		114	70 - 137	7	14
Bromomethane	20.0	17.51		ug/L		88	53 - 150	7	19
2-Butanone (MEK)	100	115.1		ug/L		115	55 - 143	0	19
Carbon disulfide	20.0	24.24		ug/L		121	64 - 135	1	16
Carbon tetrachloride	20.0	24.20		ug/L		121	70 - 147	3	16
Chlorobenzene	20.0	21.01		ug/L		105	70 - 130	1	12
Chlorodibromomethane	20.0	22.63		ug/L		113	70 - 133	1	13
Chloroethane	20.0	22.19		ug/L		111	60 - 138	2	15
Chloroform	20.0	23.44		ug/L		117	70 - 130	3	14
Chloromethane	20.0	22.13		ug/L		111	33 - 150	4	20
2-Chlorotoluene	20.0	20.66		ug/L		103	70 - 130	2	15
4-Chlorotoluene	20.0	20.27		ug/L		101	70 - 130	3	15
cis-1,2-Dichloroethene	20.0	22.10		ug/L		110	70 - 130	2	15
cis-1,3-Dichloropropene	20.0	21.71		ug/L		109	70 - 133	0	15
1,2-Dibromo-3-Chloropropane	20.0	21.33		ug/L		107	45 - 138	4	19
1,2-Dibromoethane (EDB)	20.0	22.61		ug/L		113	70 - 130	2	13
Dibromomethane	20.0	23.83		ug/L		119	70 - 130	0	14
1,2-Dichlorobenzene	20.0	20.69		ug/L		103	70 - 130	1	12
1,3-Dichlorobenzene	20.0	20.26		ug/L		101	70 - 130	2	13

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

Lab Sample ID: LCSD 490-535627/4
Matrix: Water
Analysis Batch: 535627

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene			20.0	20.73		ug/L		104	70 - 130	0	12
Dichlorodifluoromethane			20.0	19.96		ug/L		100	48 - 150	3	16
1,1-Dichloroethane			20.0	22.14		ug/L		111	70 - 130	2	17
1,2-Dichloroethane			20.0	24.65		ug/L		123	70 - 130	1	13
1,1-Dichloroethene			20.0	23.65		ug/L		118	70 - 132	1	20
1,2-Dichloropropane			20.0	23.48		ug/L		117	70 - 130	1	15
1,3-Dichloropropane			20.0	22.93		ug/L		115	70 - 130	0	12
2,2-Dichloropropane			20.0	24.13		ug/L		121	60 - 143	0	20
1,1-Dichloropropene			20.0	23.85		ug/L		119	70 - 130	2	16
Ethylbenzene			20.0	20.31		ug/L		102	70 - 130	2	12
Hexachlorobutadiene			20.0	18.65		ug/L		93	70 - 138	4	16
2-Hexanone			100	121.5		ug/L		121	54 - 142	3	17
Isopropylbenzene			20.0	19.79		ug/L		99	70 - 131	1	13
Methylene Chloride			20.0	21.55		ug/L		108	70 - 130	2	15
4-Methyl-2-pentanone (MIBK)			100	117.6		ug/L		118	60 - 137	2	21
Methyl tert-butyl ether			20.0	25.34		ug/L		127	70 - 130	1	16
Naphthalene			20.0	19.85		ug/L		99	54 - 150	1	15
n-Butylbenzene			20.0	19.24		ug/L		96	68 - 137	0	14
N-Propylbenzene			20.0	19.62		ug/L		98	70 - 134	3	14
p-Isopropyltoluene			20.0	19.15		ug/L		96	66 - 130	2	13
sec-Butylbenzene			20.0	19.35		ug/L		97	70 - 135	1	14
Styrene			20.0	21.01		ug/L		105	70 - 130	2	12
tert-Butylbenzene			20.0	19.44		ug/L		97	70 - 130	1	14
1,1,1,2-Tetrachloroethane			20.0	21.59		ug/L		108	70 - 130	2	13
1,1,2,2-Tetrachloroethane			20.0	23.43		ug/L		117	69 - 131	2	15
Tetrachloroethene			20.0	19.32		ug/L		97	70 - 130	2	17
Toluene			20.0	20.51		ug/L		103	70 - 130	2	13
trans-1,2-Dichloroethene			20.0	24.03		ug/L		120	70 - 130	3	15
trans-1,3-Dichloropropene			20.0	22.44		ug/L		112	63 - 142	1	13
1,2,3-Trichlorobenzene			20.0	19.09		ug/L		95	46 - 150	0	16
1,2,4-Trichlorobenzene			20.0	19.20		ug/L		96	58 - 147	1	15
1,1,1-Trichloroethane			20.0	23.28		ug/L		116	70 - 135	3	15
1,1,2-Trichloroethane			20.0	22.95		ug/L		115	70 - 130	1	13
Trichloroethene			20.0	22.29		ug/L		111	70 - 130	3	14
Trichlorofluoromethane			20.0	23.42		ug/L		117	59 - 150	3	22
1,2,3-Trichloropropane			20.0	23.51		ug/L		118	70 - 131	1	14
1,2,4-Trimethylbenzene			20.0	20.13		ug/L		101	70 - 130	2	13
1,3,5-Trimethylbenzene			20.0	20.14		ug/L		101	70 - 130	1	14
Vinyl chloride			20.0	22.35		ug/L		112	57 - 137	4	15
Xylenes, Total			40.0	40.75		ug/L		102	70 - 132	2	11

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*125*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

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

Lab Sample ID: 490-157266-A-40 MS
Matrix: Water
Analysis Batch: 535627

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		500	508.1		ug/L		102	39 - 150
Benzene	ND		100	115.6		ug/L		116	55 - 147
Bromobenzene	ND		100	101.5		ug/L		101	60 - 133
Bromochloromethane	ND		100	104.4		ug/L		104	59 - 132
Bromodichloromethane	ND		100	115.6		ug/L		116	70 - 140
Bromoform	ND		100	102.0		ug/L		102	53 - 150
Bromomethane	ND		100	82.41		ug/L		82	30 - 150
2-Butanone (MEK)	ND		500	464.4		ug/L		93	50 - 143
Carbon disulfide	ND		100	116.1		ug/L		116	35 - 150
Carbon tetrachloride	ND		100	115.0		ug/L		115	56 - 150
Chlorobenzene	ND		100	100.3		ug/L		100	70 - 130
Chlorodibromomethane	ND		100	104.3		ug/L		104	66 - 140
Chloroethane	ND		100	105.6		ug/L		106	58 - 141
Chloroform	ND		100	114.2		ug/L		114	66 - 138
Chloromethane	ND		100	111.0		ug/L		111	10 - 150
2-Chlorotoluene	ND		100	99.02		ug/L		99	67 - 138
4-Chlorotoluene	ND		100	98.91		ug/L		99	69 - 138
cis-1,2-Dichloroethene	ND		100	106.8		ug/L		107	68 - 131
cis-1,3-Dichloropropene	ND		100	99.12		ug/L		99	70 - 133
1,2-Dibromo-3-Chloropropane	ND		100	88.59		ug/L		89	38 - 138
1,2-Dibromoethane (EDB)	ND		100	102.0		ug/L		102	65 - 137
Dibromomethane	ND		100	110.1		ug/L		110	70 - 130
1,2-Dichlorobenzene	ND		100	97.72		ug/L		98	70 - 130
1,3-Dichlorobenzene	ND		100	96.18		ug/L		96	68 - 131
1,4-Dichlorobenzene	ND		100	96.97		ug/L		97	70 - 130
Dichlorodifluoromethane	ND		100	100.9		ug/L		101	10 - 150
1,1-Dichloroethane	ND		100	107.1		ug/L		107	61 - 139
1,2-Dichloroethane	ND		100	121.1		ug/L		120	64 - 136
1,1-Dichloroethene	ND		100	116.6		ug/L		117	54 - 150
1,2-Dichloropropane	ND		100	115.8		ug/L		116	67 - 130
1,3-Dichloropropane	ND		100	107.0		ug/L		107	70 - 130
2,2-Dichloropropane	ND		100	110.3		ug/L		110	50 - 146
1,1-Dichloropropene	ND		100	112.7		ug/L		113	54 - 150
Ethylbenzene	ND		100	97.81		ug/L		98	65 - 139
Hexachlorobutadiene	ND		100	77.27		ug/L		77	61 - 141
2-Hexanone	ND		500	496.5		ug/L		99	44 - 150
Isopropylbenzene	ND		100	94.82		ug/L		95	70 - 137
Methylene Chloride	ND		100	102.1		ug/L		102	64 - 130
4-Methyl-2-pentanone (MIBK)	ND		500	511.1		ug/L		102	50 - 140
Methyl tert-butyl ether	493		100	568.3	4	ug/L		75	55 - 141
Naphthalene	ND		100	82.56		ug/L		83	32 - 150
n-Butylbenzene	ND		100	90.61		ug/L		91	61 - 141
N-Propylbenzene	ND		100	94.04		ug/L		94	53 - 150
p-Isopropyltoluene	ND		100	91.12		ug/L		91	66 - 137
sec-Butylbenzene	ND		100	93.40		ug/L		93	55 - 136
Styrene	ND		100	99.43		ug/L		99	70 - 130
tert-Butylbenzene	ND		100	93.28		ug/L		93	70 - 138
1,1,1,2-Tetrachloroethane	ND		100	100.0		ug/L		100	70 - 131

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

Lab Sample ID: 490-157266-A-40 MS
Matrix: Water
Analysis Batch: 535627

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	ND		100	106.8		ug/L		107	56 - 145
Tetrachloroethene	ND		100	90.54		ug/L		91	57 - 138
Toluene	ND		100	98.72		ug/L		99	64 - 136
trans-1,2-Dichloroethene	ND		100	116.0		ug/L		116	59 - 143
trans-1,3-Dichloropropene	ND		100	101.4		ug/L		101	63 - 142
1,2,3-Trichlorobenzene	ND		100	80.67		ug/L		81	36 - 150
1,2,4-Trichlorobenzene	ND		100	83.61		ug/L		84	47 - 147
1,1,1-Trichloroethane	ND		100	114.6		ug/L		115	68 - 144
1,1,2-Trichloroethane	ND		100	105.1		ug/L		105	70 - 130
Trichloroethene	ND		100	107.4		ug/L		107	63 - 135
Trichlorofluoromethane	ND		100	120.2		ug/L		120	44 - 150
1,2,3-Trichloropropane	ND		100	106.6		ug/L		107	65 - 131
1,2,4-Trimethylbenzene	ND		100	96.11		ug/L		96	64 - 136
1,3,5-Trimethylbenzene	ND		100	96.22		ug/L		96	69 - 139
Vinyl chloride	ND		100	112.2		ug/L		112	57 - 150
Xylenes, Total	ND		200	193.7		ug/L		97	69 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*124*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: 490-157266-A-40 MSD
Matrix: Water
Analysis Batch: 535627

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		500	548.2		ug/L		110	39 - 150	8	28
Benzene	ND		100	115.0		ug/L		115	55 - 147	0	22
Bromobenzene	ND		100	103.8		ug/L		104	60 - 133	2	18
Bromochloromethane	ND		100	104.0		ug/L		104	59 - 132	0	21
Bromodichloromethane	ND		100	113.9		ug/L		114	70 - 140	1	196
Bromoform	ND		100	103.4		ug/L		103	53 - 150	1	20
Bromomethane	ND		100	90.74		ug/L		91	30 - 150	10	44
2-Butanone (MEK)	ND		500	465.0		ug/L		93	50 - 143	0	28
Carbon disulfide	ND		100	116.5		ug/L		117	35 - 150	0	34
Carbon tetrachloride	ND		100	114.4		ug/L		114	56 - 150	1	18
Chlorobenzene	ND		100	101.7		ug/L		102	70 - 130	1	15
Chlorodibromomethane	ND		100	105.5		ug/L		105	66 - 140	1	19
Chloroethane	ND		100	109.6		ug/L		110	58 - 141	4	31
Chloroform	ND		100	113.4		ug/L		113	66 - 138	1	21
Chloromethane	ND		100	110.2		ug/L		110	10 - 150	1	43
2-Chlorotoluene	ND		100	101.3		ug/L		101	67 - 138	2	17
4-Chlorotoluene	ND		100	100.0		ug/L		100	69 - 138	1	15
cis-1,2-Dichloroethene	ND		100	108.4		ug/L		108	68 - 131	2	21
cis-1,3-Dichloropropene	ND		100	100.8		ug/L		101	70 - 133	2	19
1,2-Dibromo-3-Chloropropane	ND		100	93.96		ug/L		94	38 - 138	6	26

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

Lab Sample ID: 490-157266-A-40 MSD
Matrix: Water
Analysis Batch: 535627

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND		100	103.7		ug/L		104	65 - 137	2	21
Dibromomethane	ND		100	109.2		ug/L		109	70 - 130	1	19
1,2-Dichlorobenzene	ND		100	99.48		ug/L		99	70 - 130	2	15
1,3-Dichlorobenzene	ND		100	99.51		ug/L		100	68 - 131	3	14
1,4-Dichlorobenzene	ND		100	99.00		ug/L		99	70 - 130	2	14
Dichlorodifluoromethane	ND		100	100.9		ug/L		101	10 - 150	0	50
1,1-Dichloroethane	ND		100	107.6		ug/L		108	61 - 139	0	23
1,2-Dichloroethane	ND		100	120.4		ug/L		119	64 - 136	1	22
1,1-Dichloroethene	ND		100	113.3		ug/L		113	54 - 150	3	24
1,2-Dichloropropane	ND		100	112.5		ug/L		112	67 - 130	3	19
1,3-Dichloropropane	ND		100	109.0		ug/L		109	70 - 130	2	17
2,2-Dichloropropane	ND		100	106.5		ug/L		106	50 - 146	4	20
1,1-Dichloropropene	ND		100	115.5		ug/L		115	54 - 150	2	24
Ethylbenzene	ND		100	98.76		ug/L		99	65 - 139	1	18
Hexachlorobutadiene	ND		100	92.64		ug/L		93	61 - 141	18	26
2-Hexanone	ND		500	524.2		ug/L		105	44 - 150	5	21
Isopropylbenzene	ND		100	95.58		ug/L		96	70 - 137	1	17
Methylene Chloride	ND		100	105.2		ug/L		105	64 - 130	3	22
4-Methyl-2-pentanone (MIBK)	ND		500	512.7		ug/L		103	50 - 140	0	24
Methyl tert-butyl ether	493		100	569.9	4	ug/L		77	55 - 141	0	24
Naphthalene	ND		100	87.73		ug/L		88	32 - 150	6	40
n-Butylbenzene	ND		100	93.94		ug/L		94	61 - 141	4	17
N-Propylbenzene	ND		100	96.64		ug/L		97	53 - 150	3	18
p-Isopropyltoluene	ND		100	94.45		ug/L		94	66 - 137	4	16
sec-Butylbenzene	ND		100	95.48		ug/L		95	55 - 136	2	50
Styrene	ND		100	100.2		ug/L		100	70 - 130	1	16
tert-Butylbenzene	ND		100	95.77		ug/L		96	70 - 138	3	17
1,1,1,2-Tetrachloroethane	ND		100	104.3		ug/L		104	70 - 131	4	16
1,1,2,2-Tetrachloroethane	ND		100	108.0		ug/L		108	56 - 145	1	19
Tetrachloroethene	ND		100	92.11		ug/L		92	57 - 138	2	17
Toluene	ND		100	99.10		ug/L		99	64 - 136	0	18
trans-1,2-Dichloroethene	ND		100	116.3		ug/L		116	59 - 143	0	25
trans-1,3-Dichloropropene	ND		100	103.6		ug/L		104	63 - 142	2	18
1,2,3-Trichlorobenzene	ND		100	86.70		ug/L		87	36 - 150	7	43
1,2,4-Trichlorobenzene	ND		100	89.00		ug/L		89	47 - 147	6	24
1,1,1-Trichloroethane	ND		100	114.5		ug/L		114	68 - 144	0	17
1,1,2-Trichloroethane	ND		100	109.0		ug/L		109	70 - 130	4	18
Trichloroethene	ND		100	107.7		ug/L		108	63 - 135	0	17
Trichlorofluoromethane	ND		100	120.3		ug/L		120	44 - 150	0	32
1,2,3-Trichloropropane	ND		100	110.5		ug/L		110	65 - 131	4	19
1,2,4-Trimethylbenzene	ND		100	97.92		ug/L		98	64 - 136	2	18
1,3,5-Trimethylbenzene	ND		100	98.67		ug/L		99	69 - 139	3	17
Vinyl chloride	ND		100	111.6		ug/L		112	57 - 150	1	37
Xylenes, Total	ND		200	196.3		ug/L		98	69 - 132	1	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*

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

Lab Sample ID: 490-157266-A-40 MSD
Matrix: Water
Analysis Batch: 535627

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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: 490-157307-20 MS
Matrix: Solid
Analysis Batch: 536144

Client Sample ID: S-060866-8918-DT-G 10.0
Prep Type: Total/NA
Prep Batch: 535681

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		4.21	4.709		mg/Kg	☼	109	21 - 150
Benzene	ND		4.21	4.709		mg/Kg	☼	109	21 - 150
Ethylbenzene	6.36		4.21	9.576		mg/Kg	☼	76	10 - 150
Ethylbenzene	6.36		4.21	9.576		mg/Kg	☼	76	10 - 150
Toluene	ND		4.21	4.527		mg/Kg	☼	107	17 - 150
Toluene	ND		4.21	4.527		mg/Kg	☼	107	17 - 150
Xylenes, Total	10.8		8.43	17.96		mg/Kg	☼	85	10 - 150
Xylenes, Total	10.8		8.43	17.96		mg/Kg	☼	85	10 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: 490-157307-20 MSD
Matrix: Solid
Analysis Batch: 536144

Client Sample ID: S-060866-8918-DT-G 10.0
Prep Type: Total/NA
Prep Batch: 535681

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		4.21	4.148		mg/Kg	☼	95	21 - 150	13	50
Benzene	ND		4.21	4.148		mg/Kg	☼	95	21 - 150	13	50
Ethylbenzene	6.36		4.21	8.650		mg/Kg	☼	54	10 - 150	10	50
Ethylbenzene	6.36		4.21	8.650		mg/Kg	☼	54	10 - 150	10	50
Toluene	ND		4.21	3.912		mg/Kg	☼	93	17 - 150	15	50
Toluene	ND		4.21	3.912		mg/Kg	☼	93	17 - 150	15	50
Xylenes, Total	10.8		8.43	16.02		mg/Kg	☼	62	10 - 150	11	50
Xylenes, Total	10.8		8.43	16.02		mg/Kg	☼	62	10 - 150	11	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*

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

Lab Sample ID: 490-157307-20 MSD
Matrix: Solid
Analysis Batch: 536145

Client Sample ID: S-060866-8918-DT-G 10.0
Prep Type: Total/NA
Prep Batch: 535681

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: 490-157307-24 MS
Matrix: Solid
Analysis Batch: 536717

Client Sample ID: S-060866-8818-DT-H 15.0
Prep Type: Total/NA
Prep Batch: 535681

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		4.24	4.723		mg/Kg	☼	110	21 - 150
Ethylbenzene	3.95		4.24	7.661		mg/Kg	☼	87	10 - 150
Toluene	5.78		4.24	8.965		mg/Kg	☼	75	17 - 150
Xylenes, Total	28.9		8.48	31.76		mg/Kg	☼	34	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: 490-157307-24 MSD
Matrix: Solid
Analysis Batch: 536717

Client Sample ID: S-060866-8818-DT-H 15.0
Prep Type: Total/NA
Prep Batch: 535681

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		4.24	4.841		mg/Kg	☼	112	21 - 150	2	50
Ethylbenzene	3.95		4.24	7.759		mg/Kg	☼	90	10 - 150	1	50
Toluene	5.78		4.24	8.837		mg/Kg	☼	72	17 - 150	1	50
Xylenes, Total	28.9		8.48	31.46		mg/Kg	☼	31	10 - 150	1	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: 490-157307-26 MS
Matrix: Solid
Analysis Batch: 535753

Client Sample ID: S-060866-8918-DT-I 10.0
Prep Type: Total/NA
Prep Batch: 535681

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		19.7	16.44		mg/Kg	☼	83	10 - 150
Benzene	0.920		3.95	4.360		mg/Kg	☼	87	21 - 150
Bromobenzene	ND		3.95	4.145		mg/Kg	☼	105	10 - 150
Bromochloromethane	ND		3.95	3.546		mg/Kg	☼	90	10 - 150
Bromodichloromethane	ND		3.95	4.946		mg/Kg	☼	125	10 - 150
Bromoform	ND		3.95	3.184		mg/Kg	☼	81	10 - 150

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

Lab Sample ID: 490-157307-26 MS
Matrix: Solid
Analysis Batch: 535753

Client Sample ID: S-060866-8918-DT-I 10.0
Prep Type: Total/NA
Prep Batch: 535681

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	ND		3.95	1.418		mg/Kg	☼	36	10 - 150
2-Butanone (MEK)	ND		19.7	13.88		mg/Kg	☼	70	10 - 150
Carbon disulfide	ND		3.95	3.461		mg/Kg	☼	88	10 - 150
Carbon tetrachloride	ND		3.95	3.793		mg/Kg	☼	96	10 - 150
Chlorobenzene	ND		3.95	3.943		mg/Kg	☼	100	10 - 150
Chlorodibromomethane	ND		3.95	3.645		mg/Kg	☼	92	10 - 150
Chloroethane	ND		3.95	1.493		mg/Kg	☼	38	10 - 150
Chloroform	ND		3.95	3.585		mg/Kg	☼	91	10 - 150
Chloromethane	ND		3.95	2.893		mg/Kg	☼	73	10 - 150
2-Chlorotoluene	ND	F1	3.95	51.33	E F1	mg/Kg	☼	1301	10 - 150
4-Chlorotoluene	ND		3.95	5.025		mg/Kg	☼	127	10 - 150
cis-1,2-Dichloroethene	ND		3.95	3.519		mg/Kg	☼	89	10 - 150
cis-1,3-Dichloropropene	ND		3.95	3.394		mg/Kg	☼	86	10 - 150
1,2-Dibromo-3-Chloropropane	ND		3.95	3.197		mg/Kg	☼	81	10 - 150
1,2-Dibromoethane (EDB)	ND		3.95	3.126		mg/Kg	☼	79	10 - 150
Dibromomethane	ND		3.95	3.267		mg/Kg	☼	83	10 - 150
1,2-Dichlorobenzene	ND	F1	3.95	6.434	F1	mg/Kg	☼	163	10 - 150
1,3-Dichlorobenzene	ND		3.95	4.077		mg/Kg	☼	103	10 - 150
1,4-Dichlorobenzene	ND		3.95	4.743		mg/Kg	☼	120	10 - 150
Dichlorodifluoromethane	ND		3.95	3.010		mg/Kg	☼	76	10 - 150
1,1-Dichloroethane	ND		3.95	3.521		mg/Kg	☼	89	10 - 150
1,2-Dichloroethane	ND		3.95	3.360		mg/Kg	☼	85	24 - 138
1,1-Dichloroethene	ND		3.95	3.526		mg/Kg	☼	89	10 - 150
1,2-Dichloropropane	ND		3.95	3.420		mg/Kg	☼	87	10 - 150
1,3-Dichloropropane	ND		3.95	3.165		mg/Kg	☼	80	10 - 150
2,2-Dichloropropane	ND		3.95	3.611		mg/Kg	☼	92	10 - 150
1,1-Dichloropropene	ND		3.95	3.578		mg/Kg	☼	91	10 - 150
Ethylbenzene	82.4	E	3.95	73.49	E 4	mg/Kg	☼	-227	10 - 150
Hexachlorobutadiene	ND		3.95	2.108		mg/Kg	☼	53	10 - 150
2-Hexanone	ND		19.7	14.36		mg/Kg	☼	73	10 - 150
Isopropylbenzene	35.3	E	3.95	33.21	E 4	mg/Kg	☼	-53	10 - 150
Methylene Chloride	ND		3.95	3.953		mg/Kg	☼	89	24 - 150
4-Methyl-2-pentanone (MIBK)	ND		19.7	13.47		mg/Kg	☼	68	10 - 150
Methyl tert-butyl ether	ND		3.95	3.601		mg/Kg	☼	91	10 - 150
Naphthalene	55.2	E	3.95	53.75	E 4	mg/Kg	☼	-38	10 - 150
n-Butylbenzene	39.8	E	3.95	38.35	E 4	mg/Kg	☼	-36	10 - 150
N-Propylbenzene	79.7	E	3.95	68.80	E 4	mg/Kg	☼	-277	10 - 150
p-Isopropyltoluene	15.2		3.95	16.37		mg/Kg	☼	30	10 - 150
sec-Butylbenzene	17.8		3.95	19.27	4	mg/Kg	☼	38	10 - 150
Styrene	ND	F1	3.95	7.795	F1	mg/Kg	☼	198	10 - 150
tert-Butylbenzene	ND		3.95	5.081		mg/Kg	☼	129	10 - 150
1,1,1,2-Tetrachloroethane	ND		3.95	3.424		mg/Kg	☼	87	10 - 150
1,1,2,2-Tetrachloroethane	ND	F1	3.95	5.023		mg/Kg	☼	127	10 - 150
Tetrachloroethene	0.198		3.95	4.011		mg/Kg	☼	97	10 - 150
Toluene	73.7	E	3.95	66.82	E 4	mg/Kg	☼	-174	17 - 150
trans-1,2-Dichloroethene	ND		3.95	3.434		mg/Kg	☼	87	10 - 150
trans-1,3-Dichloropropene	ND		3.95	2.911		mg/Kg	☼	74	10 - 150
1,2,3-Trichlorobenzene	ND		3.95	3.605		mg/Kg	☼	91	10 - 150

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

Lab Sample ID: 490-157307-26 MS
Matrix: Solid
Analysis Batch: 535753

Client Sample ID: S-060866-8918-DT-I 10.0
Prep Type: Total/NA
Prep Batch: 535681

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	ND		3.95	3.697		mg/Kg	☼	94	10 - 150
1,1,1-Trichloroethane	ND		3.95	3.864		mg/Kg	☼	98	10 - 150
1,1,2-Trichloroethane	ND		3.95	4.794		mg/Kg	☼	121	10 - 150
Trichloroethene	ND		3.95	3.863		mg/Kg	☼	98	10 - 150
Trichlorofluoromethane	ND		3.95	3.566		mg/Kg	☼	90	10 - 150
1,2,3-Trichloropropane	ND	F2 F1	3.95	33.24	E F1	mg/Kg	☼	843	10 - 150
1,2,4-Trimethylbenzene	192	E	3.95	173.0	E 4	mg/Kg	☼	-487	10 - 150
1,3,5-Trimethylbenzene	132	E	3.95	116.5	E 4	mg/Kg	☼	-396	10 - 150
Vinyl chloride	ND		3.95	3.241		mg/Kg	☼	82	10 - 150
Xylenes, Total	311		7.89	288.4	4	mg/Kg	☼	-286	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*238*	*X*	*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: 490-157307-26 MSD
Matrix: Solid
Analysis Batch: 535753

Client Sample ID: S-060866-8918-DT-I 10.0
Prep Type: Total/NA
Prep Batch: 535681

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		19.7	18.61		mg/Kg	☼	94	10 - 150	12	50
Benzene	0.920		3.95	4.303		mg/Kg	☼	86	21 - 150	1	50
Bromobenzene	ND		3.95	4.268		mg/Kg	☼	108	10 - 150	3	50
Bromochloromethane	ND		3.95	3.708		mg/Kg	☼	94	10 - 150	4	50
Bromodichloromethane	ND		3.95	4.964		mg/Kg	☼	126	10 - 150	0	50
Bromoform	ND		3.95	3.307		mg/Kg	☼	84	10 - 150	4	50
Bromomethane	ND		3.95	1.475		mg/Kg	☼	37	10 - 150	4	50
2-Butanone (MEK)	ND		19.7	14.86		mg/Kg	☼	75	10 - 150	7	50
Carbon disulfide	ND		3.95	3.482		mg/Kg	☼	88	10 - 150	1	50
Carbon tetrachloride	ND		3.95	3.796		mg/Kg	☼	96	10 - 150	0	50
Chlorobenzene	ND		3.95	4.002		mg/Kg	☼	101	10 - 150	1	50
Chlorodibromomethane	ND		3.95	3.872		mg/Kg	☼	98	10 - 150	6	50
Chloroethane	ND		3.95	1.410		mg/Kg	☼	36	10 - 150	6	50
Chloroform	ND		3.95	3.605		mg/Kg	☼	91	10 - 150	1	50
Chloromethane	ND		3.95	2.882		mg/Kg	☼	73	10 - 150	0	50
2-Chlorotoluene	ND	F1	3.95	43.35	E F1	mg/Kg	☼	1099	10 - 150	17	50
4-Chlorotoluene	ND		3.95	5.025		mg/Kg	☼	127	10 - 150	0	50
cis-1,2-Dichloroethene	ND		3.95	3.617		mg/Kg	☼	92	10 - 150	3	50
cis-1,3-Dichloropropene	ND		3.95	3.488		mg/Kg	☼	88	10 - 150	3	50
1,2-Dibromo-3-Chloropropane	ND		3.95	3.348		mg/Kg	☼	85	10 - 150	5	50
1,2-Dibromoethane (EDB)	ND		3.95	3.284		mg/Kg	☼	83	10 - 150	5	50
Dibromomethane	ND		3.95	3.485		mg/Kg	☼	88	10 - 150	6	50
1,2-Dichlorobenzene	ND	F1	3.95	6.259	F1	mg/Kg	☼	159	10 - 150	3	50
1,3-Dichlorobenzene	ND		3.95	4.059		mg/Kg	☼	103	10 - 150	0	50
1,4-Dichlorobenzene	ND		3.95	4.645		mg/Kg	☼	118	10 - 150	2	50
Dichlorodifluoromethane	ND		3.95	3.016		mg/Kg	☼	76	10 - 150	0	50

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

Lab Sample ID: 490-157307-26 MSD
Matrix: Solid
Analysis Batch: 535753

Client Sample ID: S-060866-8918-DT-I 10.0
Prep Type: Total/NA
Prep Batch: 535681

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	ND		3.95	3.529		mg/Kg	☼	89	10 - 150	0	50
1,2-Dichloroethane	ND		3.95	3.488		mg/Kg	☼	88	24 - 138	4	50
1,1-Dichloroethene	ND		3.95	3.603		mg/Kg	☼	91	10 - 150	2	50
1,2-Dichloropropane	ND		3.95	3.503		mg/Kg	☼	89	10 - 150	2	50
1,3-Dichloropropane	ND		3.95	3.285		mg/Kg	☼	83	10 - 150	4	50
2,2-Dichloropropane	ND		3.95	3.703		mg/Kg	☼	94	10 - 150	3	50
1,1-Dichloropropene	ND		3.95	3.594		mg/Kg	☼	91	10 - 150	0	50
Ethylbenzene	82.4	E	3.95	68.63	E 4	mg/Kg	☼	-350	10 - 150	7	50
Hexachlorobutadiene	ND		3.95	2.329		mg/Kg	☼	59	10 - 150	10	50
2-Hexanone	ND		19.7	14.87		mg/Kg	☼	75	10 - 150	3	50
Isopropylbenzene	35.3	E	3.95	30.93	4	mg/Kg	☼	-111	10 - 150	7	50
Methylene Chloride	ND		3.95	3.907		mg/Kg	☼	88	24 - 150	1	50
4-Methyl-2-pentanone (MIBK)	ND		19.7	13.90		mg/Kg	☼	70	10 - 150	3	50
Methyl tert-butyl ether	ND		3.95	3.840		mg/Kg	☼	97	10 - 150	6	50
Naphthalene	55.2	E	3.95	53.13	E 4	mg/Kg	☼	-54	10 - 150	1	50
n-Butylbenzene	39.8	E	3.95	36.69	E 4	mg/Kg	☼	-78	10 - 150	4	50
N-Propylbenzene	79.7	E	3.95	63.32	E 4	mg/Kg	☼	-416	10 - 150	8	50
p-Isopropyltoluene	15.2		3.95	15.94		mg/Kg	☼	19	10 - 150	3	50
sec-Butylbenzene	17.8		3.95	17.83	4	mg/Kg	☼	2	10 - 150	8	50
Styrene	ND	F1	3.95	7.624	F1	mg/Kg	☼	193	10 - 150	2	50
tert-Butylbenzene	ND		3.95	5.050		mg/Kg	☼	128	10 - 150	1	50
1,1,1,2-Tetrachloroethane	ND		3.95	3.540		mg/Kg	☼	90	10 - 150	3	50
1,1,2,2-Tetrachloroethane	ND	F1	3.95	8.138	F1	mg/Kg	☼	206	10 - 150	47	50
Tetrachloroethene	0.198		3.95	3.912		mg/Kg	☼	94	10 - 150	2	50
Toluene	73.7	E	3.95	61.73	E 4	mg/Kg	☼	-303	17 - 150	8	50
trans-1,2-Dichloroethene	ND		3.95	3.500		mg/Kg	☼	89	10 - 150	2	50
trans-1,3-Dichloropropene	ND		3.95	2.970		mg/Kg	☼	75	10 - 150	2	50
1,2,3-Trichlorobenzene	ND		3.95	3.796		mg/Kg	☼	96	10 - 150	5	50
1,2,4-Trichlorobenzene	ND		3.95	3.959		mg/Kg	☼	100	10 - 150	7	50
1,1,1-Trichloroethane	ND		3.95	3.899		mg/Kg	☼	99	10 - 150	1	50
1,1,2-Trichloroethane	ND		3.95	4.869		mg/Kg	☼	123	10 - 150	2	50
Trichloroethene	ND		3.95	3.849		mg/Kg	☼	98	10 - 150	0	50
Trichlorofluoromethane	ND		3.95	3.443		mg/Kg	☼	87	10 - 150	4	50
1,2,3-Trichloropropane	ND	F2 F1	3.95	19.62	F1 F2	mg/Kg	☼	497	10 - 150	52	50
1,2,4-Trimethylbenzene	192	E	3.95	161.5	E 4	mg/Kg	☼	-778	10 - 150	7	50
1,3,5-Trimethylbenzene	132	E	3.95	109.3	E 4	mg/Kg	☼	-579	10 - 150	6	50
Vinyl chloride	ND		3.95	3.105		mg/Kg	☼	79	10 - 150	4	50
Xylenes, Total	311		7.89	271.7	4	mg/Kg	☼	-498	10 - 150	6	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*216*	*X*	*70 - 130*
Dibromofluoromethane (Surr)	*92*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

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

Lab Sample ID: MB 490-535747/7
Matrix: Solid
Analysis Batch: 535747

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0500		mg/Kg			08/14/18 01:56	1
Benzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
Bromobenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
Bromochloromethane	ND		0.00200		mg/Kg			08/14/18 01:56	1
Bromodichloromethane	ND		0.00200		mg/Kg			08/14/18 01:56	1
Bromoform	ND		0.00200		mg/Kg			08/14/18 01:56	1
Bromomethane	ND		0.00200		mg/Kg			08/14/18 01:56	1
2-Butanone (MEK)	ND		0.0500		mg/Kg			08/14/18 01:56	1
Carbon disulfide	ND		0.00500		mg/Kg			08/14/18 01:56	1
Carbon tetrachloride	ND		0.00200		mg/Kg			08/14/18 01:56	1
Chlorobenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
Chlorodibromomethane	ND		0.00200		mg/Kg			08/14/18 01:56	1
Chloroethane	ND		0.00500		mg/Kg			08/14/18 01:56	1
Chloroform	ND		0.00200		mg/Kg			08/14/18 01:56	1
Chloromethane	ND		0.00200		mg/Kg			08/14/18 01:56	1
2-Chlorotoluene	ND		0.00200		mg/Kg			08/14/18 01:56	1
4-Chlorotoluene	ND		0.00200		mg/Kg			08/14/18 01:56	1
cis-1,2-Dichloroethene	ND		0.00200		mg/Kg			08/14/18 01:56	1
cis-1,3-Dichloropropene	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,2-Dibromo-3-Chloropropane	ND		0.00500		mg/Kg			08/14/18 01:56	1
1,2-Dibromoethane (EDB)	ND		0.00200		mg/Kg			08/14/18 01:56	1
Dibromomethane	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,2-Dichlorobenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,3-Dichlorobenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,4-Dichlorobenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
Dichlorodifluoromethane	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,1-Dichloroethane	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,2-Dichloroethane	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,1-Dichloroethene	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,2-Dichloropropane	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,3-Dichloropropane	ND		0.00200		mg/Kg			08/14/18 01:56	1
2,2-Dichloropropane	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,1-Dichloropropene	ND		0.00200		mg/Kg			08/14/18 01:56	1
Ethylbenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
Hexachlorobutadiene	ND		0.00500		mg/Kg			08/14/18 01:56	1
2-Hexanone	ND		0.0500		mg/Kg			08/14/18 01:56	1
Isopropylbenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
Methylene Chloride	ND		0.0100		mg/Kg			08/14/18 01:56	1
4-Methyl-2-pentanone (MIBK)	ND		0.0500		mg/Kg			08/14/18 01:56	1
Methyl tert-butyl ether	ND		0.00200		mg/Kg			08/14/18 01:56	1
Naphthalene	ND		0.00500		mg/Kg			08/14/18 01:56	1
n-Butylbenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
N-Propylbenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
p-Isopropyltoluene	ND		0.00200		mg/Kg			08/14/18 01:56	1
sec-Butylbenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
Styrene	ND		0.00200		mg/Kg			08/14/18 01:56	1
tert-Butylbenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,1,1,2-Tetrachloroethane	ND		0.00200		mg/Kg			08/14/18 01:56	1

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

Lab Sample ID: MB 490-535747/7
Matrix: Solid
Analysis Batch: 535747

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.00200		mg/Kg			08/14/18 01:56	1
Tetrachloroethene	ND		0.00200		mg/Kg			08/14/18 01:56	1
Toluene	ND		0.00200		mg/Kg			08/14/18 01:56	1
trans-1,2-Dichloroethene	ND		0.00200		mg/Kg			08/14/18 01:56	1
trans-1,3-Dichloropropene	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,2,3-Trichlorobenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,2,4-Trichlorobenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,1,1-Trichloroethane	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,1,2-Trichloroethane	ND		0.00500		mg/Kg			08/14/18 01:56	1
Trichloroethene	ND		0.00200		mg/Kg			08/14/18 01:56	1
Trichlorofluoromethane	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,2,3-Trichloropropane	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,2,4-Trimethylbenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
1,3,5-Trimethylbenzene	ND		0.00200		mg/Kg			08/14/18 01:56	1
Vinyl chloride	ND		0.00200		mg/Kg			08/14/18 01:56	1
Xylenes, Total	ND		0.00600		mg/Kg			08/14/18 01:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/14/18 01:56*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/14/18 01:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/14/18 01:56*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/14/18 01:56*	*1*

Lab Sample ID: LCS 490-535747/4
Matrix: Solid
Analysis Batch: 535747

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.2679		mg/Kg		107	45 - 145
Benzene	0.0500	0.05449		mg/Kg		109	70 - 130
Bromobenzene	0.0500	0.04996		mg/Kg		100	67 - 130
Bromochloromethane	0.0500	0.05358		mg/Kg		107	70 - 133
Bromodichloromethane	0.0500	0.05278		mg/Kg		106	70 - 130
Bromoform	0.0500	0.04701		mg/Kg		94	59 - 137
Bromomethane	0.0500	0.04950		mg/Kg		99	32 - 150
2-Butanone (MEK)	0.250	0.2779		mg/Kg		111	50 - 149
Carbon disulfide	0.0500	0.05348		mg/Kg		107	66 - 138
Carbon tetrachloride	0.0500	0.05142		mg/Kg		103	70 - 131
Chlorobenzene	0.0500	0.05128		mg/Kg		103	70 - 130
Chlorodibromomethane	0.0500	0.05252		mg/Kg		105	70 - 130
Chloroethane	0.0500	0.05276		mg/Kg		106	37 - 150
Chloroform	0.0500	0.05314		mg/Kg		106	70 - 130
Chloromethane	0.0500	0.04829		mg/Kg		97	53 - 150
2-Chlorotoluene	0.0500	0.04968		mg/Kg		99	70 - 132
4-Chlorotoluene	0.0500	0.04968		mg/Kg		99	67 - 135
cis-1,2-Dichloroethene	0.0500	0.05305		mg/Kg		106	70 - 132
cis-1,3-Dichloropropene	0.0500	0.05323		mg/Kg		106	70 - 130
1,2-Dibromo-3-Chloropropane	0.0500	0.04984		mg/Kg		100	47 - 144

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

Lab Sample ID: LCS 490-535747/4
Matrix: Solid
Analysis Batch: 535747

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	0.0500	0.05219		mg/Kg		104	69 - 130
Dibromomethane	0.0500	0.05312		mg/Kg		106	70 - 130
1,2-Dichlorobenzene	0.0500	0.05024		mg/Kg		100	70 - 134
1,3-Dichlorobenzene	0.0500	0.04843		mg/Kg		97	69 - 137
1,4-Dichlorobenzene	0.0500	0.04876		mg/Kg		98	66 - 134
Dichlorodifluoromethane	0.0500	0.04218		mg/Kg		84	32 - 150
1,1-Dichloroethane	0.0500	0.05411		mg/Kg		108	70 - 130
1,2-Dichloroethane	0.0500	0.05104		mg/Kg		102	65 - 134
1,1-Dichloroethene	0.0500	0.05256		mg/Kg		105	70 - 131
1,2-Dichloropropane	0.0500	0.05601		mg/Kg		112	70 - 130
1,3-Dichloropropane	0.0500	0.05398		mg/Kg		108	70 - 130
2,2-Dichloropropane	0.0500	0.05232		mg/Kg		105	57 - 150
1,1-Dichloropropene	0.0500	0.05319		mg/Kg		106	70 - 130
Ethylbenzene	0.0500	0.05030		mg/Kg		101	70 - 130
Hexachlorobutadiene	0.0500	0.04790		mg/Kg		96	64 - 137
2-Hexanone	0.250	0.2726		mg/Kg		109	47 - 148
Isopropylbenzene	0.0500	0.05002		mg/Kg		100	70 - 130
Methylene Chloride	0.0500	0.05079		mg/Kg		102	69 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2751		mg/Kg		110	48 - 150
Methyl tert-butyl ether	0.0500	0.05345		mg/Kg		107	54 - 145
Naphthalene	0.0500	0.04580		mg/Kg		92	55 - 149
n-Butylbenzene	0.0500	0.05019		mg/Kg		100	57 - 150
N-Propylbenzene	0.0500	0.05063		mg/Kg		101	62 - 150
p-Isopropyltoluene	0.0500	0.05037		mg/Kg		101	66 - 147
sec-Butylbenzene	0.0500	0.05133		mg/Kg		103	68 - 147
Styrene	0.0500	0.05092		mg/Kg		102	70 - 131
tert-Butylbenzene	0.0500	0.05014		mg/Kg		100	70 - 138
1,1,1,2-Tetrachloroethane	0.0500	0.05247		mg/Kg		105	70 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.05536		mg/Kg		111	61 - 134
Tetrachloroethene	0.0500	0.05125		mg/Kg		102	70 - 130
Toluene	0.0500	0.05207		mg/Kg		104	70 - 130
trans-1,2-Dichloroethene	0.0500	0.05307		mg/Kg		106	70 - 130
trans-1,3-Dichloropropene	0.0500	0.05204		mg/Kg		104	67 - 130
1,2,3-Trichlorobenzene	0.0500	0.04394		mg/Kg		88	57 - 146
1,2,4-Trichlorobenzene	0.0500	0.04114		mg/Kg		82	47 - 150
1,1,1-Trichloroethane	0.0500	0.05208		mg/Kg		104	70 - 130
1,1,2-Trichloroethane	0.0500	0.06275		mg/Kg		125	70 - 130
Trichloroethene	0.0500	0.05151		mg/Kg		103	70 - 130
Trichlorofluoromethane	0.0500	0.04700		mg/Kg		94	53 - 150
1,2,3-Trichloropropane	0.0500	0.05677		mg/Kg		114	60 - 139
1,2,4-Trimethylbenzene	0.0500	0.04952		mg/Kg		99	70 - 140
1,3,5-Trimethylbenzene	0.0500	0.05019		mg/Kg		100	69 - 141
Vinyl chloride	0.0500	0.05213		mg/Kg		104	63 - 150
Xylenes, Total	0.100	0.1011		mg/Kg		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*

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

Lab Sample ID: LCS 490-535747/4
Matrix: Solid
Analysis Batch: 535747

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCSD 490-535747/21
Matrix: Solid
Analysis Batch: 535747

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.250	0.2737		mg/Kg		109	45 - 145	2	38
Benzene	0.0500	0.05563		mg/Kg		111	70 - 130	2	37
Bromobenzene	0.0500	0.05672		mg/Kg		113	67 - 130	13	40
Bromochloromethane	0.0500	0.05267		mg/Kg		105	70 - 133	2	15
Bromodichloromethane	0.0500	0.05447		mg/Kg		109	70 - 130	3	20
Bromoform	0.0500	0.04889		mg/Kg		98	59 - 137	4	17
Bromomethane	0.0500	0.05452	E	mg/Kg		109	32 - 150	10	45
2-Butanone (MEK)	0.250	0.2834		mg/Kg		113	50 - 149	2	39
Carbon disulfide	0.0500	0.05787		mg/Kg		116	66 - 138	8	41
Carbon tetrachloride	0.0500	0.05264		mg/Kg		105	70 - 131	2	41
Chlorobenzene	0.0500	0.05404		mg/Kg		108	70 - 130	5	40
Chlorodibromomethane	0.0500	0.05393		mg/Kg		108	70 - 130	3	14
Chloroethane	0.0500	0.05114		mg/Kg		102	37 - 150	3	50
Chloroform	0.0500	0.05329		mg/Kg		107	70 - 130	0	15
Chloromethane	0.0500	0.05068		mg/Kg		101	53 - 150	5	47
2-Chlorotoluene	0.0500	0.05625		mg/Kg		112	70 - 132	12	41
4-Chlorotoluene	0.0500	0.05687		mg/Kg		114	67 - 135	13	41
cis-1,2-Dichloroethene	0.0500	0.05549		mg/Kg		111	70 - 132	4	18
cis-1,3-Dichloropropene	0.0500	0.05843		mg/Kg		117	70 - 130	9	42
1,2-Dibromo-3-Chloropropane	0.0500	0.05616		mg/Kg		112	47 - 144	12	38
1,2-Dibromoethane (EDB)	0.0500	0.05327		mg/Kg		107	69 - 130	2	17
Dibromomethane	0.0500	0.05237		mg/Kg		105	70 - 130	1	19
1,2-Dichlorobenzene	0.0500	0.05738		mg/Kg		115	70 - 134	13	40
1,3-Dichlorobenzene	0.0500	0.05601		mg/Kg		112	69 - 137	14	41
1,4-Dichlorobenzene	0.0500	0.05630		mg/Kg		113	66 - 134	14	41
Dichlorodifluoromethane	0.0500	0.04849		mg/Kg		97	32 - 150	14	50
1,1-Dichloroethane	0.0500	0.05629		mg/Kg		113	70 - 130	4	42
1,2-Dichloroethane	0.0500	0.05035		mg/Kg		101	65 - 134	1	16
1,1-Dichloroethene	0.0500	0.05336		mg/Kg		107	70 - 131	2	43
1,2-Dichloropropane	0.0500	0.05720		mg/Kg		114	70 - 130	2	15
1,3-Dichloropropane	0.0500	0.05538		mg/Kg		111	70 - 130	3	15
2,2-Dichloropropane	0.0500	0.05528		mg/Kg		111	57 - 150	6	42
1,1-Dichloropropene	0.0500	0.05731		mg/Kg		115	70 - 130	7	41
Ethylbenzene	0.0500	0.05562		mg/Kg		111	70 - 130	10	38
Hexachlorobutadiene	0.0500	0.05397		mg/Kg		108	64 - 137	12	44
2-Hexanone	0.250	0.2816		mg/Kg		113	47 - 148	3	38
Isopropylbenzene	0.0500	0.05514		mg/Kg		110	70 - 130	10	39
Methylene Chloride	0.0500	0.05154		mg/Kg		103	69 - 130	1	19
4-Methyl-2-pentanone (MIBK)	0.250	0.2858		mg/Kg		114	48 - 150	4	41
Methyl tert-butyl ether	0.0500	0.05464		mg/Kg		109	54 - 145	2	36

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

Lab Sample ID: LCSD 490-535747/21
Matrix: Solid
Analysis Batch: 535747

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene			0.0500	0.06062		mg/Kg		121	55 - 149	28	37
n-Butylbenzene			0.0500	0.05995		mg/Kg		120	57 - 150	18	39
N-Propylbenzene			0.0500	0.05723		mg/Kg		114	62 - 150	12	38
p-Isopropyltoluene			0.0500	0.05719		mg/Kg		114	66 - 147	13	38
sec-Butylbenzene			0.0500	0.05673		mg/Kg		113	68 - 147	10	38
Styrene			0.0500	0.05579		mg/Kg		112	70 - 131	9	40
tert-Butylbenzene			0.0500	0.05526		mg/Kg		111	70 - 138	10	38
1,1,1,2-Tetrachloroethane			0.0500	0.05326		mg/Kg		107	70 - 130	1	41
1,1,2,2-Tetrachloroethane			0.0500	0.05555		mg/Kg		111	61 - 134	0	16
Tetrachloroethene			0.0500	0.05372		mg/Kg		107	70 - 130	5	41
Toluene			0.0500	0.05504		mg/Kg		110	70 - 130	6	40
trans-1,2-Dichloroethene			0.0500	0.05626		mg/Kg		113	70 - 130	6	41
trans-1,3-Dichloropropene			0.0500	0.05898		mg/Kg		118	67 - 130	12	41
1,2,3-Trichlorobenzene			0.0500	0.05877		mg/Kg		118	57 - 146	29	42
1,2,4-Trichlorobenzene			0.0500	0.06175		mg/Kg		123	47 - 150	40	43
1,1,1-Trichloroethane			0.0500	0.05260		mg/Kg		105	70 - 130	1	41
1,1,2-Trichloroethane			0.0500	0.05932		mg/Kg		119	70 - 130	6	17
Trichloroethene			0.0500	0.05412		mg/Kg		108	70 - 130	5	41
Trichlorofluoromethane			0.0500	0.04789		mg/Kg		96	53 - 150	2	49
1,2,3-Trichloropropane			0.0500	0.05520		mg/Kg		110	60 - 139	3	16
1,2,4-Trimethylbenzene			0.0500	0.05914		mg/Kg		118	70 - 140	18	38
1,3,5-Trimethylbenzene			0.0500	0.05755		mg/Kg		115	69 - 141	14	38
Vinyl chloride			0.0500	0.05611		mg/Kg		112	63 - 150	7	46
Xylenes, Total			0.100	0.1124		mg/Kg		112	70 - 130	11	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 490-535753/7
Matrix: Solid
Analysis Batch: 535753

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.50		mg/Kg			08/14/18 01:33	1
Benzene	ND		0.100		mg/Kg			08/14/18 01:33	1
Bromobenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
Bromochloromethane	ND		0.100		mg/Kg			08/14/18 01:33	1
Bromodichloromethane	ND		0.100		mg/Kg			08/14/18 01:33	1
Bromoform	ND		0.100		mg/Kg			08/14/18 01:33	1
Bromomethane	ND		0.100		mg/Kg			08/14/18 01:33	1
2-Butanone (MEK)	ND		2.50		mg/Kg			08/14/18 01:33	1
Carbon disulfide	ND		0.250		mg/Kg			08/14/18 01:33	1
Carbon tetrachloride	ND		0.100		mg/Kg			08/14/18 01:33	1
Chlorobenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
Chlorodibromomethane	ND		0.100		mg/Kg			08/14/18 01:33	1

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

Lab Sample ID: MB 490-535753/7
Matrix: Solid
Analysis Batch: 535753

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		0.250		mg/Kg			08/14/18 01:33	1
Chloroform	ND		0.100		mg/Kg			08/14/18 01:33	1
Chloromethane	ND		0.100		mg/Kg			08/14/18 01:33	1
2-Chlorotoluene	ND		0.100		mg/Kg			08/14/18 01:33	1
4-Chlorotoluene	ND		0.100		mg/Kg			08/14/18 01:33	1
cis-1,2-Dichloroethene	ND		0.100		mg/Kg			08/14/18 01:33	1
cis-1,3-Dichloropropene	ND		0.100		mg/Kg			08/14/18 01:33	1
1,2-Dibromo-3-Chloropropane	ND		0.250		mg/Kg			08/14/18 01:33	1
1,2-Dibromoethane (EDB)	ND		0.100		mg/Kg			08/14/18 01:33	1
Dibromomethane	ND		0.100		mg/Kg			08/14/18 01:33	1
1,2-Dichlorobenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
1,3-Dichlorobenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
1,4-Dichlorobenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
Dichlorodifluoromethane	ND		0.100		mg/Kg			08/14/18 01:33	1
1,1-Dichloroethane	ND		0.100		mg/Kg			08/14/18 01:33	1
1,2-Dichloroethane	ND		0.100		mg/Kg			08/14/18 01:33	1
1,1-Dichloroethene	ND		0.100		mg/Kg			08/14/18 01:33	1
1,2-Dichloropropane	ND		0.100		mg/Kg			08/14/18 01:33	1
1,3-Dichloropropane	ND		0.100		mg/Kg			08/14/18 01:33	1
2,2-Dichloropropane	ND		0.100		mg/Kg			08/14/18 01:33	1
1,1-Dichloropropene	ND		0.100		mg/Kg			08/14/18 01:33	1
Ethylbenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
Hexachlorobutadiene	ND		0.250		mg/Kg			08/14/18 01:33	1
2-Hexanone	ND		2.50		mg/Kg			08/14/18 01:33	1
Isopropylbenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
Methylene Chloride	ND		0.500		mg/Kg			08/14/18 01:33	1
4-Methyl-2-pentanone (MIBK)	ND		2.50		mg/Kg			08/14/18 01:33	1
Methyl tert-butyl ether	ND		0.100		mg/Kg			08/14/18 01:33	1
Naphthalene	ND		0.250		mg/Kg			08/14/18 01:33	1
n-Butylbenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
N-Propylbenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
p-Isopropyltoluene	ND		0.100		mg/Kg			08/14/18 01:33	1
sec-Butylbenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
Styrene	ND		0.100		mg/Kg			08/14/18 01:33	1
tert-Butylbenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
1,1,1,2-Tetrachloroethane	ND		0.100		mg/Kg			08/14/18 01:33	1
1,1,2,2-Tetrachloroethane	ND		0.100		mg/Kg			08/14/18 01:33	1
Tetrachloroethene	ND		0.100		mg/Kg			08/14/18 01:33	1
Toluene	ND		0.100		mg/Kg			08/14/18 01:33	1
trans-1,2-Dichloroethene	ND		0.100		mg/Kg			08/14/18 01:33	1
trans-1,3-Dichloropropene	ND		0.100		mg/Kg			08/14/18 01:33	1
1,2,3-Trichlorobenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
1,2,4-Trichlorobenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
1,1,1-Trichloroethane	ND		0.100		mg/Kg			08/14/18 01:33	1
1,1,2-Trichloroethane	ND		0.250		mg/Kg			08/14/18 01:33	1
Trichloroethene	ND		0.100		mg/Kg			08/14/18 01:33	1
Trichlorofluoromethane	ND		0.100		mg/Kg			08/14/18 01:33	1
1,2,3-Trichloropropane	ND		0.100		mg/Kg			08/14/18 01:33	1

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

Lab Sample ID: MB 490-535753/7
Matrix: Solid
Analysis Batch: 535753

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
1,3,5-Trimethylbenzene	ND		0.100		mg/Kg			08/14/18 01:33	1
Vinyl chloride	ND		0.100		mg/Kg			08/14/18 01:33	1
Xylenes, Total	ND		0.300		mg/Kg			08/14/18 01:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/14/18 01:33*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*		*08/14/18 01:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*08/14/18 01:33*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*08/14/18 01:33*	*1*

Lab Sample ID: LCS 490-535753/3
Matrix: Solid
Analysis Batch: 535753

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	12.5	13.41		mg/Kg		107	45 - 145
Benzene	2.50	2.764		mg/Kg		111	70 - 130
Bromobenzene	2.50	2.301		mg/Kg		92	67 - 130
Bromochloromethane	2.50	2.881		mg/Kg		115	70 - 133
Bromodichloromethane	2.50	2.711		mg/Kg		108	70 - 130
Bromoform	2.50	2.738		mg/Kg		110	59 - 137
Bromomethane	2.50	1.501		mg/Kg		60	32 - 150
2-Butanone (MEK)	12.5	12.65		mg/Kg		101	50 - 149
Carbon disulfide	2.50	2.788		mg/Kg		112	66 - 138
Carbon tetrachloride	2.50	2.918		mg/Kg		117	70 - 131
Chlorobenzene	2.50	2.532		mg/Kg		101	70 - 130
Chlorodibromomethane	2.50	2.679		mg/Kg		107	70 - 130
Chloroethane	2.50	1.125		mg/Kg		45	37 - 150
Chloroform	2.50	2.776		mg/Kg		111	70 - 130
Chloromethane	2.50	2.315		mg/Kg		93	53 - 150
2-Chlorotoluene	2.50	2.343		mg/Kg		94	70 - 132
4-Chlorotoluene	2.50	2.300		mg/Kg		92	67 - 135
cis-1,2-Dichloroethene	2.50	2.708		mg/Kg		108	70 - 132
cis-1,3-Dichloropropene	2.50	2.460		mg/Kg		98	70 - 130
1,2-Dibromo-3-Chloropropane	2.50	2.406		mg/Kg		96	47 - 144
1,2-Dibromoethane (EDB)	2.50	2.505		mg/Kg		100	69 - 130
Dibromomethane	2.50	2.708		mg/Kg		108	70 - 130
1,2-Dichlorobenzene	2.50	2.429		mg/Kg		97	70 - 134
1,3-Dichlorobenzene	2.50	2.432		mg/Kg		97	69 - 137
1,4-Dichlorobenzene	2.50	2.507		mg/Kg		100	66 - 134
Dichlorodifluoromethane	2.50	2.420		mg/Kg		97	32 - 150
1,1-Dichloroethane	2.50	2.729		mg/Kg		109	70 - 130
1,2-Dichloroethane	2.50	2.710		mg/Kg		108	65 - 134
1,1-Dichloroethene	2.50	2.884		mg/Kg		115	70 - 131
1,2-Dichloropropane	2.50	2.609		mg/Kg		104	70 - 130
1,3-Dichloropropane	2.50	2.492		mg/Kg		100	70 - 130
2,2-Dichloropropane	2.50	2.862		mg/Kg		114	57 - 150

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

Lab Sample ID: LCS 490-535753/3
Matrix: Solid
Analysis Batch: 535753

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	2.50	2.718		mg/Kg		109	70 - 130
Ethylbenzene	2.50	2.502		mg/Kg		100	70 - 130
Hexachlorobutadiene	2.50	2.640		mg/Kg		106	64 - 137
2-Hexanone	12.5	11.22		mg/Kg		90	47 - 148
Isopropylbenzene	2.50	2.525		mg/Kg		101	70 - 130
Methylene Chloride	2.50	2.915		mg/Kg		117	69 - 130
4-Methyl-2-pentanone (MIBK)	12.5	10.98		mg/Kg		88	48 - 150
Methyl tert-butyl ether	2.50	2.840		mg/Kg		114	54 - 145
Naphthalene	2.50	2.095		mg/Kg		84	55 - 149
n-Butylbenzene	2.50	2.292		mg/Kg		92	57 - 150
N-Propylbenzene	2.50	2.373		mg/Kg		95	62 - 150
p-Isopropyltoluene	2.50	2.357		mg/Kg		94	66 - 147
sec-Butylbenzene	2.50	2.406		mg/Kg		96	68 - 147
Styrene	2.50	2.534		mg/Kg		101	70 - 131
tert-Butylbenzene	2.50	2.395		mg/Kg		96	70 - 138
1,1,1,2-Tetrachloroethane	2.50	2.692		mg/Kg		108	70 - 130
1,1,2,2-Tetrachloroethane	2.50	2.263		mg/Kg		91	61 - 134
Tetrachloroethene	2.50	2.709		mg/Kg		108	70 - 130
Toluene	2.50	2.502		mg/Kg		100	70 - 130
trans-1,2-Dichloroethene	2.50	2.724		mg/Kg		109	70 - 130
trans-1,3-Dichloropropene	2.50	2.141		mg/Kg		86	67 - 130
1,2,3-Trichlorobenzene	2.50	2.259		mg/Kg		90	57 - 146
1,2,4-Trichlorobenzene	2.50	2.170		mg/Kg		87	47 - 150
1,1,1-Trichloroethane	2.50	2.920		mg/Kg		117	70 - 130
1,1,2-Trichloroethane	2.50	2.578		mg/Kg		103	70 - 130
Trichloroethene	2.50	2.804		mg/Kg		112	70 - 130
Trichlorofluoromethane	2.50	3.242		mg/Kg		130	53 - 150
1,2,3-Trichloropropane	2.50	2.308		mg/Kg		92	60 - 139
1,2,4-Trimethylbenzene	2.50	2.377		mg/Kg		95	70 - 140
1,3,5-Trimethylbenzene	2.50	2.383		mg/Kg		95	69 - 141
Vinyl chloride	2.50	2.426		mg/Kg		97	63 - 150
Xylenes, Total	5.00	4.986		mg/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: LCSD 490-535753/4
Matrix: Solid
Analysis Batch: 535753

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	12.5	14.71		mg/Kg		118	45 - 145	9	38
Benzene	2.50	2.701		mg/Kg		108	70 - 130	2	37
Bromobenzene	2.50	2.333		mg/Kg		93	67 - 130	1	40
Bromochloromethane	2.50	2.821		mg/Kg		113	70 - 133	2	15

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

Lab Sample ID: LCSD 490-535753/4
Matrix: Solid
Analysis Batch: 535753

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromodichloromethane	2.50	2.693		mg/Kg		108	70 - 130	1	20
Bromoform	2.50	2.809		mg/Kg		112	59 - 137	3	17
Bromomethane	2.50	1.479		mg/Kg		59	32 - 150	2	45
2-Butanone (MEK)	12.5	13.25		mg/Kg		106	50 - 149	5	39
Carbon disulfide	2.50	2.750		mg/Kg		110	66 - 138	1	41
Carbon tetrachloride	2.50	2.909		mg/Kg		116	70 - 131	0	41
Chlorobenzene	2.50	2.602		mg/Kg		104	70 - 130	3	40
Chlorodibromomethane	2.50	2.711		mg/Kg		108	70 - 130	1	14
Chloroethane	2.50	1.158		mg/Kg		46	37 - 150	3	50
Chloroform	2.50	2.690		mg/Kg		108	70 - 130	3	15
Chloromethane	2.50	2.293		mg/Kg		92	53 - 150	1	47
2-Chlorotoluene	2.50	2.414		mg/Kg		97	70 - 132	3	41
4-Chlorotoluene	2.50	2.357		mg/Kg		94	67 - 135	2	41
cis-1,2-Dichloroethene	2.50	2.644		mg/Kg		106	70 - 132	2	18
cis-1,3-Dichloropropene	2.50	2.510		mg/Kg		100	70 - 130	2	42
1,2-Dibromo-3-Chloropropane	2.50	2.495		mg/Kg		100	47 - 144	4	38
1,2-Dibromoethane (EDB)	2.50	2.536		mg/Kg		101	69 - 130	1	17
Dibromomethane	2.50	2.742		mg/Kg		110	70 - 130	1	19
1,2-Dichlorobenzene	2.50	2.437		mg/Kg		97	70 - 134	0	40
1,3-Dichlorobenzene	2.50	2.516		mg/Kg		101	69 - 137	3	41
1,4-Dichlorobenzene	2.50	2.491		mg/Kg		100	66 - 134	1	41
Dichlorodifluoromethane	2.50	2.397		mg/Kg		96	32 - 150	1	50
1,1-Dichloroethane	2.50	2.690		mg/Kg		108	70 - 130	1	42
1,2-Dichloroethane	2.50	2.687		mg/Kg		107	65 - 134	1	16
1,1-Dichloroethene	2.50	2.793		mg/Kg		112	70 - 131	3	43
1,2-Dichloropropane	2.50	2.647		mg/Kg		106	70 - 130	1	15
1,3-Dichloropropane	2.50	2.469		mg/Kg		99	70 - 130	1	15
2,2-Dichloropropane	2.50	2.854		mg/Kg		114	57 - 150	0	42
1,1-Dichloropropene	2.50	2.712		mg/Kg		108	70 - 130	0	41
Ethylbenzene	2.50	2.546		mg/Kg		102	70 - 130	2	38
Hexachlorobutadiene	2.50	2.598		mg/Kg		104	64 - 137	2	44
2-Hexanone	12.5	11.53		mg/Kg		92	47 - 148	3	38
Isopropylbenzene	2.50	2.529		mg/Kg		101	70 - 130	0	39
Methylene Chloride	2.50	2.789		mg/Kg		112	69 - 130	4	19
4-Methyl-2-pentanone (MIBK)	12.5	11.61		mg/Kg		93	48 - 150	6	41
Methyl tert-butyl ether	2.50	2.837		mg/Kg		113	54 - 145	0	36
Naphthalene	2.50	2.168		mg/Kg		87	55 - 149	3	37
n-Butylbenzene	2.50	2.298		mg/Kg		92	57 - 150	0	39
N-Propylbenzene	2.50	2.419		mg/Kg		97	62 - 150	2	38
p-Isopropyltoluene	2.50	2.406		mg/Kg		96	66 - 147	2	38
sec-Butylbenzene	2.50	2.475		mg/Kg		99	68 - 147	3	38
Styrene	2.50	2.567		mg/Kg		103	70 - 131	1	40
tert-Butylbenzene	2.50	2.441		mg/Kg		98	70 - 138	2	38
1,1,1,2-Tetrachloroethane	2.50	2.737		mg/Kg		109	70 - 130	2	41
1,1,2,2-Tetrachloroethane	2.50	2.355		mg/Kg		94	61 - 134	4	16
Tetrachloroethene	2.50	2.697		mg/Kg		108	70 - 130	0	41
Toluene	2.50	2.508		mg/Kg		100	70 - 130	0	40
trans-1,2-Dichloroethene	2.50	2.651		mg/Kg		106	70 - 130	3	41

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

Lab Sample ID: LCSD 490-535753/4
Matrix: Solid
Analysis Batch: 535753

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene			2.50	2.208		mg/Kg		88	67 - 130	3	41
1,2,3-Trichlorobenzene			2.50	2.226		mg/Kg		89	57 - 146	1	42
1,2,4-Trichlorobenzene			2.50	2.127		mg/Kg		85	47 - 150	2	43
1,1,1-Trichloroethane			2.50	2.871		mg/Kg		115	70 - 130	2	41
1,1,2-Trichloroethane			2.50	2.563		mg/Kg		103	70 - 130	1	17
Trichloroethene			2.50	2.886		mg/Kg		115	70 - 130	3	41
Trichlorofluoromethane			2.50	3.014		mg/Kg		121	53 - 150	7	49
1,2,3-Trichloropropane			2.50	2.434		mg/Kg		97	60 - 139	5	16
1,2,4-Trimethylbenzene			2.50	2.378		mg/Kg		95	70 - 140	0	38
1,3,5-Trimethylbenzene			2.50	2.368		mg/Kg		95	69 - 141	1	38
Vinyl chloride			2.50	2.407		mg/Kg		96	63 - 150	1	46
Xylenes, Total			5.00	5.092		mg/Kg		102	70 - 130	2	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: 490-157342-A-2-D MS
Matrix: Solid
Analysis Batch: 536721

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 535805

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.00531		0.0458	0.04033		mg/Kg		76	21 - 150
Ethylbenzene	ND		0.0458	0.03438		mg/Kg		72	10 - 150
Toluene	0.0137		0.0458	0.04459		mg/Kg		67	17 - 150
Xylenes, Total	ND		0.0916	0.06262		mg/Kg		68	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*108*		*70 - 130*

Lab Sample ID: 490-157342-A-2-E MSD
Matrix: Solid
Analysis Batch: 536721

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 535805

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.00531		0.0492	0.04119		mg/Kg		73	21 - 150	2	50
Ethylbenzene	ND		0.0492	0.04150		mg/Kg		82	10 - 150	19	50
Toluene	0.0137		0.0492	0.04623		mg/Kg		66	17 - 150	4	50
Xylenes, Total	ND		0.0984	0.07890		mg/Kg		80	10 - 150	23	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*

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

Lab Sample ID: 490-157342-A-2-E MSD
Matrix: Solid
Analysis Batch: 536721

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 535805

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: MB 490-535837/7
Matrix: Solid
Analysis Batch: 535837

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.50		mg/Kg			08/14/18 13:41	1
Benzene	ND		0.100		mg/Kg			08/14/18 13:41	1
Bromobenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
Bromochloromethane	ND		0.100		mg/Kg			08/14/18 13:41	1
Bromodichloromethane	ND		0.100		mg/Kg			08/14/18 13:41	1
Bromoform	ND		0.100		mg/Kg			08/14/18 13:41	1
Bromomethane	ND		0.100		mg/Kg			08/14/18 13:41	1
2-Butanone (MEK)	ND		2.50		mg/Kg			08/14/18 13:41	1
Carbon disulfide	ND		0.250		mg/Kg			08/14/18 13:41	1
Carbon tetrachloride	ND		0.100		mg/Kg			08/14/18 13:41	1
Chlorobenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
Chlorodibromomethane	ND		0.100		mg/Kg			08/14/18 13:41	1
Chloroethane	ND		0.250		mg/Kg			08/14/18 13:41	1
Chloroform	ND		0.100		mg/Kg			08/14/18 13:41	1
Chloromethane	ND		0.100		mg/Kg			08/14/18 13:41	1
2-Chlorotoluene	ND		0.100		mg/Kg			08/14/18 13:41	1
4-Chlorotoluene	ND		0.100		mg/Kg			08/14/18 13:41	1
cis-1,2-Dichloroethene	ND		0.100		mg/Kg			08/14/18 13:41	1
cis-1,3-Dichloropropene	ND		0.100		mg/Kg			08/14/18 13:41	1
1,2-Dibromo-3-Chloropropane	ND		0.250		mg/Kg			08/14/18 13:41	1
1,2-Dibromoethane (EDB)	ND		0.100		mg/Kg			08/14/18 13:41	1
Dibromomethane	ND		0.100		mg/Kg			08/14/18 13:41	1
1,2-Dichlorobenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
1,3-Dichlorobenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
1,4-Dichlorobenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
Dichlorodifluoromethane	ND		0.100		mg/Kg			08/14/18 13:41	1
1,1-Dichloroethane	ND		0.100		mg/Kg			08/14/18 13:41	1
1,2-Dichloroethane	ND		0.100		mg/Kg			08/14/18 13:41	1
1,1-Dichloroethene	ND		0.100		mg/Kg			08/14/18 13:41	1
1,2-Dichloropropane	ND		0.100		mg/Kg			08/14/18 13:41	1
1,3-Dichloropropane	ND		0.100		mg/Kg			08/14/18 13:41	1
2,2-Dichloropropane	ND		0.100		mg/Kg			08/14/18 13:41	1
1,1-Dichloropropene	ND		0.100		mg/Kg			08/14/18 13:41	1
Ethylbenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
Hexachlorobutadiene	ND		0.250		mg/Kg			08/14/18 13:41	1
2-Hexanone	ND		2.50		mg/Kg			08/14/18 13:41	1
Isopropylbenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
Methylene Chloride	ND		0.500		mg/Kg			08/14/18 13:41	1
4-Methyl-2-pentanone (MIBK)	ND		2.50		mg/Kg			08/14/18 13:41	1

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

Lab Sample ID: MB 490-535837/7
Matrix: Solid
Analysis Batch: 535837

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.100		mg/Kg			08/14/18 13:41	1
Naphthalene	ND		0.250		mg/Kg			08/14/18 13:41	1
n-Butylbenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
N-Propylbenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
p-Isopropyltoluene	ND		0.100		mg/Kg			08/14/18 13:41	1
sec-Butylbenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
Styrene	ND		0.100		mg/Kg			08/14/18 13:41	1
tert-Butylbenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
1,1,1,2-Tetrachloroethane	ND		0.100		mg/Kg			08/14/18 13:41	1
1,1,2,2-Tetrachloroethane	ND		0.100		mg/Kg			08/14/18 13:41	1
Tetrachloroethene	ND		0.100		mg/Kg			08/14/18 13:41	1
Toluene	ND		0.100		mg/Kg			08/14/18 13:41	1
trans-1,2-Dichloroethene	ND		0.100		mg/Kg			08/14/18 13:41	1
trans-1,3-Dichloropropene	ND		0.100		mg/Kg			08/14/18 13:41	1
1,2,3-Trichlorobenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
1,2,4-Trichlorobenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
1,1,1-Trichloroethane	ND		0.100		mg/Kg			08/14/18 13:41	1
1,1,2-Trichloroethane	ND		0.250		mg/Kg			08/14/18 13:41	1
Trichloroethene	ND		0.100		mg/Kg			08/14/18 13:41	1
Trichlorofluoromethane	ND		0.100		mg/Kg			08/14/18 13:41	1
1,2,3-Trichloropropane	ND		0.100		mg/Kg			08/14/18 13:41	1
1,2,4-Trimethylbenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
1,3,5-Trimethylbenzene	ND		0.100		mg/Kg			08/14/18 13:41	1
Vinyl chloride	ND		0.100		mg/Kg			08/14/18 13:41	1
Xylenes, Total	ND		0.300		mg/Kg			08/14/18 13:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/14/18 13:41*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/14/18 13:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/14/18 13:41*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/14/18 13:41*	*1*

Lab Sample ID: LCS 490-535837/3
Matrix: Solid
Analysis Batch: 535837

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	12.5	12.59		mg/Kg		101	45 - 145
Benzene	2.50	2.647		mg/Kg		106	70 - 130
Bromobenzene	2.50	2.403		mg/Kg		96	67 - 130
Bromochloromethane	2.50	2.786		mg/Kg		111	70 - 133
Bromodichloromethane	2.50	2.616		mg/Kg		105	70 - 130
Bromoform	2.50	2.697		mg/Kg		108	59 - 137
Bromomethane	2.50	1.182		mg/Kg		47	32 - 150
2-Butanone (MEK)	12.5	12.26		mg/Kg		98	50 - 149
Carbon disulfide	2.50	2.646		mg/Kg		106	66 - 138
Carbon tetrachloride	2.50	2.781		mg/Kg		111	70 - 131
Chlorobenzene	2.50	2.583		mg/Kg		103	70 - 130

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

Lab Sample ID: LCS 490-535837/3
Matrix: Solid
Analysis Batch: 535837

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorodibromomethane	2.50	2.581		mg/Kg		103	70 - 130
Chloroethane	2.50	0.9272		mg/Kg		37	37 - 150
Chloroform	2.50	2.578		mg/Kg		103	70 - 130
Chloromethane	2.50	2.103		mg/Kg		84	53 - 150
2-Chlorotoluene	2.50	2.536		mg/Kg		101	70 - 132
4-Chlorotoluene	2.50	2.562		mg/Kg		102	67 - 135
cis-1,2-Dichloroethene	2.50	2.588		mg/Kg		104	70 - 132
cis-1,3-Dichloropropene	2.50	2.506		mg/Kg		100	70 - 130
1,2-Dibromo-3-Chloropropane	2.50	2.432		mg/Kg		97	47 - 144
1,2-Dibromoethane (EDB)	2.50	2.495		mg/Kg		100	69 - 130
Dibromomethane	2.50	2.616		mg/Kg		105	70 - 130
1,2-Dichlorobenzene	2.50	2.677		mg/Kg		107	70 - 134
1,3-Dichlorobenzene	2.50	2.700		mg/Kg		108	69 - 137
1,4-Dichlorobenzene	2.50	2.721		mg/Kg		109	66 - 134
Dichlorodifluoromethane	2.50	2.464		mg/Kg		99	32 - 150
1,1-Dichloroethane	2.50	2.505		mg/Kg		100	70 - 130
1,2-Dichloroethane	2.50	2.580		mg/Kg		103	65 - 134
1,1-Dichloroethene	2.50	2.687		mg/Kg		107	70 - 131
1,2-Dichloropropane	2.50	2.463		mg/Kg		99	70 - 130
1,3-Dichloropropane	2.50	2.422		mg/Kg		97	70 - 130
2,2-Dichloropropane	2.50	2.777		mg/Kg		111	57 - 150
1,1-Dichloropropene	2.50	2.697		mg/Kg		108	70 - 130
Ethylbenzene	2.50	2.604		mg/Kg		104	70 - 130
Hexachlorobutadiene	2.50	2.785		mg/Kg		111	64 - 137
2-Hexanone	12.5	11.41		mg/Kg		91	47 - 148
Isopropylbenzene	2.50	2.677		mg/Kg		107	70 - 130
Methylene Chloride	2.50	2.675		mg/Kg		107	69 - 130
4-Methyl-2-pentanone (MIBK)	12.5	11.02		mg/Kg		88	48 - 150
Methyl tert-butyl ether	2.50	2.896		mg/Kg		116	54 - 145
Naphthalene	2.50	2.564		mg/Kg		103	55 - 149
n-Butylbenzene	2.50	2.583		mg/Kg		103	57 - 150
N-Propylbenzene	2.50	2.585		mg/Kg		103	62 - 150
p-Isopropyltoluene	2.50	2.697		mg/Kg		108	66 - 147
sec-Butylbenzene	2.50	2.601		mg/Kg		104	68 - 147
Styrene	2.50	2.648		mg/Kg		106	70 - 131
tert-Butylbenzene	2.50	2.645		mg/Kg		106	70 - 138
1,1,1,2-Tetrachloroethane	2.50	2.627		mg/Kg		105	70 - 130
1,1,2,2-Tetrachloroethane	2.50	2.218		mg/Kg		89	61 - 134
Tetrachloroethene	2.50	2.826		mg/Kg		113	70 - 130
Toluene	2.50	2.532		mg/Kg		101	70 - 130
trans-1,2-Dichloroethene	2.50	2.553		mg/Kg		102	70 - 130
trans-1,3-Dichloropropene	2.50	2.228		mg/Kg		89	67 - 130
1,2,3-Trichlorobenzene	2.50	2.800		mg/Kg		112	57 - 146
1,2,4-Trichlorobenzene	2.50	2.816		mg/Kg		113	47 - 150
1,1,1-Trichloroethane	2.50	2.759		mg/Kg		110	70 - 130
1,1,2-Trichloroethane	2.50	2.459		mg/Kg		98	70 - 130
Trichloroethene	2.50	2.796		mg/Kg		112	70 - 130
Trichlorofluoromethane	2.50	2.612		mg/Kg		104	53 - 150

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

Lab Sample ID: LCS 490-535837/3
Matrix: Solid
Analysis Batch: 535837

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	2.50	2.326		mg/Kg		93	60 - 139
1,2,4-Trimethylbenzene	2.50	2.626		mg/Kg		105	70 - 140
1,3,5-Trimethylbenzene	2.50	2.592		mg/Kg		104	69 - 141
Vinyl chloride	2.50	2.376		mg/Kg		95	63 - 150
Xylenes, Total	5.00	5.258		mg/Kg		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: LCSD 490-535837/4
Matrix: Solid
Analysis Batch: 535837

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	12.5	12.95		mg/Kg		104	45 - 145	3	38
Benzene	2.50	2.527		mg/Kg		101	70 - 130	5	37
Bromobenzene	2.50	2.288		mg/Kg		92	67 - 130	5	40
Bromochloromethane	2.50	2.698		mg/Kg		108	70 - 133	3	15
Bromodichloromethane	2.50	2.483		mg/Kg		99	70 - 130	5	20
Bromoform	2.50	2.673		mg/Kg		107	59 - 137	1	17
Bromomethane	2.50	1.171		mg/Kg		47	32 - 150	1	45
2-Butanone (MEK)	12.5	12.37		mg/Kg		99	50 - 149	1	39
Carbon disulfide	2.50	2.572		mg/Kg		103	66 - 138	3	41
Carbon tetrachloride	2.50	2.680		mg/Kg		107	70 - 131	4	41
Chlorobenzene	2.50	2.444		mg/Kg		98	70 - 130	6	40
Chlorodibromomethane	2.50	2.484		mg/Kg		99	70 - 130	4	14
Chloroethane	2.50	0.8959	*	mg/Kg		36	37 - 150	3	50
Chloroform	2.50	2.510		mg/Kg		100	70 - 130	3	15
Chloromethane	2.50	2.060		mg/Kg		82	53 - 150	2	47
2-Chlorotoluene	2.50	2.316		mg/Kg		93	70 - 132	9	41
4-Chlorotoluene	2.50	2.335		mg/Kg		93	67 - 135	9	41
cis-1,2-Dichloroethene	2.50	2.532		mg/Kg		101	70 - 132	2	18
cis-1,3-Dichloropropene	2.50	2.406		mg/Kg		96	70 - 130	4	42
1,2-Dibromo-3-Chloropropane	2.50	2.536		mg/Kg		101	47 - 144	4	38
1,2-Dibromoethane (EDB)	2.50	2.445		mg/Kg		98	69 - 130	2	17
Dibromomethane	2.50	2.506		mg/Kg		100	70 - 130	4	19
1,2-Dichlorobenzene	2.50	2.502		mg/Kg		100	70 - 134	7	40
1,3-Dichlorobenzene	2.50	2.491		mg/Kg		100	69 - 137	8	41
1,4-Dichlorobenzene	2.50	2.464		mg/Kg		99	66 - 134	10	41
Dichlorodifluoromethane	2.50	2.295		mg/Kg		92	32 - 150	7	50
1,1-Dichloroethane	2.50	2.396		mg/Kg		96	70 - 130	4	42
1,2-Dichloroethane	2.50	2.462		mg/Kg		98	65 - 134	5	16
1,1-Dichloroethene	2.50	2.647		mg/Kg		106	70 - 131	1	43
1,2-Dichloropropane	2.50	2.346		mg/Kg		94	70 - 130	5	15
1,3-Dichloropropane	2.50	2.337		mg/Kg		93	70 - 130	4	15

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

Lab Sample ID: LCSD 490-535837/4
Matrix: Solid
Analysis Batch: 535837

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,2-Dichloropropane			2.50	2.668		mg/Kg		107	57 - 150	4	42
1,1-Dichloropropene			2.50	2.570		mg/Kg		103	70 - 130	5	41
Ethylbenzene			2.50	2.485		mg/Kg		99	70 - 130	5	38
Hexachlorobutadiene			2.50	2.649		mg/Kg		106	64 - 137	5	44
2-Hexanone			12.5	11.41		mg/Kg		91	47 - 148	0	38
Isopropylbenzene			2.50	2.529		mg/Kg		101	70 - 130	6	39
Methylene Chloride			2.50	2.659		mg/Kg		106	69 - 130	1	19
4-Methyl-2-pentanone (MIBK)			12.5	11.23		mg/Kg		90	48 - 150	2	41
Methyl tert-butyl ether			2.50	2.816		mg/Kg		113	54 - 145	3	36
Naphthalene			2.50	2.509		mg/Kg		100	55 - 149	2	37
n-Butylbenzene			2.50	2.418		mg/Kg		97	57 - 150	7	39
N-Propylbenzene			2.50	2.419		mg/Kg		97	62 - 150	7	38
p-Isopropyltoluene			2.50	2.559		mg/Kg		102	66 - 147	5	38
sec-Butylbenzene			2.50	2.441		mg/Kg		98	68 - 147	6	38
Styrene			2.50	2.532		mg/Kg		101	70 - 131	4	40
tert-Butylbenzene			2.50	2.464		mg/Kg		99	70 - 138	7	38
1,1,1,2-Tetrachloroethane			2.50	2.497		mg/Kg		100	70 - 130	5	41
1,1,2,2-Tetrachloroethane			2.50	2.120		mg/Kg		85	61 - 134	5	16
Tetrachloroethene			2.50	2.671		mg/Kg		107	70 - 130	6	41
Toluene			2.50	2.434		mg/Kg		97	70 - 130	4	40
trans-1,2-Dichloroethene			2.50	2.483		mg/Kg		99	70 - 130	3	41
trans-1,3-Dichloropropene			2.50	2.175		mg/Kg		87	67 - 130	2	41
1,2,3-Trichlorobenzene			2.50	2.564		mg/Kg		103	57 - 146	9	42
1,2,4-Trichlorobenzene			2.50	2.583		mg/Kg		103	47 - 150	9	43
1,1,1-Trichloroethane			2.50	2.644		mg/Kg		106	70 - 130	4	41
1,1,2-Trichloroethane			2.50	2.399		mg/Kg		96	70 - 130	2	17
Trichloroethene			2.50	2.702		mg/Kg		108	70 - 130	3	41
Trichlorofluoromethane			2.50	2.458		mg/Kg		98	53 - 150	6	49
1,2,3-Trichloropropane			2.50	2.321		mg/Kg		93	60 - 139	0	16
1,2,4-Trimethylbenzene			2.50	2.461		mg/Kg		98	70 - 140	6	38
1,3,5-Trimethylbenzene			2.50	2.424		mg/Kg		97	69 - 141	7	38
Vinyl chloride			2.50	2.250		mg/Kg		90	63 - 150	5	46
Xylenes, Total			5.00	4.970		mg/Kg		99	70 - 130	6	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: MB 490-535841/7
Matrix: Solid
Analysis Batch: 535841

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			08/14/18 14:00	1
Ethylbenzene	ND		0.00200		mg/Kg			08/14/18 14:00	1
Toluene	ND		0.00200		mg/Kg			08/14/18 14:00	1

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

Lab Sample ID: MB 490-535841/7
Matrix: Solid
Analysis Batch: 535841

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.00600		mg/Kg			08/14/18 14:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*08/14/18 14:00*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*08/14/18 14:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*08/14/18 14:00*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/14/18 14:00*	*1*

Lab Sample ID: LCS 490-535841/3
Matrix: Solid
Analysis Batch: 535841

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05461		mg/Kg		109	70 - 130		
Ethylbenzene			0.0500	0.05399		mg/Kg		108	70 - 130		
Toluene			0.0500	0.05320		mg/Kg		106	70 - 130		
Xylenes, Total			0.100	0.1087		mg/Kg		109	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 490-535841/4
Matrix: Solid
Analysis Batch: 535841

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05359		mg/Kg		107	70 - 130	2	37
Ethylbenzene			0.0500	0.05238		mg/Kg		105	70 - 130	3	38
Toluene			0.0500	0.05213		mg/Kg		104	70 - 130	2	40
Xylenes, Total			0.100	0.1054		mg/Kg		105	70 - 130	3	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 490-536144/8
Matrix: Solid
Analysis Batch: 536144

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100		mg/Kg			08/15/18 14:04	1
Ethylbenzene	ND		0.100		mg/Kg			08/15/18 14:04	1

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

Lab Sample ID: MB 490-536144/8
Matrix: Solid
Analysis Batch: 536144

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.100		mg/Kg			08/15/18 14:04	1
Xylenes, Total	ND		0.300		mg/Kg			08/15/18 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/15/18 14:04*	*1*
Dibromofluoromethane (Surr)	*122*		*70 - 130*		*08/15/18 14:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*08/15/18 14:04*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/15/18 14:04*	*1*

Lab Sample ID: LCS 490-536144/4
Matrix: Solid
Analysis Batch: 536144

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.50	2.775		mg/Kg		111	70 - 130
Ethylbenzene	2.50	2.742		mg/Kg		110	70 - 130
Toluene	2.50	2.692		mg/Kg		108	70 - 130
Xylenes, Total	5.00	5.672		mg/Kg		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 490-536144/5
Matrix: Solid
Analysis Batch: 536144

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	2.50	2.832		mg/Kg		113	70 - 130	2	37
Ethylbenzene	2.50	2.802		mg/Kg		112	70 - 130	2	38
Toluene	2.50	2.698		mg/Kg		108	70 - 130	0	40
Xylenes, Total	5.00	5.735		mg/Kg		115	70 - 130	1	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: MB 490-536145/8
Matrix: Solid
Analysis Batch: 536145

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100		mg/Kg			08/15/18 14:04	1

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

Lab Sample ID: MB 490-536145/8
Matrix: Solid
Analysis Batch: 536145

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.100		mg/Kg			08/15/18 14:04	1
Toluene	ND		0.100		mg/Kg			08/15/18 14:04	1
Xylenes, Total	ND		0.300		mg/Kg			08/15/18 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/15/18 14:04*	*1*
Dibromofluoromethane (Surr)	*122*		*70 - 130*		*08/15/18 14:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*08/15/18 14:04*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/15/18 14:04*	*1*

Lab Sample ID: LCS 490-536145/4
Matrix: Solid
Analysis Batch: 536145

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			2.50	2.775		mg/Kg		111	70 - 130		
Ethylbenzene			2.50	2.742		mg/Kg		110	70 - 130		
Toluene			2.50	2.692		mg/Kg		108	70 - 130		
Xylenes, Total			5.00	5.672		mg/Kg		113	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 490-536145/5
Matrix: Solid
Analysis Batch: 536145

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			2.50	2.832		mg/Kg		113	70 - 130	2	37
Ethylbenzene			2.50	2.802		mg/Kg		112	70 - 130	2	38
Toluene			2.50	2.698		mg/Kg		108	70 - 130	0	40
Xylenes, Total			5.00	5.735		mg/Kg		115	70 - 130	1	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

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

Lab Sample ID: MB 490-536717/7
Matrix: Solid
Analysis Batch: 536717

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.100		mg/Kg			08/17/18 13:58	1
Ethylbenzene	ND		0.100		mg/Kg			08/17/18 13:58	1
Toluene	ND		0.100		mg/Kg			08/17/18 13:58	1
Xylenes, Total	ND		0.300		mg/Kg			08/17/18 13:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/17/18 13:58*	*1*
Dibromofluoromethane (Surr)	*123*		*70 - 130*		*08/17/18 13:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*08/17/18 13:58*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/17/18 13:58*	*1*

Lab Sample ID: LCS 490-536717/3
Matrix: Solid
Analysis Batch: 536717

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			2.50	2.861		mg/Kg		114	70 - 130		
Ethylbenzene			2.50	2.567		mg/Kg		103	70 - 130		
Toluene			2.50	2.510		mg/Kg		100	70 - 130		
Xylenes, Total			5.00	5.172		mg/Kg		103	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*106*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: LCSD 490-536717/4
Matrix: Solid
Analysis Batch: 536717

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			2.50	2.918		mg/Kg		117	70 - 130	2	37
Ethylbenzene			2.50	2.654		mg/Kg		106	70 - 130	3	38
Toluene			2.50	2.623		mg/Kg		105	70 - 130	4	40
Xylenes, Total			5.00	5.314		mg/Kg		106	70 - 130	3	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

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

Lab Sample ID: MB 490-536721/7
Matrix: Solid
Analysis Batch: 536721

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00200		mg/Kg			08/17/18 13:36	1
Ethylbenzene	ND		0.00200		mg/Kg			08/17/18 13:36	1
Toluene	ND		0.00200		mg/Kg			08/17/18 13:36	1
Xylenes, Total	ND		0.00600		mg/Kg			08/17/18 13:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/17/18 13:36*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/17/18 13:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*08/17/18 13:36*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*08/17/18 13:36*	*1*

Lab Sample ID: LCS 490-536721/4
Matrix: Solid
Analysis Batch: 536721

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.04988		mg/Kg		100	70 - 130		
Ethylbenzene			0.0500	0.04767		mg/Kg		95	70 - 130		
Toluene			0.0500	0.04922		mg/Kg		98	70 - 130		
Xylenes, Total			0.100	0.09596		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 490-536721/5
Matrix: Solid
Analysis Batch: 536721

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05394		mg/Kg		108	70 - 130	8	37
Ethylbenzene			0.0500	0.05168		mg/Kg		103	70 - 130	8	38
Toluene			0.0500	0.05320		mg/Kg		106	70 - 130	8	40
Xylenes, Total			0.100	0.1042		mg/Kg		104	70 - 130	8	38

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: MB 490-535540/28
Matrix: Solid
Analysis Batch: 535540

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			08/13/18 23:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*		*08/13/18 23:51*	*1*

Lab Sample ID: LCS 490-535540/26
Matrix: Solid
Analysis Batch: 535540

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12			50.0	49.60		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*87*		*50 - 150*

Lab Sample ID: LCSD 490-535540/27
Matrix: Solid
Analysis Batch: 535540

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12			50.0	48.94		mg/Kg		98	70 - 130	1	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*89*		*50 - 150*

Lab Sample ID: 490-157307-1 DU
Matrix: Solid
Analysis Batch: 535540

Client Sample ID: S-060866-8818-DT-A 5.0
Prep Type: Total/NA
Prep Batch: 535637

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C6-C12	13.9			14.06		mg/Kg	☼			1	10

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*95*		*50 - 150*

Lab Sample ID: 490-157307-15 DU
Matrix: Solid
Analysis Batch: 535777

Client Sample ID: S-060866-8918-DT-E 15.0
Prep Type: Total/NA
Prep Batch: 535637

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C6-C12	46.1			45.07		mg/Kg	☼			2	10

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*96*		*50 - 150*

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

Lab Sample ID: MB 490-535777/22
Matrix: Solid
Analysis Batch: 535777

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			08/15/18 01:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*		*08/15/18 01:53*	*1*

Lab Sample ID: MB 490-535777/40
Matrix: Solid
Analysis Batch: 535777

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		5.00		mg/Kg			08/15/18 12:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*50 - 150*		*08/15/18 12:36*	*1*

Lab Sample ID: LCS 490-535777/20
Matrix: Solid
Analysis Batch: 535777

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12			50.0	47.23		mg/Kg		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*88*		*50 - 150*

Lab Sample ID: LCS 490-535777/38
Matrix: Solid
Analysis Batch: 535777

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12			50.0	57.29		mg/Kg		115	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*87*		*50 - 150*

Lab Sample ID: LCSD 490-535777/21
Matrix: Solid
Analysis Batch: 535777

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12			50.0	45.90		mg/Kg		92	70 - 130	3	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*88*		*50 - 150*

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

Lab Sample ID: LCSD 490-535777/39
Matrix: Solid
Analysis Batch: 535777

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12			50.0	54.37		mg/Kg		109	70 - 130	5	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*88*		*50 - 150*

Lab Sample ID: MB 490-536110/14
Matrix: Water
Analysis Batch: 536110

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			08/15/18 15:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*99*		*50 - 150*		*08/15/18 15:22*	*1*

Lab Sample ID: LCS 490-536110/12
Matrix: Water
Analysis Batch: 536110

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12			1000	1130		ug/L		113	39 - 143		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*73*		*50 - 150*

Lab Sample ID: LCSD 490-536110/13
Matrix: Water
Analysis Batch: 536110

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12			1000	1107		ug/L		111	39 - 143	2	18

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*74*		*50 - 150*

Lab Sample ID: 490-157307-28 DU
Matrix: Water
Analysis Batch: 536110

Client Sample ID: GW-060866-8918-DT-I
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C6-C12	524			533.0		ug/L				2	18

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*109*		*50 - 150*

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

Lab Sample ID: MB 490-536301/1-A
Matrix: Solid
Analysis Batch: 536450

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 536301

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		4.00		mg/Kg		08/15/18 15:42	08/16/18 13:18	1
C24-C40	ND		4.00		mg/Kg		08/15/18 15:42	08/16/18 13:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*81*		*50 - 150*	*08/15/18 15:42*	*08/16/18 13:18*	*1*

Lab Sample ID: LCS 490-536301/2-A
Matrix: Solid
Analysis Batch: 536450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 536301

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C24			40.0	33.28		mg/Kg		83	55 - 129		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*74*		*50 - 150*

Lab Sample ID: 490-157307-4 DU
Matrix: Solid
Analysis Batch: 536450

Client Sample ID: S-060866-8818-DT-B 5.0
Prep Type: Total/NA
Prep Batch: 536301

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C10-C24	5.50			ND		mg/Kg	☼			31	50
C24-C40	17.7			10.78		mg/Kg	☼			48	50

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*78*		*50 - 150*

Lab Sample ID: 490-157307-16 DU
Matrix: Solid
Analysis Batch: 536684

Client Sample ID: S-060866-8918-DT-F 5.0
Prep Type: Total/NA
Prep Batch: 536301

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C10-C24	3130			5673	F3	mg/Kg	☼			58	50
C24-C40	1280			2060		mg/Kg	☼			47	50

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*0*	*X*	*50 - 150*

Lab Sample ID: MB 490-536611/1-A
Matrix: Solid
Analysis Batch: 536684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 536611

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		4.00		mg/Kg		08/16/18 15:46	08/17/18 21:54	1
C24-C40	ND		4.00		mg/Kg		08/16/18 15:46	08/17/18 21:54	1

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

Lab Sample ID: MB 490-536611/1-A
Matrix: Solid
Analysis Batch: 536684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 536611

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	98		50 - 150	08/16/18 15:46	08/17/18 21:54	1

Lab Sample ID: LCS 490-536611/2-A
Matrix: Solid
Analysis Batch: 536684

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 536611

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C24	40.0	41.69		mg/Kg		104	55 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	97		50 - 150

Lab Sample ID: 490-157307-25 DU
Matrix: Solid
Analysis Batch: 536973

Client Sample ID: S-060866-8918-DT-I 5.0
Prep Type: Total/NA
Prep Batch: 536611

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
C10-C24	15500		14610		mg/Kg	☼	6	50
C24-C40	7160		5862		mg/Kg	☼	20	50

Surrogate	DU %Recovery	DU Qualifier	Limits
o-Terphenyl	0	X	50 - 150

Lab Sample ID: MB 490-537484/1-A
Matrix: Water
Analysis Batch: 537966

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 537484

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		100		ug/L		08/21/18 09:14	08/22/18 16:29	1
C24-C40	ND		100		ug/L		08/21/18 09:14	08/22/18 16:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	87		50 - 150	08/21/18 09:14	08/22/18 16:29	1

Lab Sample ID: LCS 490-537484/2-A
Matrix: Water
Analysis Batch: 537966

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 537484

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C24	1000	819.5		ug/L		82	51 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	82		50 - 150

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

Lab Sample ID: 490-157729-G-4-A DU
Matrix: Water
Analysis Batch: 537966

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 537484

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C10-C24	ND			ND		ug/L				NC	41
C24-C40	ND			ND		ug/L				3	41

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*69*		*50 - 150*

Method: Moisture - Percent Moisture

Lab Sample ID: 490-157307-14 DU
Matrix: Solid
Analysis Batch: 535705

Client Sample ID: S-060866-8918-DT-E 10.0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	23.2			23.4		%				0.6	20
Percent Solids	76.8			76.6		%				0.2	20

Lab Sample ID: 490-157307-1 DU
Matrix: Solid
Analysis Batch: 535907

Client Sample ID: S-060866-8818-DT-A 5.0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	84.5			84.6		%				0.1	20

Lab Sample ID: 490-157307-17 DU
Matrix: Solid
Analysis Batch: 535907

Client Sample ID: S-060866-8918-DT-F 10.0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	74.9			75.3		%				0.5	20

Lab Sample ID: 490-157307-24 DU
Matrix: Solid
Analysis Batch: 535907

Client Sample ID: S-060866-8818-DT-H 15.0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Solids	71.4			69.7		%				2	20

GC/MS VOA

Analysis Batch: 535435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-28	GW-060866-8918-DT-I	Total/NA	Water	8260B	
MB 490-535435/6	Method Blank	Total/NA	Water	8260B	
LCS 490-535435/3	Lab Control Sample	Total/NA	Water	8260B	
490-157279-A-10 MS	Matrix Spike	Total/NA	Water	8260B	
490-157279-A-10 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 535580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-1	S-060866-8818-DT-A 5.0	Total/NA	Solid	8260B	535684
490-157307-2	S-060866-8818-DT-A 10.0	Total/NA	Solid	8260B	535684
490-157307-3	S-060866-8818-DT-A 15.0	Total/NA	Solid	8260B	535684
490-157307-4	S-060866-8818-DT-B 5.0	Total/NA	Solid	8260B	535684
490-157307-5	S-060866-8818-DT-B 10.0	Total/NA	Solid	8260B	535684
490-157307-6	S-060866-8818-DT-B 15.0	Total/NA	Solid	8260B	535684
490-157307-7	S-060866-8818-DT-C 5.0	Total/NA	Solid	8260B	535684
MB 490-535580/8	Method Blank	Total/NA	Solid	8260B	
LCS 490-535580/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-535580/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 535627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-28	GW-060866-8918-DT-I	Total/NA	Water	8260B	
MB 490-535627/6	Method Blank	Total/NA	Water	8260B	
LCS 490-535627/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-535627/4	Lab Control Sample Dup	Total/NA	Water	8260B	
490-157266-A-40 MS	Matrix Spike	Total/NA	Water	8260B	
490-157266-A-40 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Prep Batch: 535681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-10	S-060866-8918-DT-D 5.0	Total/NA	Solid	5035	
490-157307-13	S-060866-8918-DT-E 5.0	Total/NA	Solid	5035	
490-157307-14	S-060866-8918-DT-E 10.0	Total/NA	Solid	5035	
490-157307-15	S-060866-8918-DT-E 15.0	Total/NA	Solid	5035	
490-157307-16	S-060866-8918-DT-F 5.0	Total/NA	Solid	5035	
490-157307-17	S-060866-8918-DT-F 10.0	Total/NA	Solid	5035	
490-157307-18	S-060866-8918-DT-F 15.0	Total/NA	Solid	5035	
490-157307-19	S-060866-8918-DT-G 5.0	Total/NA	Solid	5035	
490-157307-20	S-060866-8918-DT-G 10.0	Total/NA	Solid	5035	
490-157307-21	S-060866-8918-DT-G 15.0	Total/NA	Solid	5035	
490-157307-22	S-060866-8818-DT-H 5.0	Total/NA	Solid	5035	
490-157307-23	S-060866-8818-DT-H 10.0	Total/NA	Solid	5035	
490-157307-24	S-060866-8818-DT-H 15.0	Total/NA	Solid	5035	
490-157307-25	S-060866-8918-DT-I 5.0	Total/NA	Solid	5035	
490-157307-26	S-060866-8918-DT-I 10.0	Total/NA	Solid	5035	
490-157307-27	S-060866-8918-DT-I 15.0	Total/NA	Solid	5035	
490-157307-20 MS	S-060866-8918-DT-G 10.0	Total/NA	Solid	5035	
490-157307-20 MSD	S-060866-8918-DT-G 10.0	Total/NA	Solid	5035	
490-157307-24 MS	S-060866-8818-DT-H 15.0	Total/NA	Solid	5035	
490-157307-24 MSD	S-060866-8818-DT-H 15.0	Total/NA	Solid	5035	
490-157307-26 MS	S-060866-8918-DT-I 10.0	Total/NA	Solid	5035	

GC/MS VOA (Continued)

Prep Batch: 535681 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-26 MSD	S-060866-8918-DT-I 10.0	Total/NA	Solid	5035	

Prep Batch: 535684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-1	S-060866-8818-DT-A 5.0	Total/NA	Solid	5035	
490-157307-2	S-060866-8818-DT-A 10.0	Total/NA	Solid	5035	
490-157307-3	S-060866-8818-DT-A 15.0	Total/NA	Solid	5035	
490-157307-4	S-060866-8818-DT-B 5.0	Total/NA	Solid	5035	
490-157307-5	S-060866-8818-DT-B 10.0	Total/NA	Solid	5035	
490-157307-6	S-060866-8818-DT-B 15.0	Total/NA	Solid	5035	
490-157307-7	S-060866-8818-DT-C 5.0	Total/NA	Solid	5035	
490-157307-8	S-060866-8818-DT-C 10.0	Total/NA	Solid	5035	
490-157307-9	S-060866-8818-DT-C 15.0	Total/NA	Solid	5035	
490-157307-10	S-060866-8918-DT-D 5.0	Total/NA	Solid	5035	
490-157307-10	S-060866-8918-DT-D 5.0	Total/NA	Solid	5035	
490-157307-11	S-060866-8918-DT-D 10.0	Total/NA	Solid	5035	
490-157307-12	S-060866-8918-DT-D 15.0'	Total/NA	Solid	5035	
490-157307-15	S-060866-8918-DT-E 15.0	Total/NA	Solid	5035	
490-157307-16	S-060866-8918-DT-F 5.0	Total/NA	Solid	5035	
490-157307-21	S-060866-8918-DT-G 15.0	Total/NA	Solid	5035	
490-157307-24	S-060866-8818-DT-H 15.0	Total/NA	Solid	5035	
490-157307-27	S-060866-8918-DT-I 15.0	Total/NA	Solid	5035	
490-157307-29	Trip Blanks	Total/NA	Solid	5035	

Analysis Batch: 535747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-8	S-060866-8818-DT-C 10.0	Total/NA	Solid	8260B	535684
490-157307-9	S-060866-8818-DT-C 15.0	Total/NA	Solid	8260B	535684
490-157307-11	S-060866-8918-DT-D 10.0	Total/NA	Solid	8260B	535684
490-157307-12	S-060866-8918-DT-D 15.0'	Total/NA	Solid	8260B	535684
490-157307-15	S-060866-8918-DT-E 15.0	Total/NA	Solid	8260B	535684
490-157307-16	S-060866-8918-DT-F 5.0	Total/NA	Solid	8260B	535684
490-157307-21	S-060866-8918-DT-G 15.0	Total/NA	Solid	8260B	535684
490-157307-24	S-060866-8818-DT-H 15.0	Total/NA	Solid	8260B	535684
490-157307-27	S-060866-8918-DT-I 15.0	Total/NA	Solid	8260B	535684
490-157307-29	Trip Blanks	Total/NA	Solid	8260B	535684
MB 490-535747/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-535747/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-535747/21	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 535753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-10	S-060866-8918-DT-D 5.0	Total/NA	Solid	8260B	535681
490-157307-13	S-060866-8918-DT-E 5.0	Total/NA	Solid	8260B	535681
490-157307-14	S-060866-8918-DT-E 10.0	Total/NA	Solid	8260B	535681
490-157307-18	S-060866-8918-DT-F 15.0	Total/NA	Solid	8260B	535681
490-157307-19	S-060866-8918-DT-G 5.0	Total/NA	Solid	8260B	535681
490-157307-22	S-060866-8818-DT-H 5.0	Total/NA	Solid	8260B	535681
490-157307-23	S-060866-8818-DT-H 10.0	Total/NA	Solid	8260B	535681
490-157307-25	S-060866-8918-DT-I 5.0	Total/NA	Solid	8260B	535681
490-157307-26	S-060866-8918-DT-I 10.0	Total/NA	Solid	8260B	535681

GC/MS VOA (Continued)

Analysis Batch: 535753 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-535753/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-535753/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-535753/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
490-157307-26 MS	S-060866-8918-DT-I 10.0	Total/NA	Solid	8260B	535681
490-157307-26 MSD	S-060866-8918-DT-I 10.0	Total/NA	Solid	8260B	535681

Prep Batch: 535805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157342-A-2-D MS	Matrix Spike	Total/NA	Solid	5030B	
490-157342-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Analysis Batch: 535837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-13	S-060866-8918-DT-E 5.0	Total/NA	Solid	8260B	535681
490-157307-14	S-060866-8918-DT-E 10.0	Total/NA	Solid	8260B	535681
490-157307-15	S-060866-8918-DT-E 15.0	Total/NA	Solid	8260B	535681
490-157307-16	S-060866-8918-DT-F 5.0	Total/NA	Solid	8260B	535681
490-157307-18	S-060866-8918-DT-F 15.0	Total/NA	Solid	8260B	535681
490-157307-21	S-060866-8918-DT-G 15.0	Total/NA	Solid	8260B	535681
490-157307-22	S-060866-8818-DT-H 5.0	Total/NA	Solid	8260B	535681
490-157307-23	S-060866-8818-DT-H 10.0	Total/NA	Solid	8260B	535681
490-157307-25	S-060866-8918-DT-I 5.0	Total/NA	Solid	8260B	535681
490-157307-26	S-060866-8918-DT-I 10.0	Total/NA	Solid	8260B	535681
MB 490-535837/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-535837/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-535837/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 535841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-10	S-060866-8918-DT-D 5.0	Total/NA	Solid	8260B	535684
MB 490-535841/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-535841/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-535841/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 536144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-17	S-060866-8918-DT-F 10.0	Total/NA	Solid	8260B	535681
490-157307-17	S-060866-8918-DT-F 10.0	Total/NA	Solid	8260B	535681
490-157307-20	S-060866-8918-DT-G 10.0	Total/NA	Solid	8260B	535681
490-157307-23	S-060866-8818-DT-H 10.0	Total/NA	Solid	8260B	535681
MB 490-536144/8	Method Blank	Total/NA	Solid	8260B	
LCS 490-536144/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-536144/5	Lab Control Sample Dup	Total/NA	Solid	8260B	
490-157307-20 MS	S-060866-8918-DT-G 10.0	Total/NA	Solid	8260B	535681
490-157307-20 MSD	S-060866-8918-DT-G 10.0	Total/NA	Solid	8260B	535681

Analysis Batch: 536145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-20	S-060866-8918-DT-G 10.0	Total/NA	Solid	8260B	535681
MB 490-536145/8	Method Blank	Total/NA	Solid	8260B	
LCS 490-536145/4	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS VOA (Continued)

Analysis Batch: 536145 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 490-536145/5	Lab Control Sample Dup	Total/NA	Solid	8260B	
490-157307-20 MS	S-060866-8918-DT-G 10.0	Total/NA	Solid	8260B	535681
490-157307-20 MSD	S-060866-8918-DT-G 10.0	Total/NA	Solid	8260B	535681

Analysis Batch: 536717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-24	S-060866-8918-DT-H 15.0	Total/NA	Solid	8260B	535681
490-157307-27	S-060866-8918-DT-I 15.0	Total/NA	Solid	8260B	535681
MB 490-536717/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-536717/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-536717/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
490-157307-24 MS	S-060866-8918-DT-H 15.0	Total/NA	Solid	8260B	535681
490-157307-24 MSD	S-060866-8918-DT-H 15.0	Total/NA	Solid	8260B	535681

Analysis Batch: 536721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-10	S-060866-8918-DT-D 5.0	Total/NA	Solid	8260B	535684
MB 490-536721/7	Method Blank	Total/NA	Solid	8260B	
LCS 490-536721/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-536721/5	Lab Control Sample Dup	Total/NA	Solid	8260B	
490-157342-A-2-D MS	Matrix Spike	Total/NA	Solid	8260B	535805
490-157342-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	535805

GC VOA

Analysis Batch: 535540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-1	S-060866-8918-DT-A 5.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-2	S-060866-8918-DT-A 10.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-3	S-060866-8918-DT-A 15.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-4	S-060866-8918-DT-B 5.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-5	S-060866-8918-DT-B 10.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-6	S-060866-8918-DT-B 15.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-7	S-060866-8918-DT-C 5.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-8	S-060866-8918-DT-C 10.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-9	S-060866-8918-DT-C 15.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-10	S-060866-8918-DT-D 5.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-11	S-060866-8918-DT-D 10.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-12	S-060866-8918-DT-D 15.0'	Total/NA	Solid	NWTPH-Gx	535637
490-157307-13	S-060866-8918-DT-E 5.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-14	S-060866-8918-DT-E 10.0	Total/NA	Solid	NWTPH-Gx	535637
MB 490-535540/28	Method Blank	Total/NA	Solid	NWTPH-Gx	
LCS 490-535540/26	Lab Control Sample	Total/NA	Solid	NWTPH-Gx	
LCSD 490-535540/27	Lab Control Sample Dup	Total/NA	Solid	NWTPH-Gx	
490-157307-1 DU	S-060866-8918-DT-A 5.0	Total/NA	Solid	NWTPH-Gx	535637

Prep Batch: 535637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-1	S-060866-8918-DT-A 5.0	Total/NA	Solid	5035	
490-157307-2	S-060866-8918-DT-A 10.0	Total/NA	Solid	5035	

GC VOA (Continued)

Prep Batch: 535637 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-3	S-060866-8818-DT-A 15.0	Total/NA	Solid	5035	
490-157307-4	S-060866-8818-DT-B 5.0	Total/NA	Solid	5035	
490-157307-5	S-060866-8818-DT-B 10.0	Total/NA	Solid	5035	
490-157307-6	S-060866-8818-DT-B 15.0	Total/NA	Solid	5035	
490-157307-7	S-060866-8818-DT-C 5.0	Total/NA	Solid	5035	
490-157307-8	S-060866-8818-DT-C 10.0	Total/NA	Solid	5035	
490-157307-9	S-060866-8818-DT-C 15.0	Total/NA	Solid	5035	
490-157307-10	S-060866-8918-DT-D 5.0	Total/NA	Solid	5035	
490-157307-11	S-060866-8918-DT-D 10.0	Total/NA	Solid	5035	
490-157307-12	S-060866-8918-DT-D 15.0'	Total/NA	Solid	5035	
490-157307-13	S-060866-8918-DT-E 5.0	Total/NA	Solid	5035	
490-157307-14	S-060866-8918-DT-E 10.0	Total/NA	Solid	5035	
490-157307-15	S-060866-8918-DT-E 15.0	Total/NA	Solid	5035	
490-157307-16	S-060866-8918-DT-F 5.0	Total/NA	Solid	5035	
490-157307-17	S-060866-8918-DT-F 10.0	Total/NA	Solid	5035	
490-157307-18	S-060866-8918-DT-F 15.0	Total/NA	Solid	5035	
490-157307-19	S-060866-8918-DT-G 5.0	Total/NA	Solid	5035	
490-157307-20	S-060866-8918-DT-G 10.0	Total/NA	Solid	5035	
490-157307-21	S-060866-8918-DT-G 15.0	Total/NA	Solid	5035	
490-157307-22	S-060866-8818-DT-H 5.0	Total/NA	Solid	5035	
490-157307-23	S-060866-8818-DT-H 10.0	Total/NA	Solid	5035	
490-157307-24	S-060866-8818-DT-H 15.0	Total/NA	Solid	5035	
490-157307-25	S-060866-8918-DT-I 5.0	Total/NA	Solid	5035	
490-157307-26	S-060866-8918-DT-I 10.0	Total/NA	Solid	5035	
490-157307-27	S-060866-8918-DT-I 15.0	Total/NA	Solid	5035	
490-157307-1 DU	S-060866-8818-DT-A 5.0	Total/NA	Solid	5035	
490-157307-15 DU	S-060866-8918-DT-E 15.0	Total/NA	Solid	5035	

Analysis Batch: 535777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-15	S-060866-8918-DT-E 15.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-16	S-060866-8918-DT-F 5.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-17	S-060866-8918-DT-F 10.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-18	S-060866-8918-DT-F 15.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-19	S-060866-8918-DT-G 5.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-20	S-060866-8918-DT-G 10.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-21	S-060866-8918-DT-G 15.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-22	S-060866-8818-DT-H 5.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-23	S-060866-8818-DT-H 10.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-24	S-060866-8818-DT-H 15.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-25	S-060866-8918-DT-I 5.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-26	S-060866-8918-DT-I 10.0	Total/NA	Solid	NWTPH-Gx	535637
490-157307-27	S-060866-8918-DT-I 15.0	Total/NA	Solid	NWTPH-Gx	535637
MB 490-535777/22	Method Blank	Total/NA	Solid	NWTPH-Gx	
MB 490-535777/40	Method Blank	Total/NA	Solid	NWTPH-Gx	
LCS 490-535777/20	Lab Control Sample	Total/NA	Solid	NWTPH-Gx	
LCS 490-535777/38	Lab Control Sample	Total/NA	Solid	NWTPH-Gx	
LCSD 490-535777/21	Lab Control Sample Dup	Total/NA	Solid	NWTPH-Gx	
LCSD 490-535777/39	Lab Control Sample Dup	Total/NA	Solid	NWTPH-Gx	
490-157307-15 DU	S-060866-8918-DT-E 15.0	Total/NA	Solid	NWTPH-Gx	535637

GC VOA (Continued)

Analysis Batch: 536110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-28	GW-060866-8918-DT-I	Total/NA	Water	NWTPH-Gx	
MB 490-536110/14	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 490-536110/12	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 490-536110/13	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
490-157307-28 DU	GW-060866-8918-DT-I	Total/NA	Water	NWTPH-Gx	

GC Semi VOA

Prep Batch: 536301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-1	S-060866-8818-DT-A 5.0	Total/NA	Solid	3550B	
490-157307-2	S-060866-8818-DT-A 10.0	Total/NA	Solid	3550B	
490-157307-3	S-060866-8818-DT-A 15.0	Total/NA	Solid	3550B	
490-157307-4	S-060866-8818-DT-B 5.0	Total/NA	Solid	3550B	
490-157307-5	S-060866-8818-DT-B 10.0	Total/NA	Solid	3550B	
490-157307-6	S-060866-8818-DT-B 15.0	Total/NA	Solid	3550B	
490-157307-7	S-060866-8818-DT-C 5.0	Total/NA	Solid	3550B	
490-157307-8	S-060866-8818-DT-C 10.0	Total/NA	Solid	3550B	
490-157307-9	S-060866-8818-DT-C 15.0	Total/NA	Solid	3550B	
490-157307-10	S-060866-8918-DT-D 5.0	Total/NA	Solid	3550B	
490-157307-11	S-060866-8918-DT-D 10.0	Total/NA	Solid	3550B	
490-157307-12	S-060866-8918-DT-D 15.0'	Total/NA	Solid	3550B	
490-157307-13	S-060866-8918-DT-E 5.0	Total/NA	Solid	3550B	
490-157307-14	S-060866-8918-DT-E 10.0	Total/NA	Solid	3550B	
490-157307-15	S-060866-8918-DT-E 15.0	Total/NA	Solid	3550B	
490-157307-16	S-060866-8918-DT-F 5.0	Total/NA	Solid	3550B	
490-157307-17	S-060866-8918-DT-F 10.0	Total/NA	Solid	3550B	
490-157307-18	S-060866-8918-DT-F 15.0	Total/NA	Solid	3550B	
490-157307-19	S-060866-8918-DT-G 5.0	Total/NA	Solid	3550B	
MB 490-536301/1-A	Method Blank	Total/NA	Solid	3550B	
LCS 490-536301/2-A	Lab Control Sample	Total/NA	Solid	3550B	
490-157307-4 DU	S-060866-8818-DT-B 5.0	Total/NA	Solid	3550B	
490-157307-16 DU	S-060866-8818-DT-F 5.0	Total/NA	Solid	3550B	

Analysis Batch: 536450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-1	S-060866-8818-DT-A 5.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-2	S-060866-8818-DT-A 10.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-3	S-060866-8818-DT-A 15.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-4	S-060866-8818-DT-B 5.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-5	S-060866-8818-DT-B 10.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-6	S-060866-8818-DT-B 15.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-7	S-060866-8818-DT-C 5.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-8	S-060866-8818-DT-C 10.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-9	S-060866-8818-DT-C 15.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-11	S-060866-8918-DT-D 10.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-12	S-060866-8918-DT-D 15.0'	Total/NA	Solid	NWTPH-Dx	536301
490-157307-15	S-060866-8918-DT-E 15.0	Total/NA	Solid	NWTPH-Dx	536301
MB 490-536301/1-A	Method Blank	Total/NA	Solid	NWTPH-Dx	536301
LCS 490-536301/2-A	Lab Control Sample	Total/NA	Solid	NWTPH-Dx	536301

GC Semi VOA (Continued)

Analysis Batch: 536450 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-4 DU	S-060866-8818-DT-B 5.0	Total/NA	Solid	NWTPH-Dx	536301

Prep Batch: 536611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-20	S-060866-8918-DT-G 10.0	Total/NA	Solid	3550B	
490-157307-21	S-060866-8918-DT-G 15.0	Total/NA	Solid	3550B	
490-157307-22	S-060866-8818-DT-H 5.0	Total/NA	Solid	3550B	
490-157307-23	S-060866-8818-DT-H 10.0	Total/NA	Solid	3550B	
490-157307-24	S-060866-8818-DT-H 15.0	Total/NA	Solid	3550B	
490-157307-25	S-060866-8918-DT-I 5.0	Total/NA	Solid	3550B	
490-157307-26	S-060866-8918-DT-I 10.0	Total/NA	Solid	3550B	
490-157307-27	S-060866-8918-DT-I 15.0	Total/NA	Solid	3550B	
MB 490-536611/1-A	Method Blank	Total/NA	Solid	3550B	
LCS 490-536611/2-A	Lab Control Sample	Total/NA	Solid	3550B	
490-157307-25 DU	S-060866-8918-DT-I 5.0	Total/NA	Solid	3550B	

Analysis Batch: 536684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-10	S-060866-8918-DT-D 5.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-13	S-060866-8918-DT-E 5.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-14	S-060866-8918-DT-E 10.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-16	S-060866-8918-DT-F 5.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-17	S-060866-8918-DT-F 10.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-18	S-060866-8918-DT-F 15.0	Total/NA	Solid	NWTPH-Dx	536301
490-157307-19	S-060866-8918-DT-G 5.0	Total/NA	Solid	NWTPH-Dx	536301
MB 490-536611/1-A	Method Blank	Total/NA	Solid	NWTPH-Dx	536611
LCS 490-536611/2-A	Lab Control Sample	Total/NA	Solid	NWTPH-Dx	536611
490-157307-16 DU	S-060866-8918-DT-F 5.0	Total/NA	Solid	NWTPH-Dx	536301

Analysis Batch: 536973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-20	S-060866-8918-DT-G 10.0	Total/NA	Solid	NWTPH-Dx	536611
490-157307-21	S-060866-8918-DT-G 15.0	Total/NA	Solid	NWTPH-Dx	536611
490-157307-22	S-060866-8818-DT-H 5.0	Total/NA	Solid	NWTPH-Dx	536611
490-157307-23	S-060866-8818-DT-H 10.0	Total/NA	Solid	NWTPH-Dx	536611
490-157307-24	S-060866-8818-DT-H 15.0	Total/NA	Solid	NWTPH-Dx	536611
490-157307-25	S-060866-8918-DT-I 5.0	Total/NA	Solid	NWTPH-Dx	536611
490-157307-26	S-060866-8918-DT-I 10.0	Total/NA	Solid	NWTPH-Dx	536611
490-157307-26	S-060866-8918-DT-I 10.0	Total/NA	Solid	NWTPH-Dx	536611
490-157307-27	S-060866-8918-DT-I 15.0	Total/NA	Solid	NWTPH-Dx	536611
490-157307-25 DU	S-060866-8918-DT-I 5.0	Total/NA	Solid	NWTPH-Dx	536611

Prep Batch: 537484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-28	GW-060866-8918-DT-I	Total/NA	Water	3510C	
MB 490-537484/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-537484/2-A	Lab Control Sample	Total/NA	Water	3510C	
490-157729-G-4-A DU	Duplicate	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Analysis Batch: 537966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-28	GW-060866-8918-DT-I	Total/NA	Water	NWTPH-Dx	537484
MB 490-537484/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	537484
LCS 490-537484/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	537484
490-157729-G-4-A DU	Duplicate	Total/NA	Water	NWTPH-Dx	537484

General Chemistry

Analysis Batch: 535705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-11	S-060866-8918-DT-D 10.0	Total/NA	Solid	Moisture	
490-157307-12	S-060866-8918-DT-D 15.0'	Total/NA	Solid	Moisture	
490-157307-14	S-060866-8918-DT-E 10.0	Total/NA	Solid	Moisture	
490-157307-15	S-060866-8918-DT-E 15.0	Total/NA	Solid	Moisture	
490-157307-14 DU	S-060866-8918-DT-E 10.0	Total/NA	Solid	Moisture	

Analysis Batch: 535907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157307-1	S-060866-8918-DT-A 5.0	Total/NA	Solid	Moisture	
490-157307-2	S-060866-8918-DT-A 10.0	Total/NA	Solid	Moisture	
490-157307-3	S-060866-8918-DT-A 15.0	Total/NA	Solid	Moisture	
490-157307-4	S-060866-8918-DT-B 5.0	Total/NA	Solid	Moisture	
490-157307-5	S-060866-8918-DT-B 10.0	Total/NA	Solid	Moisture	
490-157307-6	S-060866-8918-DT-B 15.0	Total/NA	Solid	Moisture	
490-157307-7	S-060866-8918-DT-C 5.0	Total/NA	Solid	Moisture	
490-157307-8	S-060866-8918-DT-C 10.0	Total/NA	Solid	Moisture	
490-157307-9	S-060866-8918-DT-C 15.0	Total/NA	Solid	Moisture	
490-157307-10	S-060866-8918-DT-D 5.0	Total/NA	Solid	Moisture	
490-157307-13	S-060866-8918-DT-E 5.0	Total/NA	Solid	Moisture	
490-157307-16	S-060866-8918-DT-F 5.0	Total/NA	Solid	Moisture	
490-157307-17	S-060866-8918-DT-F 10.0	Total/NA	Solid	Moisture	
490-157307-18	S-060866-8918-DT-F 15.0	Total/NA	Solid	Moisture	
490-157307-19	S-060866-8918-DT-G 5.0	Total/NA	Solid	Moisture	
490-157307-20	S-060866-8918-DT-G 10.0	Total/NA	Solid	Moisture	
490-157307-21	S-060866-8918-DT-G 15.0	Total/NA	Solid	Moisture	
490-157307-22	S-060866-8918-DT-H 5.0	Total/NA	Solid	Moisture	
490-157307-23	S-060866-8918-DT-H 10.0	Total/NA	Solid	Moisture	
490-157307-24	S-060866-8918-DT-H 15.0	Total/NA	Solid	Moisture	
490-157307-25	S-060866-8918-DT-I 5.0	Total/NA	Solid	Moisture	
490-157307-26	S-060866-8918-DT-I 10.0	Total/NA	Solid	Moisture	
490-157307-27	S-060866-8918-DT-I 15.0	Total/NA	Solid	Moisture	
490-157307-1 DU	S-060866-8918-DT-A 5.0	Total/NA	Solid	Moisture	
490-157307-17 DU	S-060866-8918-DT-F 10.0	Total/NA	Solid	Moisture	
490-157307-24 DU	S-060866-8918-DT-H 15.0	Total/NA	Solid	Moisture	

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157307-1
SDG: 701 Bozarth Ave, Woodland WA

Client Sample ID: S-060866-8818-DT-A 5.0
Lab Sample ID: 490-157307-1
Date Collected: 08/08/18 12:45
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8818-DT-A 5.0
Lab Sample ID: 490-157307-1
Date Collected: 08/08/18 12:45
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.329 g	5.0 mL	535684	08/08/18 14:45	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535580	08/13/18 19:24	S1S	TAL NSH
Total/NA	Prep	5035			5.762 g	5.0 mL	535637	08/08/18 14:45	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	535540	08/14/18 00:27	S1S	TAL NSH
Total/NA	Prep	3550B			25.03 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			536450	08/16/18 13:55	AK1	TAL NSH

Client Sample ID: S-060866-8818-DT-A 10.0
Lab Sample ID: 490-157307-2
Date Collected: 08/08/18 12:55
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8818-DT-A 10.0
Lab Sample ID: 490-157307-2
Date Collected: 08/08/18 12:55
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 74.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.509 g	5.0 mL	535684	08/08/18 14:55	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535580	08/13/18 19:52	S1S	TAL NSH
Total/NA	Prep	5035			5.418 g	5.0 mL	535637	08/08/18 14:55	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	535540	08/14/18 01:38	S1S	TAL NSH
Total/NA	Prep	3550B			25.42 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			536450	08/16/18 14:13	AK1	TAL NSH

Client Sample ID: S-060866-8818-DT-A 15.0
Lab Sample ID: 490-157307-3
Date Collected: 08/08/18 13:10
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8818-DT-A 15.0

Lab Sample ID: 490-157307-3
Date Collected: 08/08/18 13:10
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 75.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.604 g	5.0 mL	535684	08/08/18 15:10	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535580	08/13/18 20:20	S1S	TAL NSH
Total/NA	Prep	5035			5.582 g	5.0 mL	535637	08/08/18 15:10	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	535540	08/14/18 02:14	S1S	TAL NSH
Total/NA	Prep	3550B			25.39 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			536450	08/16/18 14:31	AK1	TAL NSH

Client Sample ID: S-060866-8818-DT-B 5.0

Lab Sample ID: 490-157307-4
Date Collected: 08/08/18 09:15
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8818-DT-B 5.0

Lab Sample ID: 490-157307-4
Date Collected: 08/08/18 09:15
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 77.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.322 g	5.0 mL	535684	08/08/18 11:15	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535580	08/13/18 20:48	S1S	TAL NSH
Total/NA	Prep	5035			5.71 g	5.0 mL	535637	08/08/18 11:15	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	535540	08/14/18 02:49	S1S	TAL NSH
Total/NA	Prep	3550B			25.12 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			536450	08/16/18 14:49	AK1	TAL NSH

Client Sample ID: S-060866-8818-DT-B 10.0

Lab Sample ID: 490-157307-5
Date Collected: 08/08/18 09:25
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8818-DT-B 10.0

Lab Sample ID: 490-157307-5
Date Collected: 08/08/18 09:25
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 68.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.741 g	5.0 mL	535684	08/08/18 11:25	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535580	08/13/18 21:16	S1S	TAL NSH
Total/NA	Prep	5035			5.302 g	5.0 mL	535637	08/08/18 11:25	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	535540	08/14/18 03:25	S1S	TAL NSH
Total/NA	Prep	3550B			25.29 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH

Client Sample ID: S-060866-8818-DT-B 10.0

Lab Sample ID: 490-157307-5
Date Collected: 08/08/18 09:25
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 68.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Dx		1			536450	08/16/18 15:26	AK1	TAL NSH

Client Sample ID: S-060866-8818-DT-B 15.0

Lab Sample ID: 490-157307-6
Date Collected: 08/08/18 09:35
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8818-DT-B 15.0

Lab Sample ID: 490-157307-6
Date Collected: 08/08/18 09:35
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 75.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.075 g	5.0 mL	535684	08/08/18 11:35	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535580	08/13/18 21:44	S1S	TAL NSH
Total/NA	Prep	5035			5.777 g	5.0 mL	535637	08/08/18 11:35	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	535540	08/14/18 04:00	S1S	TAL NSH
Total/NA	Prep	3550B			25.31 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			536450	08/16/18 15:44	AK1	TAL NSH

Client Sample ID: S-060866-8818-DT-C 5.0

Lab Sample ID: 490-157307-7
Date Collected: 08/08/18 15:45
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8818-DT-C 5.0

Lab Sample ID: 490-157307-7
Date Collected: 08/08/18 15:45
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 73.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.392 g	5.0 mL	535684	08/08/18 17:45	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535580	08/13/18 22:12	S1S	TAL NSH
Total/NA	Prep	5035			5.3 g	5.0 mL	535637	08/08/18 17:45	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	535540	08/14/18 04:36	S1S	TAL NSH
Total/NA	Prep	3550B			25.11 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			536450	08/16/18 16:02	AK1	TAL NSH

Client Sample ID: S-060866-8818-DT-C 10.0
Lab Sample ID: 490-157307-8
Date Collected: 08/08/18 15:55
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8818-DT-C 10.0
Lab Sample ID: 490-157307-8
Date Collected: 08/08/18 15:55
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 71.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.79 g	5.0 mL	535684	08/08/18 17:55	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535747	08/14/18 02:52	AK1	TAL NSH
Total/NA	Prep	5035			4.879 g	5.0 mL	535637	08/08/18 17:55	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	535540	08/14/18 05:12	S1S	TAL NSH
Total/NA	Prep	3550B			25.04 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			536450	08/16/18 16:20	AK1	TAL NSH

Client Sample ID: S-060866-8818-DT-C 15.0
Lab Sample ID: 490-157307-9
Date Collected: 08/08/18 16:00
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8818-DT-C 15.0
Lab Sample ID: 490-157307-9
Date Collected: 08/08/18 16:00
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 71.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.512 g	5.0 mL	535684	08/08/18 18:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535747	08/14/18 03:19	AK1	TAL NSH
Total/NA	Prep	5035			5.207 g	5.0 mL	535637	08/08/18 18:00	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	535540	08/14/18 05:47	S1S	TAL NSH
Total/NA	Prep	3550B			25.35 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			536450	08/16/18 16:39	AK1	TAL NSH

Client Sample ID: S-060866-8918-DT-D 5.0
Lab Sample ID: 490-157307-10
Date Collected: 08/09/18 10:00
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-D 5.0

Lab Sample ID: 490-157307-10
Date Collected: 08/09/18 10:00
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 78.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.705 g	5.0 mL	535681	08/09/18 12:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	535753	08/14/18 02:01	PN	TAL NSH
Total/NA	Prep	5035			5.552 g	5.0 mL	535684	08/09/18 12:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535841	08/14/18 14:56	NC	TAL NSH
Total/NA	Prep	5035			5.288 g	5.0 mL	535684	08/09/18 12:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	536721	08/17/18 17:19	AK1	TAL NSH
Total/NA	Prep	5035			5.264 g	5.0 mL	535637	08/09/18 12:00	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		100	0.1 mL	5 mL	535540	08/14/18 09:21	S1S	TAL NSH
Total/NA	Prep	3550B			25.62 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		50			536684	08/17/18 13:07	JDJ	TAL NSH

Client Sample ID: S-060866-8918-DT-D 10.0

Lab Sample ID: 490-157307-11
Date Collected: 08/09/18 10:10
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535705	08/13/18 13:55	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-D 10.0

Lab Sample ID: 490-157307-11
Date Collected: 08/09/18 10:10
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 69.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.97 g	5.0 mL	535684	08/09/18 12:10	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535747	08/14/18 03:47	AK1	TAL NSH
Total/NA	Prep	5035			5.019 g	5.0 mL	535637	08/09/18 12:10	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		10	0.1 mL	5 mL	535540	08/14/18 09:56	S1S	TAL NSH
Total/NA	Prep	3550B			25.06 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			536450	08/16/18 17:15	AK1	TAL NSH

Client Sample ID: S-060866-8918-DT-D 15.0'

Lab Sample ID: 490-157307-12
Date Collected: 08/09/18 10:22
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535705	08/13/18 13:55	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-D 15.0'

Lab Sample ID: 490-157307-12
Date Collected: 08/09/18 10:22
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 68.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.844 g	5.0 mL	535684	08/09/18 12:22	DHC	TAL NSH

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157307-1
SDG: 701 Bozarth Ave, Woodland WA

Client Sample ID: S-060866-8918-DT-D 15.0'

Lab Sample ID: 490-157307-12
Date Collected: 08/09/18 10:22
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 68.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 mL	535747	08/14/18 04:15	AK1	TAL NSH
Total/NA	Prep	5035			3.258 g	5.0 mL	535637	08/09/18 12:22	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	535540	08/14/18 11:07	S1S	TAL NSH
Total/NA	Prep	3550B			25.17 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			536450	08/16/18 17:34	AK1	TAL NSH

Client Sample ID: S-060866-8918-DT-E 5.0

Lab Sample ID: 490-157307-13
Date Collected: 08/09/18 08:25
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-E 5.0

Lab Sample ID: 490-157307-13
Date Collected: 08/09/18 08:25
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 71.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.741 g	5.0 mL	535681	08/09/18 10:25	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	535753	08/14/18 02:30	PN	TAL NSH
Total/NA	Prep	5035			5.741 g	5.0 mL	535681	08/09/18 10:25	DHC	TAL NSH
Total/NA	Analysis	8260B		20	0.1 mL	5 mL	535837	08/14/18 14:10	RP	TAL NSH
Total/NA	Prep	5035			5.383 g	5.0 mL	535637	08/09/18 10:25	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		100	0.1 mL	5 mL	535540	08/14/18 08:10	S1S	TAL NSH
Total/NA	Prep	3550B			25.04 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		50			536684	08/17/18 13:43	JDJ	TAL NSH

Client Sample ID: S-060866-8918-DT-E 10.0

Lab Sample ID: 490-157307-14
Date Collected: 08/09/18 08:35
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535705	08/13/18 13:55	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-E 10.0

Lab Sample ID: 490-157307-14
Date Collected: 08/09/18 08:35
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 76.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.352 g	5.0 mL	535681	08/09/18 10:35	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	535753	08/14/18 02:59	PN	TAL NSH
Total/NA	Prep	5035			5.352 g	5.0 mL	535681	08/09/18 10:35	DHC	TAL NSH
Total/NA	Analysis	8260B		20	0.1 mL	5 mL	535837	08/14/18 15:11	RP	TAL NSH

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157307-1
SDG: 701 Bozarth Ave, Woodland WA

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.976 g	5.0 mL	535637	08/09/18 10:35	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		100	0.1 mL	5 mL	535540	08/14/18 08:45	S1S	TAL NSH
Total/NA	Prep	3550B			25.46 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		25			536684	08/17/18 14:20	JDJ	TAL NSH

Client Sample ID: S-060866-8918-DT-E 15.0
Date Collected: 08/09/18 08:45
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535705	08/13/18 13:55	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-E 15.0
Date Collected: 08/09/18 08:45
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-15
Matrix: Solid
Percent Solids: 71.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.675 g	5.0 mL	535681	08/09/18 10:45	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	535837	08/14/18 18:32	RP	TAL NSH
Total/NA	Prep	5035			5.991 g	5.0 mL	535684	08/09/18 10:45	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535747	08/14/18 04:43	AK1	TAL NSH
Total/NA	Prep	5035			5.205 g	5.0 mL	535637	08/09/18 10:45	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	535777	08/15/18 02:29	AK1	TAL NSH
Total/NA	Prep	3550B			25.17 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			536450	08/16/18 19:05	AK1	TAL NSH

Client Sample ID: S-060866-8918-DT-F 5.0
Date Collected: 08/09/18 11:50
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-F 5.0
Date Collected: 08/09/18 11:50
Date Received: 08/11/18 10:45

Lab Sample ID: 490-157307-16
Matrix: Solid
Percent Solids: 67.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.187 g	5.0 mL	535681	08/09/18 13:50	DHC	TAL NSH
Total/NA	Analysis	8260B		10	0.1 mL	5 mL	535837	08/14/18 19:29	RP	TAL NSH
Total/NA	Prep	5035			5.336 g	5.0 mL	535684	08/09/18 13:50	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535747	08/14/18 05:11	AK1	TAL NSH
Total/NA	Prep	5035			5.481 g	5.0 mL	535637	08/09/18 13:50	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		20	0.1 mL	5 mL	535777	08/15/18 16:37	AK1	TAL NSH
Total/NA	Prep	3550B			25.04 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		20			536684	08/17/18 14:38	JDJ	TAL NSH

Client Sample ID: S-060866-8918-DT-F 10.0
Lab Sample ID: 490-157307-17
Date Collected: 08/09/18 12:00
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-F 10.0
Lab Sample ID: 490-157307-17
Date Collected: 08/09/18 12:00
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 74.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.718 g	5.0 mL	535681	08/09/18 14:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	536144	08/15/18 15:59	P1B	TAL NSH
Total/NA	Prep	5035			5.718 g	5.0 mL	535681	08/09/18 14:00	DHC	TAL NSH
Total/NA	Analysis	8260B		20	0.1 mL	5 mL	536144	08/15/18 16:28	P1B	TAL NSH
Total/NA	Prep	5035			6.238 g	5.0 mL	535637	08/09/18 14:00	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		100	0.1 mL	5 mL	535777	08/15/18 18:36	AK1	TAL NSH
Total/NA	Prep	3550B			25.13 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		25			536684	08/17/18 15:14	JDJ	TAL NSH

Client Sample ID: S-060866-8918-DT-F 15.0
Lab Sample ID: 490-157307-18
Date Collected: 08/09/18 12:07
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-F 15.0
Lab Sample ID: 490-157307-18
Date Collected: 08/09/18 12:07
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 74.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.953 g	5.0 mL	535681	08/09/18 14:07	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	535753	08/14/18 03:28	PN	TAL NSH
Total/NA	Prep	5035			5.953 g	5.0 mL	535681	08/09/18 14:07	DHC	TAL NSH
Total/NA	Analysis	8260B		20	0.1 mL	5 mL	535837	08/14/18 15:39	RP	TAL NSH
Total/NA	Prep	5035			5.914 g	5.0 mL	535637	08/09/18 14:07	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		10	0.1 mL	5 mL	535777	08/15/18 14:42	AK1	TAL NSH
Total/NA	Prep	3550B			25.17 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		25			536684	08/17/18 15:51	JDJ	TAL NSH

Client Sample ID: S-060866-8918-DT-G 5.0
Lab Sample ID: 490-157307-19
Date Collected: 08/09/18 10:55
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-G 5.0

Lab Sample ID: 490-157307-19
Date Collected: 08/09/18 10:55
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 65.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.724 g	5.0 mL	535681	08/09/18 12:55	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	535753	08/14/18 03:57	PN	TAL NSH
Total/NA	Prep	5035			4.988 g	5.0 mL	535637	08/09/18 12:55	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		20	0.1 mL	5 mL	535777	08/15/18 17:17	AK1	TAL NSH
Total/NA	Prep	3550B			25.41 g	1.00 mL	536301	08/15/18 15:42	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		10			536684	08/17/18 16:09	JDJ	TAL NSH

Client Sample ID: S-060866-8918-DT-G 10.0

Lab Sample ID: 490-157307-20
Date Collected: 08/09/18 11:05
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-G 10.0

Lab Sample ID: 490-157307-20
Date Collected: 08/09/18 11:05
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 75.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.919 g	5.0 mL	535681	08/09/18 13:05	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	536144	08/15/18 15:02	P1B	TAL NSH
Total/NA	Prep	5035			4.919 g	5.0 mL	535681	08/09/18 13:05	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	536145	08/15/18 15:02	PN	TAL NSH
Total/NA	Prep	5035			4.443 g	5.0 mL	535637	08/09/18 13:05	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		10	0.1 mL	5 mL	535777	08/15/18 15:19	AK1	TAL NSH
Total/NA	Prep	3550B			25.01 g	1.00 mL	536611	08/16/18 15:46	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		10			536973	08/18/18 13:12	LOJ	TAL NSH

Client Sample ID: S-060866-8918-DT-G 15.0

Lab Sample ID: 490-157307-21
Date Collected: 08/09/18 11:15
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-G 15.0

Lab Sample ID: 490-157307-21
Date Collected: 08/09/18 11:15
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 73.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.755 g	5.0 mL	535681	08/09/18 13:15	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	535837	08/14/18 19:00	RP	TAL NSH

Client Sample ID: S-060866-8918-DT-G 15.0

Lab Sample ID: 490-157307-21
Date Collected: 08/09/18 11:15
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 73.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.162 g	5.0 mL	535684	08/09/18 13:15	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535747	08/14/18 06:07	AK1	TAL NSH
Total/NA	Prep	5035			5.868 g	5.0 mL	535637	08/09/18 13:15	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	535777	08/15/18 13:28	AK1	TAL NSH
Total/NA	Prep	3550B			25.54 g	1.00 mL	536611	08/16/18 15:46	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			536973	08/18/18 12:00	LOJ	TAL NSH

Client Sample ID: S-060866-8818-DT-H 5.0

Lab Sample ID: 490-157307-22
Date Collected: 08/08/18 16:55
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8818-DT-H 5.0

Lab Sample ID: 490-157307-22
Date Collected: 08/08/18 16:55
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 70.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.6 g	5.0 mL	535681	08/08/18 18:55	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	535753	08/14/18 04:27	PN	TAL NSH
Total/NA	Prep	5035			4.6 g	5.0 mL	535681	08/08/18 18:55	DHC	TAL NSH
Total/NA	Analysis	8260B		20	0.1 mL	5 mL	535837	08/14/18 16:08	RP	TAL NSH
Total/NA	Prep	5035			5.211 g	5.0 mL	535637	08/08/18 18:55	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		20	0.1 mL	5 mL	535777	08/15/18 17:57	AK1	TAL NSH
Total/NA	Prep	3550B			25.22 g	1.00 mL	536611	08/16/18 15:46	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		50			536973	08/18/18 13:30	LOJ	TAL NSH

Client Sample ID: S-060866-8818-DT-H 10.0

Lab Sample ID: 490-157307-23
Date Collected: 08/08/18 17:00
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8818-DT-H 10.0

Lab Sample ID: 490-157307-23
Date Collected: 08/08/18 17:00
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 74.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.353 g	5.0 mL	535681	08/08/18 19:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	535753	08/14/18 04:56	PN	TAL NSH
Total/NA	Prep	5035			4.353 g	5.0 mL	535681	08/08/18 19:00	DHC	TAL NSH

Client Sample ID: S-060866-8818-DT-H 10.0

Lab Sample ID: 490-157307-23
Date Collected: 08/08/18 17:00
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 74.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	0.1 mL	5 mL	535837	08/14/18 16:37	RP	TAL NSH
Total/NA	Prep	5035			4.353 g	5.0 mL	535681	08/08/18 19:00	DHC	TAL NSH
Total/NA	Analysis	8260B		40	0.1 mL	5 mL	536144	08/15/18 15:31	P1B	TAL NSH
Total/NA	Prep	5035			4.197 g	5.0 mL	535637	08/08/18 19:00	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		100	0.1 mL	5 mL	535777	08/15/18 19:15	AK1	TAL NSH
Total/NA	Prep	3550B			25.31 g	1.00 mL	536611	08/16/18 15:46	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		25			536973	08/18/18 13:48	LOJ	TAL NSH

Client Sample ID: S-060866-8818-DT-H 15.0

Lab Sample ID: 490-157307-24
Date Collected: 08/08/18 17:10
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8818-DT-H 15.0

Lab Sample ID: 490-157307-24
Date Collected: 08/08/18 17:10
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 71.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.404 g	5.0 mL	535681	08/08/18 19:10	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	536717	08/17/18 14:27	P1B	TAL NSH
Total/NA	Prep	5035			6.297 g	5.0 mL	535684	08/08/18 19:10	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535747	08/14/18 06:35	AK1	TAL NSH
Total/NA	Prep	5035			5.767 g	5.0 mL	535637	08/08/18 19:10	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		10	0.1 mL	5 mL	535777	08/15/18 15:58	AK1	TAL NSH
Total/NA	Prep	3550B			25.02 g	1.00 mL	536611	08/16/18 15:46	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		5			536973	08/18/18 14:25	LOJ	TAL NSH

Client Sample ID: S-060866-8918-DT-I 5.0

Lab Sample ID: 490-157307-25
Date Collected: 08/09/18 07:00
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-I 5.0

Lab Sample ID: 490-157307-25
Date Collected: 08/09/18 07:00
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 74.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3.873 g	5.0 mL	535681	08/09/18 09:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	535753	08/14/18 05:24	PN	TAL NSH

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157307-1
SDG: 701 Bozarth Ave, Woodland WA

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3.873 g	5.0 mL	535681	08/09/18 09:00	DHC	TAL NSH
Total/NA	Analysis	8260B		20	0.1 mL	5 mL	535837	08/14/18 17:05	RP	TAL NSH
Total/NA	Prep	5035			4.601 g	5.0 mL	535637	08/09/18 09:00	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		100	0.1 mL	5 mL	535777	08/15/18 19:54	AK1	TAL NSH
Total/NA	Prep	3550B			25.00 g	1.00 mL	536611	08/16/18 15:46	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		100			536973	08/18/18 14:43	LOJ	TAL NSH

Client Sample ID: S-060866-8918-DT-I 10.0
Lab Sample ID: 490-157307-26
Date Collected: 08/09/18 07:10
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-I 10.0
Lab Sample ID: 490-157307-26
Date Collected: 08/09/18 07:10
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 75.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.28 g	5.0 mL	535681	08/09/18 09:10	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	535753	08/14/18 05:53	PN	TAL NSH
Total/NA	Prep	5035			5.28 g	5.0 mL	535681	08/09/18 09:10	DHC	TAL NSH
Total/NA	Analysis	8260B		20	0.1 mL	5 mL	535837	08/14/18 17:34	RP	TAL NSH
Total/NA	Prep	5035			5.485 g	5.0 mL	535637	08/09/18 09:10	DHC	TAL NSH
Total/NA	Analysis	NWTPH-Gx		100	0.1 mL	5 mL	535777	08/15/18 20:31	AK1	TAL NSH
Total/NA	Prep	3550B			25.38 g	1.00 mL	536611	08/16/18 15:46	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		20			536973	08/18/18 15:19	LOJ	TAL NSH
Total/NA	Prep	3550B			25.38 g	1.00 mL	536611	08/16/18 15:46	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		40			536973	08/19/18 10:07	LOJ	TAL NSH

Client Sample ID: S-060866-8918-DT-I 15.0
Lab Sample ID: 490-157307-27
Date Collected: 08/09/18 07:20
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			535907	08/14/18 12:30	BAA	TAL NSH

Client Sample ID: S-060866-8918-DT-I 15.0
Lab Sample ID: 490-157307-27
Date Collected: 08/09/18 07:20
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 69.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.438 g	5.0 mL	535681	08/09/18 09:20	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	536717	08/17/18 14:56	P1B	TAL NSH
Total/NA	Prep	5035			6.354 g	5.0 mL	535684	08/09/18 09:20	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535747	08/14/18 07:03	AK1	TAL NSH
Total/NA	Prep	5035			5.418 g	5.0 mL	535637	08/09/18 09:20	DHC	TAL NSH

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157307-1
SDG: 701 Bozarth Ave, Woodland WA

Client Sample ID: S-060866-8918-DT-I 15.0

Lab Sample ID: 490-157307-27
Date Collected: 08/09/18 07:20
Matrix: Solid
Date Received: 08/11/18 10:45
Percent Solids: 69.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Gx		1	0.1 mL	5 mL	535777	08/15/18 14:05	AK1	TAL NSH
Total/NA	Prep	3550B			25.01 g	1.00 mL	536611	08/16/18 15:46	AMD	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			536973	08/18/18 12:18	LOJ	TAL NSH

Client Sample ID: GW-060866-8918-DT-I

Lab Sample ID: 490-157307-28
Date Collected: 08/09/18 14:05
Matrix: Water
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	535435	08/11/18 18:36	S1S	TAL NSH
Total/NA	Analysis	8260B		1	10 mL	10 mL	535627	08/13/18 21:09	P1B	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	536110	08/15/18 15:53	S1S	TAL NSH
Total/NA	Prep	3510C			961.1 mL	1 mL	537484	08/21/18 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			537966	08/22/18 17:05	LOJ	TAL NSH

Client Sample ID: Trip Blanks

Lab Sample ID: 490-157307-29
Date Collected: 08/09/18 00:01
Matrix: Solid
Date Received: 08/11/18 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0 g	5.0 mL	535684	08/09/18 02:01	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	535747	08/14/18 02:24	AK1	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157307-1
SDG: 701 Bozarth Ave, Woodland WA

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL NSH
3550B	Ultrasonic Extraction	SW846	TAL NSH
5030B	Purge and Trap	SW846	TAL NSH
5035	Closed System Purge and Trap	SW846	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157307-1
SDG: 701 Bozarth Ave, Woodland WA

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Washington	State Program	10	C789	07-19-19

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	1,1,1,2-Tetrachloroethane
8260B		Water	1,1,1-Trichloroethane
8260B		Water	1,1,2,2-Tetrachloroethane
8260B		Water	1,1,2-Trichloroethane
8260B		Water	1,1-Dichloroethane
8260B		Water	1,1-Dichloroethene
8260B		Water	1,1-Dichloropropene
8260B		Water	1,2,3-Trichlorobenzene
8260B		Water	1,2,3-Trichloropropane
8260B		Water	1,2,4-Trichlorobenzene
8260B		Water	1,2,4-Trimethylbenzene
8260B		Water	1,2-Dibromo-3-Chloropropane
8260B		Water	1,2-Dibromoethane (EDB)
8260B		Water	1,2-Dichlorobenzene
8260B		Water	1,2-Dichloroethane
8260B		Water	1,2-Dichloropropane
8260B		Water	1,3,5-Trimethylbenzene
8260B		Water	1,3-Dichlorobenzene
8260B		Water	1,3-Dichloropropane
8260B		Water	1,4-Dichlorobenzene
8260B		Water	2,2-Dichloropropane
8260B		Water	2-Butanone (MEK)
8260B		Water	2-Chlorotoluene
8260B		Water	2-Hexanone
8260B		Water	4-Chlorotoluene
8260B		Water	4-Methyl-2-pentanone (MIBK)
8260B		Water	Acetone
8260B		Water	Benzene
8260B		Water	Bromobenzene
8260B		Water	Bromochloromethane
8260B		Water	Bromodichloromethane
8260B		Water	Bromoform
8260B		Water	Bromomethane
8260B		Water	Carbon disulfide
8260B		Water	Carbon tetrachloride
8260B		Water	Chlorobenzene
8260B		Water	Chlorodibromomethane
8260B		Water	Chloroethane
8260B		Water	Chloroform
8260B		Water	Chloromethane
8260B		Water	cis-1,2-Dichloroethene
8260B		Water	cis-1,3-Dichloropropene
8260B		Water	Dibromomethane
8260B		Water	Dichlorodifluoromethane
8260B		Water	Ethylbenzene
8260B		Water	Hexachlorobutadiene

Laboratory: TestAmerica Nashville (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Washington	State Program	10	C789	07-19-19

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	Isopropylbenzene
8260B		Water	Methyl tert-butyl ether
8260B		Water	Methylene Chloride
8260B		Water	Naphthalene
8260B		Water	n-Butylbenzene
8260B		Water	N-Propylbenzene
8260B		Water	p-Isopropyltoluene
8260B		Water	sec-Butylbenzene
8260B		Water	Styrene
8260B		Water	tert-Butylbenzene
8260B		Water	Tetrachloroethene
8260B		Water	Toluene
8260B		Water	trans-1,2-Dichloroethene
8260B		Water	trans-1,3-Dichloropropene
8260B		Water	Trichloroethene
8260B		Water	Trichlorofluoromethane
8260B		Water	Vinyl chloride
8260B		Water	Xylenes, Total
8260B	5035	Solid	1,1,1,2-Tetrachloroethane
8260B	5035	Solid	1,1,1-Trichloroethane
8260B	5035	Solid	1,1,2,2-Tetrachloroethane
8260B	5035	Solid	1,1,2-Trichloroethane
8260B	5035	Solid	1,1-Dichloroethane
8260B	5035	Solid	1,1-Dichloroethene
8260B	5035	Solid	1,1-Dichloropropene
8260B	5035	Solid	1,2,3-Trichlorobenzene
8260B	5035	Solid	1,2,3-Trichloropropane
8260B	5035	Solid	1,2,4-Trichlorobenzene
8260B	5035	Solid	1,2,4-Trimethylbenzene
8260B	5035	Solid	1,2-Dibromo-3-Chloropropane
8260B	5035	Solid	1,2-Dibromoethane (EDB)
8260B	5035	Solid	1,2-Dichlorobenzene
8260B	5035	Solid	1,2-Dichloroethane
8260B	5035	Solid	1,2-Dichloropropane
8260B	5035	Solid	1,3,5-Trimethylbenzene
8260B	5035	Solid	1,3-Dichlorobenzene
8260B	5035	Solid	1,3-Dichloropropane
8260B	5035	Solid	1,4-Dichlorobenzene
8260B	5035	Solid	2,2-Dichloropropane
8260B	5035	Solid	2-Butanone (MEK)
8260B	5035	Solid	2-Chlorotoluene
8260B	5035	Solid	2-Hexanone
8260B	5035	Solid	4-Chlorotoluene
8260B	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260B	5035	Solid	Acetone
8260B	5035	Solid	Benzene

Laboratory: TestAmerica Nashville (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Washington	State Program	10	C789	07-19-19

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
8260B	5035	Solid	Bromobenzene
8260B	5035	Solid	Bromochloromethane
8260B	5035	Solid	Bromodichloromethane
8260B	5035	Solid	Bromoform
8260B	5035	Solid	Bromomethane
8260B	5035	Solid	Carbon disulfide
8260B	5035	Solid	Carbon tetrachloride
8260B	5035	Solid	Chlorobenzene
8260B	5035	Solid	Chlorodibromomethane
8260B	5035	Solid	Chloroethane
8260B	5035	Solid	Chloroform
8260B	5035	Solid	Chloromethane
8260B	5035	Solid	cis-1,2-Dichloroethene
8260B	5035	Solid	cis-1,3-Dichloropropene
8260B	5035	Solid	Dibromomethane
8260B	5035	Solid	Dichlorodifluoromethane
8260B	5035	Solid	Ethylbenzene
8260B	5035	Solid	Hexachlorobutadiene
8260B	5035	Solid	Isopropylbenzene
8260B	5035	Solid	Methyl tert-butyl ether
8260B	5035	Solid	Methylene Chloride
8260B	5035	Solid	Naphthalene
8260B	5035	Solid	n-Butylbenzene
8260B	5035	Solid	N-Propylbenzene
8260B	5035	Solid	p-Isopropyltoluene
8260B	5035	Solid	sec-Butylbenzene
8260B	5035	Solid	Styrene
8260B	5035	Solid	tert-Butylbenzene
8260B	5035	Solid	Tetrachloroethene
8260B	5035	Solid	Toluene
8260B	5035	Solid	trans-1,2-Dichloroethene
8260B	5035	Solid	trans-1,3-Dichloropropene
8260B	5035	Solid	Trichloroethene
8260B	5035	Solid	Trichlorofluoromethane
8260B	5035	Solid	Vinyl chloride
8260B	5035	Solid	Xylenes, Total

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-157307 Chain of Custody

Cooler Received/Opened On 8/11/2018 @ 1045

Time Samples Removed From Cooler 15:31 Time Samples Placed In Storage 16:01 (2 Hour Window)

1. Tracking # 3698 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17610176 pH Strip Lot N/A Chlorine Strip Lot N/A

2. Temperature of rep. sample or temp blank when opened: 3.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 2 (Front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) 2.7

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) KD

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) KD

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) KD

I certify that I attached a label with the unique LIMS number to each container (intial) KD

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 490
157307

COOLER RECEIPT FORM

Cooler Received/Opened On 8/11/2018 @ 1045

Time Samples Removed From Cooler 15:31 Time Samples Placed In Storage 16:01 (2 Hour Window)

1. Tracking # 3902 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960357 pH Strip Lot N/A Chlorine Strip Lot N/A

2. Temperature of rep. sample or temp blank when opened: 3.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: 2 Front

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (intial) GH

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) KD

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) KD

17. Were custody papers properly filled out (ink, signed, etc)? YES NO NA

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) KD

I certify that I attached a label with the unique LIMS number to each container (intial) KD

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO #_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 8/11/2018 @ 1045

Time Samples Removed From Cooler 15:31 Time Samples Placed In Storage 16:01 (2 Hour Window)

1. Tracking # 3687 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960357 pH Strip Lot N/A Chlorine Strip Lot N/A

2. Temperature of rep. sample or temp blank when opened: 4.0 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 2 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) GH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

● ⬅ Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # ____

I certify that I unloaded the cooler and answered questions 7-14 (intial) KD

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) KD

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) KD

I certify that I attached a label with the unique LIMS number to each container (intial) KD

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#____

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

p1 of 3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Tvdeau	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 490-86630-25165.3
Client Contact: Brian Peters	Phone: 425 409 8096	E-Mail: roxanne.cisneros@testamericainc.com		Page: Page 3 of 3
Company: GHD Services Inc.				Job #:
Address: 20818 44th Ave W Suite 190	Due Date Requested:			
City: Lynnwood	TAT Requested (days):			
State, Zip: WA, 98036				
Phone:	PO #: 4036058			
Email: brian.peters@ghd.com	WO #: 060866			
Project Name: Shell - Washington	Project #: 49001126			
Site	SSOW#:			

Analysis Requested

Loc: 490
157307

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - 8260B VOC	Moisture - Percent Moisture/Solids	NWTPH_Gx - NWTPH-Gx	8260B - 8260 BTEX	Moisture, NWTPH_Dx	8260B - 8260 BTEX	Total Number of containers	Special Instructions/Note:
	Preservation Code:							N	N	F	N	N	E		
1	S-060866-8818-DT-A 5.0	8/8/18	1245	G	Solid				X	X	X	X	X		
2	A 10.0		1255		Solid				X	X	X	X	X		
3	A 15.0		1310		Solid				X	X	X	X	X		
4	B 5.0		0915		Solid				X	X	X	X	X		
5	B 10.0		0925		Solid				X	X	X	X	X		
6	B 15.0		0935		Solid				X	X	X	X	X		
7	C 5.0		1545		Solid				X	X	X	X	X		
8	C 10.0		1555		Solid				X	X	X	X	X		
9	C 15.0		1600		Solid				X	X	X	X	X		
10	8918 - D 5.0	8/9/18	1000		Solid				X	X	X	X	X		
11	8918 - D 10.0	8/9/18	1010		Solid			X	X	X	X	X	X		

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8/23/2018

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
D. Tvdeau	8/10/18 0700	GHD		08-14-2018 10:45	TA-NAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.1, 3.9, 4.0

Ver: 08/ /2016

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Tvdeau	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 490-86630-25165.1
Client Contact: Brian Peters	Phone: 425 409 8096	E-Mail: roxanne.cisneros@testamericainc.com		Page: Page 1 of 3
Company: GHD Services Inc.				Job #:

Address: 20818 44th Ave W Suite 190	Due Date Requested:	Analysis Requested
City: Lynnwood	TAT Requested (days):	
State, Zip: WA, 98036		
Phone:	PO #: 4036058	
Email: brian.peters@ghd.com	WO #: 060866	
Project Name: Shell - Washington	Project #: 49001126	
Site:	SSOW#:	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - 8260B VOC	Moisture - Percent Moisture/Solids	NWTPH_Gx - NWTPH-Gx	8260B - 8260 BTEX	Moisture, NWTPH_Dx	8260B - 8260 BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:					N	N	F	N	N	E		
12	S-060866-8918-DT-D 15.0'	8/9/18	1022	G	Solid			X	X	X	X	X	X		
13	E 5.0		0825		Solid				X	X	X	X	X		
14	E 10.0		0835		Solid			X	X	X	X	X	X		
15	E 15.0		0845		Solid			X	X	X	X	X	X		
16	F 5.0		1150		Solid				X	X	X	X	X		
17	F 10.0		1200		Solid				X	X	X	X	X		
18	F 15.0		1207		Solid				X	X	X	X	X		
19	G 5.0		1055		Solid				X	X	X	X	X		
20	G 10.0		1105		Solid				X	X	X	X	X		
21	G 15.0		1115		Solid				X	X	X	X	X		
22	8818	8/8/18	1655		Solid				X	X	X	X	X		

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
D. Tvdeau	8/10/18 0700	GHD	[signature]	08-11-2018 10:45	TA-NAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.1, 3.9, 4.0

Ver: 08/04/2016

8/23/2018

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

P3 of 3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D-TN Lew	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 490-86630-25165.2
Client Contact: Brian Peters	Phone: 4254098096	E-Mail: roxanne.cisneros@testamericainc.com		Page: Page 2 of 3
Company: GHD Services Inc.				Job #:
Address: 20818 44th Ave W Suite 190	Due Date Requested:			
City: Lynnwood	TAT Requested (days):			
State, Zip: WA, 98036				
Phone:	PO #: 4036058			
Email: brian.peters@ghd.com	WO #: 060866			
Project Name: Shell - Washington	Project #: 49001126			
Site:	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - 8260B VOC	Moisture - Percent Moisture/Solids	NWTPH_Gx - NWTPH-Gx w/ Silica gel	8260B - 8260B BTEX	Moisture, NWTPH_Dx	8260B - 8260B BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	F	N	N	E		
23 S-060866-8818-DT-H10.0	8/8/18	1700	G	Solid				X	X	X	X	X		
24 8818 H15.0	8/8/18	1710		Solid				X	X	X	X	X		
25 8918 I 5.0	8/9/18	0700		Solid				X	X	X	X	X		
26 I 10.0		0710		Solid				X	X	X	X	X		
27 I 15.0		0720		Solid				X	X	X	X	X		
28 Gw: 060866 8918: DT: I		1405		~~Solid~~ W			X	X	X	X	X	X		
29 Trip blanks				Solid										
				Solid										
				Solid										
				Solid										
				Solid										

DT

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
D.TN Lew	8/10/18 0700	GHD		08-11-2018 10:45	TA-NAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.1, 3.9, 4.0

Ver: 08/04/2016

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8/23/2018

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-157729-1
TestAmerica SDG: 701 Bozarth Ave, Woodland, WA
Client Project/Site: Shell Woodland

For:
GHD Services Inc.
20818 44th Ave W
Suite 190
Lynnwood, Washington 98036

Attn: Brian Peters

Authorized for release by:
8/31/2018 9:05:28 PM
Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Designee for

Roxanne Cisneros, Senior Project Manager
(615)301-5761
roxanne.cisneros@testamericainc.com

Table of Contents

Sample Summary

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157729-1
SDG: 701 Bozarth Ave, Woodland, WA

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-157729-1	GW-060866-081518-LB-MW-1	Water	08/15/18 11:50	08/18/18 09:55
490-157729-2	GW-060866-081518-LB-MW-2	Water	08/15/18 09:35	08/18/18 09:55
490-157729-3	GW-060866-081418-LB-MW-3	Water	08/14/18 12:05	08/18/18 09:55
490-157729-4	GW-060866-081418-LB-MW-4	Water	08/14/18 15:20	08/18/18 09:55
490-157729-5	GW-060866-081418-LB-MW-5	Water	08/14/18 11:15	08/18/18 09:55
490-157729-6	GW-060866-081418-LB-MW-6	Water	08/14/18 17:00	08/18/18 09:55
490-157729-7	GW-060866-081518-LB-MW-7	Water	08/15/18 10:50	08/18/18 09:55
490-157729-8	GW-060866-081418-LB-MW-8	Water	08/14/18 13:35	08/18/18 09:55
490-157729-9	GW-060866-081518-LB-MW-9	Water	08/15/18 14:05	08/18/18 09:55
490-157729-10	GW-060866-081418-LB-MW-11	Water	08/14/18 09:55	08/18/18 09:55
490-157729-11	GW-060866-081418-LB-MW-12	Water	08/14/18 09:13	08/18/18 09:55
490-157729-12	GW-060866-081518-LB-MW-13	Water	08/15/18 08:10	08/18/18 09:55
490-157729-13	GW-060866-081518-LB-MW-14	Water	08/15/18 15:10	08/18/18 09:55
490-157729-14	GW-060866-081518-LB-MW-15	Water	08/15/18 13:10	08/18/18 09:55
490-157729-15	GW-060866-081518-LB-DUP-1	Water	08/15/18 00:01	08/18/18 09:55
490-157729-16	GW-060866-081418-LB-TB	Water	08/14/18 08:30	08/18/18 09:55

Job ID: 490-157729-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-157729-1

Comments
No additional comments.

Receipt
The samples were received on 8/18/2018 9:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.6º C, 1.4º C and 4.1º C.

Receipt Exceptions
The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): GW-060866-081418-LB-MW-11 (490-157729-10). The container labels list GW-060866-081418-LB-MW-11, while the COC lists GW-060866-081518-LB-MW-11.

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

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

GC Semi VOA
Method NWTPH-Dx: The following samples were diluted due to the nature of the sample matrix: GW-060866-081518-LB-MW-13 (490-157729-12) and GW-060866-081518-LB-MW-15 (490-157729-14). Elevated reporting limits (RLs) are provided.

Method NWTPH-Dx: The following samples contained a hydrocarbon pattern for analyte C10-C24 that most closely resembles a Diesel Fuel #2 product used by the laboratory for quantitative purposes: GW-060866-081518-LB-MW-9 (490-157729-9) and GW-060866-081518-LB-DUP-1 (490-157729-15). There was insufficient contamination present for analyte C24-C40 to perform a pattern match for the following samples: GW-060866-081518-LB-MW-9 (490-157729-9) and GW-060866-081518-LB-DUP-1 (490-157729-15).

Method NWTPH-Dx: The following sample contained a hydrocarbon pattern that most closely resembles a Gasoline product used by the laboratory for quantitative purposes and an unknown hydrocarbon pattern: GW-060866-081518-LB-MW-15 (490-157729-14).

Method NWTPH-Dx: The following samples contained a hydrocarbon pattern which does not match a typical Total Petroleum Hydrocarbon (TPH) pattern used by the laboratory for quantitative purposes: GW-060866-081418-LB-MW-6 (490-157729-6) and GW-060866-081518-LB-MW-7 (490-157729-7).

Method NWTPH-Dx: There was insufficient contamination present to perform a pattern match for the following sample: GW-060866-081418-LB-MW-5 (490-157729-5).

Method NWTPH-Dx: There was insufficient contamination present for analyte C10-C24 to perform a pattern match for the following samples: GW-060866-081518-LB-MW-1 (490-157729-1) and GW-060866-081518-LB-MW-13 (490-157729-12).

Method NWTPH-Dx: The following samples contained a hydrocarbon pattern for analyte C10-C24 that most closely resembles the Gasoline and Diesel Fuel #2 products used by the laboratory for quantitative purposes: GW-060866-081518-LB-MW-2 (490-157729-2), GW-060866-081418-LB-MW-3 (490-157729-3) and GW-060866-081518-LB-MW-14 (490-157729-13). There was insufficient contamination present for analyte C24-C40 to perform a pattern match for the following samples: GW-060866-081518-LB-MW-2 (490-157729-2), GW-060866-081418-LB-MW-3 (490-157729-3) and GW-060866-081518-LB-MW-14 (490-157729-13).

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

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

VOA Prep

Job ID: 490-157729-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Client Sample ID: GW-060866-081518-LB-MW-1

Lab Sample ID: 490-157729-1

Date Collected: 08/15/18 11:50

Matrix: Water

Date Received: 08/18/18 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			08/22/18 03:08	1
Ethylbenzene	ND		1.00		ug/L			08/22/18 03:08	1
Naphthalene	ND		5.00		ug/L			08/22/18 03:08	1
Toluene	ND		1.00		ug/L			08/22/18 03:08	1
Xylenes, Total	ND		3.00		ug/L			08/22/18 03:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*08/22/18 03:08*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/22/18 03:08*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*08/22/18 03:08*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/22/18 03:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**279**		100		ug/L			08/23/18 12:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*118*		*50 - 150*		*08/23/18 12:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**643**		97.7		ug/L		08/21/18 09:14	08/22/18 21:50	1
C24-C40	ND		97.7		ug/L		08/21/18 09:14	08/22/18 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*50 - 150*	*08/21/18 09:14*	*08/22/18 21:50*	*1*

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157729-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-081518-LB-MW-2
Date Collected: 08/15/18 09:35
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			08/21/18 21:25	1
Benzene	**186**		10.0		ug/L			08/22/18 15:48	10
Bromobenzene	ND		1.00		ug/L			08/21/18 21:25	1
Bromochloromethane	ND		1.00		ug/L			08/21/18 21:25	1
Bromodichloromethane	ND		1.00		ug/L			08/21/18 21:25	1
Bromoform	ND		1.00		ug/L			08/21/18 21:25	1
Bromomethane	ND		1.00		ug/L			08/21/18 21:25	1
2-Butanone (MEK)	ND		50.0		ug/L			08/21/18 21:25	1
Carbon disulfide	ND		1.00		ug/L			08/21/18 21:25	1
Carbon tetrachloride	ND		1.00		ug/L			08/21/18 21:25	1
Chlorobenzene	**1.66**		1.00		ug/L			08/21/18 21:25	1
Chlorodibromomethane	ND		1.00		ug/L			08/21/18 21:25	1
Chloroethane	ND		1.00		ug/L			08/21/18 21:25	1
Chloroform	ND		1.00		ug/L			08/21/18 21:25	1
Chloromethane	ND		1.00		ug/L			08/21/18 21:25	1
2-Chlorotoluene	**9.46**		1.00		ug/L			08/21/18 21:25	1
4-Chlorotoluene	ND		1.00		ug/L			08/21/18 21:25	1
cis-1,2-Dichloroethene	**1.61**		1.00		ug/L			08/21/18 21:25	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			08/21/18 21:25	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			08/21/18 21:25	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			08/21/18 21:25	1
Dibromomethane	ND		1.00		ug/L			08/21/18 21:25	1
1,2-Dichlorobenzene	**9.58**		1.00		ug/L			08/21/18 21:25	1
1,3-Dichlorobenzene	ND		1.00		ug/L			08/21/18 21:25	1
1,4-Dichlorobenzene	**2.95**		1.00		ug/L			08/21/18 21:25	1
Dichlorodifluoromethane	ND		1.00		ug/L			08/21/18 21:25	1
1,1-Dichloroethane	**1.25**		1.00		ug/L			08/21/18 21:25	1
1,2-Dichloroethane	ND		1.00		ug/L			08/21/18 21:25	1
1,1-Dichloroethene	ND		1.00		ug/L			08/21/18 21:25	1
1,2-Dichloropropane	ND		1.00		ug/L			08/21/18 21:25	1
1,3-Dichloropropane	ND		1.00		ug/L			08/21/18 21:25	1
2,2-Dichloropropane	ND		1.00		ug/L			08/21/18 21:25	1
1,1-Dichloropropene	ND		1.00		ug/L			08/21/18 21:25	1
Ethylbenzene	**31.1**		1.00		ug/L			08/21/18 21:25	1
Hexachlorobutadiene	ND		2.00		ug/L			08/21/18 21:25	1
2-Hexanone	ND		10.0		ug/L			08/21/18 21:25	1
Isopropylbenzene	**68.1**		1.00		ug/L			08/21/18 21:25	1
Methylene Chloride	ND		5.00		ug/L			08/21/18 21:25	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			08/21/18 21:25	1
Methyl tert-butyl ether	ND		1.00		ug/L			08/21/18 21:25	1
Naphthalene	ND		5.00		ug/L			08/21/18 21:25	1
n-Butylbenzene	**8.72**		1.00		ug/L			08/21/18 21:25	1
N-Propylbenzene	**109**		1.00		ug/L			08/21/18 21:25	1
p-Isopropyltoluene	**3.80**		1.00		ug/L			08/21/18 21:25	1
sec-Butylbenzene	**8.20**		1.00		ug/L			08/21/18 21:25	1
Styrene	ND		1.00		ug/L			08/21/18 21:25	1
tert-Butylbenzene	**1.05**		1.00		ug/L			08/21/18 21:25	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			08/21/18 21:25	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			08/21/18 21:25	1

Client Sample ID: GW-060866-081518-LB-MW-2

Date Collected: 08/15/18 09:35
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00		ug/L			08/21/18 21:25	1
Toluene	**9.34**		1.00		ug/L			08/21/18 21:25	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			08/21/18 21:25	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			08/21/18 21:25	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			08/21/18 21:25	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			08/21/18 21:25	1
1,1,1-Trichloroethane	ND		1.00		ug/L			08/21/18 21:25	1
1,1,2-Trichloroethane	ND		1.00		ug/L			08/21/18 21:25	1
Trichloroethene	ND		1.00		ug/L			08/21/18 21:25	1
Trichlorofluoromethane	ND		1.00		ug/L			08/21/18 21:25	1
1,2,3-Trichloropropane	ND		1.00		ug/L			08/21/18 21:25	1
1,2,4-Trimethylbenzene	**395**		10.0		ug/L			08/22/18 15:48	10
1,3,5-Trimethylbenzene	**95.3**		1.00		ug/L			08/21/18 21:25	1
Vinyl chloride	ND		1.00		ug/L			08/21/18 21:25	1
Xylenes, Total	**1620**		30.0		ug/L			08/22/18 15:48	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/21/18 21:25*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/22/18 15:48*	*10*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*08/21/18 21:25*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/22/18 15:48*	*10*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*08/21/18 21:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/22/18 15:48*	*10*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/21/18 21:25*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*08/22/18 15:48*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**7620**		1000		ug/L			08/23/18 16:16	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*106*		*50 - 150*		*08/23/18 16:16*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**3230**		97.8		ug/L		08/21/18 09:15	08/22/18 22:08	1
C24-C40	**179**		97.8		ug/L		08/21/18 09:15	08/22/18 22:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*70*		*50 - 150*	*08/21/18 09:15*	*08/22/18 22:08*	*1*

Client Sample ID: GW-060866-081418-LB-MW-3

Lab Sample ID: 490-157729-3

Date Collected: 08/14/18 12:05

Matrix: Water

Date Received: 08/18/18 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.56**		1.00		ug/L			08/22/18 03:35	1
Ethylbenzene	**24.3**		1.00		ug/L			08/22/18 03:35	1
Naphthalene	**6.73**		5.00		ug/L			08/22/18 03:35	1
Toluene	ND		1.00		ug/L			08/22/18 03:35	1
Xylenes, Total	**3.61**		3.00		ug/L			08/22/18 03:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*08/22/18 03:35*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/22/18 03:35*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/22/18 03:35*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/22/18 03:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**2730**		1000		ug/L			08/23/18 16:47	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*126*		*50 - 150*		*08/23/18 16:47*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**2030**		98.3		ug/L		08/21/18 09:15	08/22/18 22:25	1
C24-C40	**155**		98.3		ug/L		08/21/18 09:15	08/22/18 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*95*		*50 - 150*	*08/21/18 09:15*	*08/22/18 22:25*	*1*

Client Sample ID: GW-060866-081418-LB-MW-4

Date Collected: 08/14/18 15:20
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			08/22/18 04:01	1
Ethylbenzene	ND		1.00		ug/L			08/22/18 04:01	1
Naphthalene	ND		5.00		ug/L			08/22/18 04:01	1
Toluene	ND		1.00		ug/L			08/22/18 04:01	1
Xylenes, Total	ND		3.00		ug/L			08/22/18 04:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*08/22/18 04:01*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/22/18 04:01*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/22/18 04:01*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/22/18 04:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			08/23/18 11:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*99*		*50 - 150*		*08/23/18 11:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		96.1		ug/L		08/21/18 09:15	08/22/18 17:23	1
C24-C40	ND		96.1		ug/L		08/21/18 09:15	08/22/18 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*78*		*50 - 150*	*08/21/18 09:15*	*08/22/18 17:23*	*1*

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157729-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-081418-LB-MW-5
Date Collected: 08/14/18 11:15
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			08/21/18 20:05	1
Benzene	ND		1.00		ug/L			08/21/18 20:05	1
Bromobenzene	ND		1.00		ug/L			08/21/18 20:05	1
Bromochloromethane	ND		1.00		ug/L			08/21/18 20:05	1
Bromodichloromethane	ND		1.00		ug/L			08/21/18 20:05	1
Bromoform	ND		1.00		ug/L			08/21/18 20:05	1
Bromomethane	ND		1.00		ug/L			08/21/18 20:05	1
2-Butanone (MEK)	ND		50.0		ug/L			08/21/18 20:05	1
Carbon disulfide	ND		1.00		ug/L			08/21/18 20:05	1
Carbon tetrachloride	ND		1.00		ug/L			08/21/18 20:05	1
Chlorobenzene	ND		1.00		ug/L			08/21/18 20:05	1
Chlorodibromomethane	ND		1.00		ug/L			08/21/18 20:05	1
Chloroethane	ND		1.00		ug/L			08/21/18 20:05	1
Chloroform	ND		1.00		ug/L			08/21/18 20:05	1
Chloromethane	ND		1.00		ug/L			08/21/18 20:05	1
2-Chlorotoluene	ND		1.00		ug/L			08/21/18 20:05	1
4-Chlorotoluene	ND		1.00		ug/L			08/21/18 20:05	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			08/21/18 20:05	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			08/21/18 20:05	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			08/21/18 20:05	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			08/21/18 20:05	1
Dibromomethane	ND		1.00		ug/L			08/21/18 20:05	1
1,2-Dichlorobenzene	ND		1.00		ug/L			08/21/18 20:05	1
1,3-Dichlorobenzene	ND		1.00		ug/L			08/21/18 20:05	1
1,4-Dichlorobenzene	ND		1.00		ug/L			08/21/18 20:05	1
Dichlorodifluoromethane	ND		1.00		ug/L			08/21/18 20:05	1
1,1-Dichloroethane	ND		1.00		ug/L			08/21/18 20:05	1
1,2-Dichloroethane	ND		1.00		ug/L			08/21/18 20:05	1
1,1-Dichloroethene	ND		1.00		ug/L			08/21/18 20:05	1
1,2-Dichloropropane	ND		1.00		ug/L			08/21/18 20:05	1
1,3-Dichloropropane	ND		1.00		ug/L			08/21/18 20:05	1
2,2-Dichloropropane	ND		1.00		ug/L			08/21/18 20:05	1
1,1-Dichloropropene	ND		1.00		ug/L			08/21/18 20:05	1
Ethylbenzene	**2.91**		1.00		ug/L			08/21/18 20:05	1
Hexachlorobutadiene	ND		2.00		ug/L			08/21/18 20:05	1
2-Hexanone	ND		10.0		ug/L			08/21/18 20:05	1
Isopropylbenzene	**3.02**		1.00		ug/L			08/21/18 20:05	1
Methylene Chloride	ND		5.00		ug/L			08/21/18 20:05	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			08/21/18 20:05	1
Methyl tert-butyl ether	ND		1.00		ug/L			08/21/18 20:05	1
Naphthalene	ND		5.00		ug/L			08/21/18 20:05	1
n-Butylbenzene	**1.08**		1.00		ug/L			08/21/18 20:05	1
N-Propylbenzene	**3.97**		1.00		ug/L			08/21/18 20:05	1
p-Isopropyltoluene	ND		1.00		ug/L			08/21/18 20:05	1
sec-Butylbenzene	**1.90**		1.00		ug/L			08/21/18 20:05	1
Styrene	ND		1.00		ug/L			08/21/18 20:05	1
tert-Butylbenzene	ND		1.00		ug/L			08/21/18 20:05	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			08/21/18 20:05	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			08/21/18 20:05	1

Client Sample ID: GW-060866-081418-LB-MW-5

Lab Sample ID: 490-157729-5

Date Collected: 08/14/18 11:15

Matrix: Water

Date Received: 08/18/18 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00		ug/L			08/21/18 20:05	1
Toluene	ND		1.00		ug/L			08/21/18 20:05	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			08/21/18 20:05	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			08/21/18 20:05	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			08/21/18 20:05	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			08/21/18 20:05	1
1,1,1-Trichloroethane	ND		1.00		ug/L			08/21/18 20:05	1
1,1,2-Trichloroethane	ND		1.00		ug/L			08/21/18 20:05	1
Trichloroethene	ND		1.00		ug/L			08/21/18 20:05	1
Trichlorofluoromethane	ND		1.00		ug/L			08/21/18 20:05	1
1,2,3-Trichloropropane	ND		1.00		ug/L			08/21/18 20:05	1
1,2,4-Trimethylbenzene	**2.51**		1.00		ug/L			08/21/18 20:05	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			08/21/18 20:05	1
Vinyl chloride	ND		1.00		ug/L			08/21/18 20:05	1
Xylenes, Total	ND		3.00		ug/L			08/21/18 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/21/18 20:05*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/21/18 20:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*08/21/18 20:05*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/21/18 20:05*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**307**		100		ug/L			08/23/18 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*98*		*50 - 150*		*08/23/18 13:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**129**		94.9		ug/L		08/21/18 09:15	08/22/18 22:43	1
C24-C40	ND		94.9		ug/L		08/21/18 09:15	08/22/18 22:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*84*		*50 - 150*	*08/21/18 09:15*	*08/22/18 22:43*	*1*

Client Sample ID: GW-060866-081418-LB-MW-6

Date Collected: 08/14/18 17:00
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			08/22/18 04:28	1
Ethylbenzene	ND		1.00		ug/L			08/22/18 04:28	1
Naphthalene	ND		5.00		ug/L			08/22/18 04:28	1
Toluene	ND		1.00		ug/L			08/22/18 04:28	1
Xylenes, Total	ND		3.00		ug/L			08/22/18 04:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/22/18 04:28*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/22/18 04:28*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*08/22/18 04:28*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/22/18 04:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			08/23/18 11:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*100*		*50 - 150*		*08/23/18 11:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**231**		96.0		ug/L		08/21/18 09:15	08/22/18 23:01	1
C24-C40	**200**		96.0		ug/L		08/21/18 09:15	08/22/18 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*107*		*50 - 150*	*08/21/18 09:15*	*08/22/18 23:01*	*1*

Client Sample ID: GW-060866-081518-LB-MW-7

Lab Sample ID: 490-157729-7

Date Collected: 08/15/18 10:50

Matrix: Water

Date Received: 08/18/18 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			08/22/18 04:54	1
Ethylbenzene	ND		1.00		ug/L			08/22/18 04:54	1
Naphthalene	ND		5.00		ug/L			08/22/18 04:54	1
Toluene	ND		1.00		ug/L			08/22/18 04:54	1
Xylenes, Total	ND		3.00		ug/L			08/22/18 04:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*08/22/18 04:54*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/22/18 04:54*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/22/18 04:54*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/22/18 04:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			08/23/18 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*102*		*50 - 150*		*08/23/18 13:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**356**		95.4		ug/L		08/21/18 09:15	08/22/18 23:54	1
C24-C40	**221**		95.4		ug/L		08/21/18 09:15	08/22/18 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*98*		*50 - 150*	*08/21/18 09:15*	*08/22/18 23:54*	*1*

Client Sample ID: GW-060866-081418-LB-MW-8

Lab Sample ID: 490-157729-8

Date Collected: 08/14/18 13:35

Matrix: Water

Date Received: 08/18/18 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			08/22/18 05:21	1
Ethylbenzene	ND		1.00		ug/L			08/22/18 05:21	1
Naphthalene	ND		5.00		ug/L			08/22/18 05:21	1
Toluene	ND		1.00		ug/L			08/22/18 05:21	1
Xylenes, Total	ND		3.00		ug/L			08/22/18 05:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/22/18 05:21*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/22/18 05:21*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/22/18 05:21*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/22/18 05:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			08/23/18 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*101*		*50 - 150*		*08/23/18 14:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		96.3		ug/L		08/21/18 09:15	08/23/18 00:11	1
C24-C40	ND		96.3		ug/L		08/21/18 09:15	08/23/18 00:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*81*		*50 - 150*	*08/21/18 09:15*	*08/23/18 00:11*	*1*

Client Sample ID: GW-060866-081518-LB-MW-9

Date Collected: 08/15/18 14:05
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			08/22/18 05:47	1
Ethylbenzene	ND		1.00		ug/L			08/22/18 05:47	1
Naphthalene	ND		5.00		ug/L			08/22/18 05:47	1
Toluene	**1.23**		1.00		ug/L			08/22/18 05:47	1
Xylenes, Total	**7.83**		3.00		ug/L			08/22/18 05:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*08/22/18 05:47*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/22/18 05:47*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/22/18 05:47*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/22/18 05:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**419**		100		ug/L			08/23/18 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*111*		*50 - 150*		*08/23/18 20:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**1140**		105		ug/L		08/21/18 09:15	08/23/18 00:29	1
C24-C40	**132**		105		ug/L		08/21/18 09:15	08/23/18 00:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*85*		*50 - 150*	*08/21/18 09:15*	*08/23/18 00:29*	*1*

Client Sample ID: GW-060866-081418-LB-MW-11

Date Collected: 08/14/18 09:55
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			08/22/18 06:14	1
Ethylbenzene	ND		1.00		ug/L			08/22/18 06:14	1
Naphthalene	ND		5.00		ug/L			08/22/18 06:14	1
Toluene	ND		1.00		ug/L			08/22/18 06:14	1
Xylenes, Total	ND		3.00		ug/L			08/22/18 06:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*08/22/18 06:14*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/22/18 06:14*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*08/22/18 06:14*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/22/18 06:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			08/23/18 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*		*08/23/18 14:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		104		ug/L		08/24/18 11:26	08/25/18 16:01	1
C24-C40	ND		104		ug/L		08/24/18 11:26	08/25/18 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*131*		*50 - 150*	*08/24/18 11:26*	*08/25/18 16:01*	*1*

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157729-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-081418-LB-MW-12
Date Collected: 08/14/18 09:13
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			08/21/18 19:38	1
Benzene	ND		1.00		ug/L			08/21/18 19:38	1
Bromobenzene	ND		1.00		ug/L			08/21/18 19:38	1
Bromochloromethane	ND		1.00		ug/L			08/21/18 19:38	1
Bromodichloromethane	ND		1.00		ug/L			08/21/18 19:38	1
Bromoform	ND		1.00		ug/L			08/21/18 19:38	1
Bromomethane	ND		1.00		ug/L			08/21/18 19:38	1
2-Butanone (MEK)	ND		50.0		ug/L			08/21/18 19:38	1
Carbon disulfide	ND		1.00		ug/L			08/21/18 19:38	1
Carbon tetrachloride	ND		1.00		ug/L			08/21/18 19:38	1
Chlorobenzene	ND		1.00		ug/L			08/21/18 19:38	1
Chlorodibromomethane	ND		1.00		ug/L			08/21/18 19:38	1
Chloroethane	ND		1.00		ug/L			08/21/18 19:38	1
Chloroform	ND		1.00		ug/L			08/21/18 19:38	1
Chloromethane	ND		1.00		ug/L			08/21/18 19:38	1
2-Chlorotoluene	ND		1.00		ug/L			08/21/18 19:38	1
4-Chlorotoluene	ND		1.00		ug/L			08/21/18 19:38	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			08/21/18 19:38	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			08/21/18 19:38	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			08/21/18 19:38	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			08/21/18 19:38	1
Dibromomethane	ND		1.00		ug/L			08/21/18 19:38	1
1,2-Dichlorobenzene	ND		1.00		ug/L			08/21/18 19:38	1
1,3-Dichlorobenzene	ND		1.00		ug/L			08/21/18 19:38	1
1,4-Dichlorobenzene	ND		1.00		ug/L			08/21/18 19:38	1
Dichlorodifluoromethane	ND		1.00		ug/L			08/21/18 19:38	1
1,1-Dichloroethane	ND		1.00		ug/L			08/21/18 19:38	1
1,2-Dichloroethane	ND		1.00		ug/L			08/21/18 19:38	1
1,1-Dichloroethene	ND		1.00		ug/L			08/21/18 19:38	1
1,2-Dichloropropane	ND		1.00		ug/L			08/21/18 19:38	1
1,3-Dichloropropane	ND		1.00		ug/L			08/21/18 19:38	1
2,2-Dichloropropane	ND		1.00		ug/L			08/21/18 19:38	1
1,1-Dichloropropene	ND		1.00		ug/L			08/21/18 19:38	1
Ethylbenzene	ND		1.00		ug/L			08/21/18 19:38	1
Hexachlorobutadiene	ND		2.00		ug/L			08/21/18 19:38	1
2-Hexanone	ND		10.0		ug/L			08/21/18 19:38	1
Isopropylbenzene	ND		1.00		ug/L			08/21/18 19:38	1
Methylene Chloride	ND		5.00		ug/L			08/21/18 19:38	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			08/21/18 19:38	1
Methyl tert-butyl ether	ND		1.00		ug/L			08/21/18 19:38	1
Naphthalene	ND		5.00		ug/L			08/21/18 19:38	1
n-Butylbenzene	ND		1.00		ug/L			08/21/18 19:38	1
N-Propylbenzene	ND		1.00		ug/L			08/21/18 19:38	1
p-Isopropyltoluene	ND		1.00		ug/L			08/21/18 19:38	1
sec-Butylbenzene	ND		1.00		ug/L			08/21/18 19:38	1
Styrene	ND		1.00		ug/L			08/21/18 19:38	1
tert-Butylbenzene	ND		1.00		ug/L			08/21/18 19:38	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			08/21/18 19:38	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			08/21/18 19:38	1

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157729-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-081418-LB-MW-12
Date Collected: 08/14/18 09:13
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	2.70		1.00		ug/L			08/21/18 19:38	1
Toluene	ND		1.00		ug/L			08/21/18 19:38	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			08/21/18 19:38	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			08/21/18 19:38	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			08/21/18 19:38	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			08/21/18 19:38	1
1,1,1-Trichloroethane	ND		1.00		ug/L			08/21/18 19:38	1
1,1,2-Trichloroethane	ND		1.00		ug/L			08/21/18 19:38	1
Trichloroethene	ND		1.00		ug/L			08/21/18 19:38	1
Trichlorofluoromethane	ND		1.00		ug/L			08/21/18 19:38	1
1,2,3-Trichloropropane	ND		1.00		ug/L			08/21/18 19:38	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			08/21/18 19:38	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			08/21/18 19:38	1
Vinyl chloride	ND		1.00		ug/L			08/21/18 19:38	1
Xylenes, Total	ND		3.00		ug/L			08/21/18 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/21/18 19:38*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/21/18 19:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*08/21/18 19:38*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/21/18 19:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			08/23/18 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*		*08/23/18 15:14*	*1*

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157729-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-081518-LB-MW-13
Date Collected: 08/15/18 08:10
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			08/21/18 20:31	1
Benzene	**4.24**		1.00		ug/L			08/21/18 20:31	1
Bromobenzene	ND		1.00		ug/L			08/21/18 20:31	1
Bromochloromethane	ND		1.00		ug/L			08/21/18 20:31	1
Bromodichloromethane	ND		1.00		ug/L			08/21/18 20:31	1
Bromoform	ND		1.00		ug/L			08/21/18 20:31	1
Bromomethane	ND		1.00		ug/L			08/21/18 20:31	1
2-Butanone (MEK)	ND		50.0		ug/L			08/21/18 20:31	1
Carbon disulfide	ND		1.00		ug/L			08/21/18 20:31	1
Carbon tetrachloride	ND		1.00		ug/L			08/21/18 20:31	1
Chlorobenzene	ND		1.00		ug/L			08/21/18 20:31	1
Chlorodibromomethane	ND		1.00		ug/L			08/21/18 20:31	1
Chloroethane	ND		1.00		ug/L			08/21/18 20:31	1
Chloroform	ND		1.00		ug/L			08/21/18 20:31	1
Chloromethane	**1.20**		1.00		ug/L			08/21/18 20:31	1
2-Chlorotoluene	ND		1.00		ug/L			08/21/18 20:31	1
4-Chlorotoluene	ND		1.00		ug/L			08/21/18 20:31	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			08/21/18 20:31	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			08/21/18 20:31	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			08/21/18 20:31	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			08/21/18 20:31	1
Dibromomethane	ND		1.00		ug/L			08/21/18 20:31	1
1,2-Dichlorobenzene	ND		1.00		ug/L			08/21/18 20:31	1
1,3-Dichlorobenzene	ND		1.00		ug/L			08/21/18 20:31	1
1,4-Dichlorobenzene	ND		1.00		ug/L			08/21/18 20:31	1
Dichlorodifluoromethane	ND		1.00		ug/L			08/21/18 20:31	1
1,1-Dichloroethane	ND		1.00		ug/L			08/21/18 20:31	1
1,2-Dichloroethane	ND		1.00		ug/L			08/21/18 20:31	1
1,1-Dichloroethene	ND		1.00		ug/L			08/21/18 20:31	1
1,2-Dichloropropane	ND		1.00		ug/L			08/21/18 20:31	1
1,3-Dichloropropane	ND		1.00		ug/L			08/21/18 20:31	1
2,2-Dichloropropane	ND		1.00		ug/L			08/21/18 20:31	1
1,1-Dichloropropene	ND		1.00		ug/L			08/21/18 20:31	1
Ethylbenzene	**12.6**		1.00		ug/L			08/21/18 20:31	1
Hexachlorobutadiene	ND		2.00		ug/L			08/21/18 20:31	1
2-Hexanone	ND		10.0		ug/L			08/21/18 20:31	1
Isopropylbenzene	**4.02**		1.00		ug/L			08/21/18 20:31	1
Methylene Chloride	ND		5.00		ug/L			08/21/18 20:31	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			08/21/18 20:31	1
Methyl tert-butyl ether	ND		1.00		ug/L			08/21/18 20:31	1
Naphthalene	ND		5.00		ug/L			08/21/18 20:31	1
n-Butylbenzene	ND		1.00		ug/L			08/21/18 20:31	1
N-Propylbenzene	**1.50**		1.00		ug/L			08/21/18 20:31	1
p-Isopropyltoluene	ND		1.00		ug/L			08/21/18 20:31	1
sec-Butylbenzene	ND		1.00		ug/L			08/21/18 20:31	1
Styrene	ND		1.00		ug/L			08/21/18 20:31	1
tert-Butylbenzene	ND		1.00		ug/L			08/21/18 20:31	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			08/21/18 20:31	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			08/21/18 20:31	1

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157729-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-081518-LB-MW-13
Date Collected: 08/15/18 08:10
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00		ug/L			08/21/18 20:31	1
Toluene	ND		1.00		ug/L			08/21/18 20:31	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			08/21/18 20:31	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			08/21/18 20:31	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			08/21/18 20:31	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			08/21/18 20:31	1
1,1,1-Trichloroethane	ND		1.00		ug/L			08/21/18 20:31	1
1,1,2-Trichloroethane	ND		1.00		ug/L			08/21/18 20:31	1
Trichloroethene	ND		1.00		ug/L			08/21/18 20:31	1
Trichlorofluoromethane	ND		1.00		ug/L			08/21/18 20:31	1
1,2,3-Trichloropropane	ND		1.00		ug/L			08/21/18 20:31	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			08/21/18 20:31	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			08/21/18 20:31	1
Vinyl chloride	ND		1.00		ug/L			08/21/18 20:31	1
Xylenes, Total	**3.28**		3.00		ug/L			08/21/18 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/21/18 20:31*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/21/18 20:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*08/21/18 20:31*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/21/18 20:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**358**		100		ug/L			08/24/18 06:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*117*		*50 - 150*		*08/24/18 06:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**4750**		484		ug/L		08/21/18 09:15	08/23/18 01:04	5
C24-C40	ND		484		ug/L		08/21/18 09:15	08/23/18 01:04	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*66*		*50 - 150*	*08/21/18 09:15*	*08/23/18 01:04*	*5*

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157729-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-081518-LB-MW-14
Date Collected: 08/15/18 15:10
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			08/21/18 20:58	1
Benzene	**18.4**		1.00		ug/L			08/21/18 20:58	1
Bromobenzene	ND		1.00		ug/L			08/21/18 20:58	1
Bromochloromethane	ND		1.00		ug/L			08/21/18 20:58	1
Bromodichloromethane	ND		1.00		ug/L			08/21/18 20:58	1
Bromoform	ND		1.00		ug/L			08/21/18 20:58	1
Bromomethane	ND		1.00		ug/L			08/21/18 20:58	1
2-Butanone (MEK)	ND		50.0		ug/L			08/21/18 20:58	1
Carbon disulfide	ND		1.00		ug/L			08/21/18 20:58	1
Carbon tetrachloride	ND		1.00		ug/L			08/21/18 20:58	1
Chlorobenzene	ND		1.00		ug/L			08/21/18 20:58	1
Chlorodibromomethane	ND		1.00		ug/L			08/21/18 20:58	1
Chloroethane	ND		1.00		ug/L			08/21/18 20:58	1
Chloroform	ND		1.00		ug/L			08/21/18 20:58	1
Chloromethane	ND		1.00		ug/L			08/21/18 20:58	1
2-Chlorotoluene	ND		1.00		ug/L			08/21/18 20:58	1
4-Chlorotoluene	ND		1.00		ug/L			08/21/18 20:58	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			08/21/18 20:58	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			08/21/18 20:58	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			08/21/18 20:58	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			08/21/18 20:58	1
Dibromomethane	ND		1.00		ug/L			08/21/18 20:58	1
1,2-Dichlorobenzene	**2.43**		1.00		ug/L			08/21/18 20:58	1
1,3-Dichlorobenzene	ND		1.00		ug/L			08/21/18 20:58	1
1,4-Dichlorobenzene	ND		1.00		ug/L			08/21/18 20:58	1
Dichlorodifluoromethane	ND		1.00		ug/L			08/21/18 20:58	1
1,1-Dichloroethane	ND		1.00		ug/L			08/21/18 20:58	1
1,2-Dichloroethane	ND		1.00		ug/L			08/21/18 20:58	1
1,1-Dichloroethene	ND		1.00		ug/L			08/21/18 20:58	1
1,2-Dichloropropane	ND		1.00		ug/L			08/21/18 20:58	1
1,3-Dichloropropane	ND		1.00		ug/L			08/21/18 20:58	1
2,2-Dichloropropane	ND		1.00		ug/L			08/21/18 20:58	1
1,1-Dichloropropene	ND		1.00		ug/L			08/21/18 20:58	1
Ethylbenzene	**5.00**		1.00		ug/L			08/21/18 20:58	1
Hexachlorobutadiene	ND		2.00		ug/L			08/21/18 20:58	1
2-Hexanone	ND		10.0		ug/L			08/21/18 20:58	1
Isopropylbenzene	**15.6**		1.00		ug/L			08/21/18 20:58	1
Methylene Chloride	ND		5.00		ug/L			08/21/18 20:58	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			08/21/18 20:58	1
Methyl tert-butyl ether	ND		1.00		ug/L			08/21/18 20:58	1
Naphthalene	**7.09**		5.00		ug/L			08/21/18 20:58	1
n-Butylbenzene	**1.59**		1.00		ug/L			08/21/18 20:58	1
N-Propylbenzene	**20.4**		1.00		ug/L			08/21/18 20:58	1
p-Isopropyltoluene	ND		1.00		ug/L			08/21/18 20:58	1
sec-Butylbenzene	**1.87**		1.00		ug/L			08/21/18 20:58	1
Styrene	ND		1.00		ug/L			08/21/18 20:58	1
tert-Butylbenzene	ND		1.00		ug/L			08/21/18 20:58	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			08/21/18 20:58	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			08/21/18 20:58	1

Client Sample ID: GW-060866-081518-LB-MW-14

Lab Sample ID: 490-157729-13

Date Collected: 08/15/18 15:10

Matrix: Water

Date Received: 08/18/18 09:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00		ug/L			08/21/18 20:58	1
Toluene	**4.03**		1.00		ug/L			08/21/18 20:58	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			08/21/18 20:58	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			08/21/18 20:58	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			08/21/18 20:58	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			08/21/18 20:58	1
1,1,1-Trichloroethane	ND		1.00		ug/L			08/21/18 20:58	1
1,1,2-Trichloroethane	ND		1.00		ug/L			08/21/18 20:58	1
Trichloroethene	ND		1.00		ug/L			08/21/18 20:58	1
Trichlorofluoromethane	ND		1.00		ug/L			08/21/18 20:58	1
1,2,3-Trichloropropane	ND		1.00		ug/L			08/21/18 20:58	1
1,2,4-Trimethylbenzene	**22.9**		1.00		ug/L			08/21/18 20:58	1
1,3,5-Trimethylbenzene	**7.11**		1.00		ug/L			08/21/18 20:58	1
Vinyl chloride	ND		1.00		ug/L			08/21/18 20:58	1
Xylenes, Total	**44.4**		3.00		ug/L			08/21/18 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/21/18 20:58*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/21/18 20:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*08/21/18 20:58*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/21/18 20:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**1270**		500		ug/L			08/23/18 17:49	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*102*		*50 - 150*		*08/23/18 17:49*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**1740**		95.8		ug/L		08/21/18 09:15	08/23/18 01:21	1
C24-C40	**143**		95.8		ug/L		08/21/18 09:15	08/23/18 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*87*		*50 - 150*	*08/21/18 09:15*	*08/23/18 01:21*	*1*

Client Sample ID: GW-060866-081518-LB-MW-15

Date Collected: 08/15/18 13:10
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			08/21/18 21:51	1
Benzene	**239**		25.0		ug/L			08/22/18 15:21	25
Bromobenzene	ND		1.00		ug/L			08/21/18 21:51	1
Bromochloromethane	ND		1.00		ug/L			08/21/18 21:51	1
Bromodichloromethane	ND		1.00		ug/L			08/21/18 21:51	1
Bromoform	ND		1.00		ug/L			08/21/18 21:51	1
Bromomethane	ND		1.00		ug/L			08/21/18 21:51	1
2-Butanone (MEK)	ND		50.0		ug/L			08/21/18 21:51	1
Carbon disulfide	ND		1.00		ug/L			08/21/18 21:51	1
Carbon tetrachloride	ND		1.00		ug/L			08/21/18 21:51	1
Chlorobenzene	**1.56**		1.00		ug/L			08/21/18 21:51	1
Chlorodibromomethane	ND		1.00		ug/L			08/21/18 21:51	1
Chloroethane	**6.28**		1.00		ug/L			08/21/18 21:51	1
Chloroform	ND		1.00		ug/L			08/21/18 21:51	1
Chloromethane	ND		1.00		ug/L			08/21/18 21:51	1
2-Chlorotoluene	ND		1.00		ug/L			08/21/18 21:51	1
4-Chlorotoluene	ND		1.00		ug/L			08/21/18 21:51	1
cis-1,2-Dichloroethene	**5.89**		1.00		ug/L			08/21/18 21:51	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			08/21/18 21:51	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			08/21/18 21:51	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			08/21/18 21:51	1
Dibromomethane	ND		1.00		ug/L			08/21/18 21:51	1
1,2-Dichlorobenzene	**9.81**		1.00		ug/L			08/21/18 21:51	1
1,3-Dichlorobenzene	ND		1.00		ug/L			08/21/18 21:51	1
1,4-Dichlorobenzene	**3.49**		1.00		ug/L			08/21/18 21:51	1
Dichlorodifluoromethane	ND		1.00		ug/L			08/21/18 21:51	1
1,1-Dichloroethane	**15.3**		1.00		ug/L			08/21/18 21:51	1
1,2-Dichloroethane	ND		1.00		ug/L			08/21/18 21:51	1
1,1-Dichloroethene	ND		1.00		ug/L			08/21/18 21:51	1
1,2-Dichloropropane	ND		1.00		ug/L			08/21/18 21:51	1
1,3-Dichloropropane	ND		1.00		ug/L			08/21/18 21:51	1
2,2-Dichloropropane	ND		1.00		ug/L			08/21/18 21:51	1
1,1-Dichloropropene	ND		1.00		ug/L			08/21/18 21:51	1
Ethylbenzene	**1380**		25.0		ug/L			08/22/18 15:21	25
Hexachlorobutadiene	ND		2.00		ug/L			08/21/18 21:51	1
2-Hexanone	ND		10.0		ug/L			08/21/18 21:51	1
Isopropylbenzene	**81.2**		1.00		ug/L			08/21/18 21:51	1
Methylene Chloride	ND		5.00		ug/L			08/21/18 21:51	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			08/21/18 21:51	1
Methyl tert-butyl ether	ND		1.00		ug/L			08/21/18 21:51	1
Naphthalene	**250**		125		ug/L			08/22/18 15:21	25
n-Butylbenzene	**16.9**		1.00		ug/L			08/21/18 21:51	1
N-Propylbenzene	**136**		1.00		ug/L			08/21/18 21:51	1
p-Isopropyltoluene	**9.44**		1.00		ug/L			08/21/18 21:51	1
sec-Butylbenzene	**10.1**		1.00		ug/L			08/21/18 21:51	1
Styrene	ND		1.00		ug/L			08/21/18 21:51	1
tert-Butylbenzene	ND		1.00		ug/L			08/21/18 21:51	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			08/21/18 21:51	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			08/21/18 21:51	1

Client Sample ID: GW-060866-081518-LB-MW-15
Date Collected: 08/15/18 13:10
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00		ug/L			08/21/18 21:51	1
Toluene	**31.4**		1.00		ug/L			08/21/18 21:51	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			08/21/18 21:51	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			08/21/18 21:51	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			08/21/18 21:51	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			08/21/18 21:51	1
1,1,1-Trichloroethane	ND		1.00		ug/L			08/21/18 21:51	1
1,1,2-Trichloroethane	ND		1.00		ug/L			08/21/18 21:51	1
Trichloroethene	ND		1.00		ug/L			08/21/18 21:51	1
Trichlorofluoromethane	ND		1.00		ug/L			08/21/18 21:51	1
1,2,3-Trichloropropane	ND		1.00		ug/L			08/21/18 21:51	1
1,2,4-Trimethylbenzene	**1030**		25.0		ug/L			08/22/18 15:21	25
1,3,5-Trimethylbenzene	**271**		25.0		ug/L			08/22/18 15:21	25
Vinyl chloride	ND		1.00		ug/L			08/21/18 21:51	1
Xylenes, Total	**5540**		75.0		ug/L			08/22/18 15:21	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/21/18 21:51*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/22/18 15:21*	*25*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/21/18 21:51*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*08/22/18 15:21*	*25*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*08/21/18 21:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/22/18 15:21*	*25*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/21/18 21:51*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*08/22/18 15:21*	*25*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**23600**		500		ug/L			08/23/18 18:20	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*50 - 150*		*08/23/18 18:20*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**5460**		476		ug/L		08/21/18 09:15	08/23/18 01:39	5
C24-C40	ND		476		ug/L		08/21/18 09:15	08/23/18 01:39	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*107*		*50 - 150*	*08/21/18 09:15*	*08/23/18 01:39*	*5*

Client Sample ID: GW-060866-081518-LB-DUP-1

Date Collected: 08/15/18 00:01
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-15

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			08/22/18 06:40	1
Ethylbenzene	ND		1.00		ug/L			08/22/18 06:40	1
Naphthalene	ND		5.00		ug/L			08/22/18 06:40	1
Toluene	**1.24**		1.00		ug/L			08/22/18 06:40	1
Xylenes, Total	**8.08**		3.00		ug/L			08/22/18 06:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*08/22/18 06:40*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/22/18 06:40*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/22/18 06:40*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/22/18 06:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**443**		100		ug/L			08/23/18 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*111*		*50 - 150*		*08/23/18 18:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**1240**		97.0		ug/L		08/21/18 09:15	08/23/18 01:56	1
C24-C40	**187**		97.0		ug/L		08/21/18 09:15	08/23/18 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*92*		*50 - 150*	*08/21/18 09:15*	*08/23/18 01:56*	*1*

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157729-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-081418-LB-TB
Date Collected: 08/14/18 08:30
Date Received: 08/18/18 09:55

Lab Sample ID: 490-157729-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			08/21/18 19:12	1
Ethylbenzene	ND		1.00		ug/L			08/21/18 19:12	1
Naphthalene	ND		5.00		ug/L			08/21/18 19:12	1
Toluene	ND		1.00		ug/L			08/21/18 19:12	1
Xylenes, Total	ND		3.00		ug/L			08/21/18 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*08/21/18 19:12*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/21/18 19:12*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/21/18 19:12*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/21/18 19:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			08/23/18 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*100*		*50 - 150*		*08/23/18 15:45*	*1*

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

Lab Sample ID: MB 490-537617/6
Matrix: Water
Analysis Batch: 537617

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			08/21/18 13:42	1
Benzene	ND		1.00		ug/L			08/21/18 13:42	1
Bromobenzene	ND		1.00		ug/L			08/21/18 13:42	1
Bromochloromethane	ND		1.00		ug/L			08/21/18 13:42	1
Bromodichloromethane	ND		1.00		ug/L			08/21/18 13:42	1
Bromoform	ND		1.00		ug/L			08/21/18 13:42	1
Bromomethane	ND		1.00		ug/L			08/21/18 13:42	1
2-Butanone (MEK)	ND		50.0		ug/L			08/21/18 13:42	1
Carbon disulfide	ND		1.00		ug/L			08/21/18 13:42	1
Carbon tetrachloride	ND		1.00		ug/L			08/21/18 13:42	1
Chlorobenzene	ND		1.00		ug/L			08/21/18 13:42	1
Chlorodibromomethane	ND		1.00		ug/L			08/21/18 13:42	1
Chloroethane	ND		1.00		ug/L			08/21/18 13:42	1
Chloroform	ND		1.00		ug/L			08/21/18 13:42	1
Chloromethane	ND		1.00		ug/L			08/21/18 13:42	1
2-Chlorotoluene	ND		1.00		ug/L			08/21/18 13:42	1
4-Chlorotoluene	ND		1.00		ug/L			08/21/18 13:42	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			08/21/18 13:42	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			08/21/18 13:42	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			08/21/18 13:42	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			08/21/18 13:42	1
Dibromomethane	ND		1.00		ug/L			08/21/18 13:42	1
1,2-Dichlorobenzene	ND		1.00		ug/L			08/21/18 13:42	1
1,3-Dichlorobenzene	ND		1.00		ug/L			08/21/18 13:42	1
1,4-Dichlorobenzene	ND		1.00		ug/L			08/21/18 13:42	1
Dichlorodifluoromethane	ND		1.00		ug/L			08/21/18 13:42	1
1,1-Dichloroethane	ND		1.00		ug/L			08/21/18 13:42	1
1,2-Dichloroethane	ND		1.00		ug/L			08/21/18 13:42	1
1,1-Dichloroethene	ND		1.00		ug/L			08/21/18 13:42	1
1,2-Dichloropropane	ND		1.00		ug/L			08/21/18 13:42	1
1,3-Dichloropropane	ND		1.00		ug/L			08/21/18 13:42	1
2,2-Dichloropropane	ND		1.00		ug/L			08/21/18 13:42	1
1,1-Dichloropropene	ND		1.00		ug/L			08/21/18 13:42	1
Ethylbenzene	ND		1.00		ug/L			08/21/18 13:42	1
Hexachlorobutadiene	ND		2.00		ug/L			08/21/18 13:42	1
2-Hexanone	ND		10.0		ug/L			08/21/18 13:42	1
Isopropylbenzene	ND		1.00		ug/L			08/21/18 13:42	1
Methylene Chloride	ND		5.00		ug/L			08/21/18 13:42	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			08/21/18 13:42	1
Methyl tert-butyl ether	ND		1.00		ug/L			08/21/18 13:42	1
Naphthalene	ND		5.00		ug/L			08/21/18 13:42	1
n-Butylbenzene	ND		1.00		ug/L			08/21/18 13:42	1
N-Propylbenzene	ND		1.00		ug/L			08/21/18 13:42	1
p-Isopropyltoluene	ND		1.00		ug/L			08/21/18 13:42	1
sec-Butylbenzene	ND		1.00		ug/L			08/21/18 13:42	1
Styrene	ND		1.00		ug/L			08/21/18 13:42	1
tert-Butylbenzene	ND		1.00		ug/L			08/21/18 13:42	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			08/21/18 13:42	1

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

Lab Sample ID: MB 490-537617/6
Matrix: Water
Analysis Batch: 537617

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			08/21/18 13:42	1
Tetrachloroethene	ND		1.00		ug/L			08/21/18 13:42	1
Toluene	ND		1.00		ug/L			08/21/18 13:42	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			08/21/18 13:42	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			08/21/18 13:42	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			08/21/18 13:42	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			08/21/18 13:42	1
1,1,1-Trichloroethane	ND		1.00		ug/L			08/21/18 13:42	1
1,1,2-Trichloroethane	ND		1.00		ug/L			08/21/18 13:42	1
Trichloroethene	ND		1.00		ug/L			08/21/18 13:42	1
Trichlorofluoromethane	ND		1.00		ug/L			08/21/18 13:42	1
1,2,3-Trichloropropane	ND		1.00		ug/L			08/21/18 13:42	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			08/21/18 13:42	1
1,3,5-Trimethylbenzene	ND		1.00		ug/L			08/21/18 13:42	1
Vinyl chloride	ND		1.00		ug/L			08/21/18 13:42	1
Xylenes, Total	ND		3.00		ug/L			08/21/18 13:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*08/21/18 13:42*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/21/18 13:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*08/21/18 13:42*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/21/18 13:42*	*1*

Lab Sample ID: LCS 490-537617/3
Matrix: Water
Analysis Batch: 537617

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	101.9		ug/L		102	39 - 150
Benzene	20.0	21.41		ug/L		107	70 - 130
Bromobenzene	20.0	19.16		ug/L		96	70 - 130
Bromochloromethane	20.0	24.12		ug/L		121	70 - 130
Bromodichloromethane	20.0	24.59		ug/L		123	70 - 130
Bromoform	20.0	24.02		ug/L		120	70 - 137
Bromomethane	20.0	20.89		ug/L		104	53 - 150
2-Butanone (MEK)	100	110.6		ug/L		111	55 - 143
Carbon disulfide	20.0	22.92		ug/L		115	64 - 135
Carbon tetrachloride	20.0	24.81		ug/L		124	70 - 147
Chlorobenzene	20.0	20.34		ug/L		102	70 - 130
Chlorodibromomethane	20.0	21.71		ug/L		109	70 - 133
Chloroethane	20.0	21.61		ug/L		108	60 - 138
Chloroform	20.0	22.66		ug/L		113	70 - 130
Chloromethane	20.0	20.78		ug/L		104	33 - 150
2-Chlorotoluene	20.0	18.99		ug/L		95	70 - 130
4-Chlorotoluene	20.0	18.88		ug/L		94	70 - 130
cis-1,2-Dichloroethene	20.0	22.61		ug/L		113	70 - 130
cis-1,3-Dichloropropene	20.0	20.81		ug/L		104	70 - 133
1,2-Dibromo-3-Chloropropane	20.0	18.07		ug/L		90	45 - 138

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

Lab Sample ID: LCS 490-537617/3
Matrix: Water
Analysis Batch: 537617

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	20.0	20.76		ug/L		104	70 - 130
Dibromomethane	20.0	23.33		ug/L		117	70 - 130
1,2-Dichlorobenzene	20.0	20.34		ug/L		102	70 - 130
1,3-Dichlorobenzene	20.0	19.82		ug/L		99	70 - 130
1,4-Dichlorobenzene	20.0	20.08		ug/L		100	70 - 130
Dichlorodifluoromethane	20.0	22.10		ug/L		110	48 - 150
1,1-Dichloroethane	20.0	21.99		ug/L		110	70 - 130
1,2-Dichloroethane	20.0	23.46		ug/L		117	70 - 130
1,1-Dichloroethene	20.0	22.78		ug/L		114	70 - 132
1,2-Dichloropropane	20.0	22.16		ug/L		111	70 - 130
1,3-Dichloropropane	20.0	19.90		ug/L		99	70 - 130
2,2-Dichloropropane	20.0	21.66		ug/L		108	60 - 143
1,1-Dichloropropene	20.0	22.56		ug/L		113	70 - 130
Ethylbenzene	20.0	19.70		ug/L		99	70 - 130
Hexachlorobutadiene	20.0	21.04		ug/L		105	70 - 138
2-Hexanone	100	96.41		ug/L		96	54 - 142
Isopropylbenzene	20.0	19.36		ug/L		97	70 - 131
Methylene Chloride	20.0	22.58		ug/L		113	70 - 130
4-Methyl-2-pentanone (MIBK)	100	99.19		ug/L		99	60 - 137
Methyl tert-butyl ether	20.0	23.16		ug/L		116	70 - 130
Naphthalene	20.0	18.96		ug/L		95	54 - 150
n-Butylbenzene	20.0	19.90		ug/L		100	68 - 137
N-Propylbenzene	20.0	19.24		ug/L		96	70 - 134
p-Isopropyltoluene	20.0	19.55		ug/L		98	66 - 130
sec-Butylbenzene	20.0	19.21		ug/L		96	70 - 135
Styrene	20.0	19.75		ug/L		99	70 - 130
tert-Butylbenzene	20.0	18.97		ug/L		95	70 - 130
1,1,1,2-Tetrachloroethane	20.0	21.64		ug/L		108	70 - 130
1,1,2,2-Tetrachloroethane	20.0	19.85		ug/L		99	69 - 131
Tetrachloroethene	20.0	20.93		ug/L		105	70 - 130
Toluene	20.0	19.42		ug/L		97	70 - 130
trans-1,2-Dichloroethene	20.0	23.30		ug/L		117	70 - 130
trans-1,3-Dichloropropene	20.0	21.27		ug/L		106	63 - 142
1,2,3-Trichlorobenzene	20.0	18.57		ug/L		93	46 - 150
1,2,4-Trichlorobenzene	20.0	20.29		ug/L		101	58 - 147
1,1,1-Trichloroethane	20.0	24.08		ug/L		120	70 - 135
1,1,2-Trichloroethane	20.0	20.22		ug/L		101	70 - 130
Trichloroethene	20.0	23.55		ug/L		118	70 - 130
Trichlorofluoromethane	20.0	21.45		ug/L		107	59 - 150
1,2,3-Trichloropropane	20.0	18.95		ug/L		95	70 - 131
1,2,4-Trimethylbenzene	20.0	19.55		ug/L		98	70 - 130
1,3,5-Trimethylbenzene	20.0	19.19		ug/L		96	70 - 130
Vinyl chloride	20.0	21.41		ug/L		107	57 - 137
Xylenes, Total	40.0	38.70		ug/L		97	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*107*		*70 - 130*

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

Lab Sample ID: LCS 490-537617/3
Matrix: Water
Analysis Batch: 537617

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: LCSD 490-537617/4
Matrix: Water
Analysis Batch: 537617

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	99.29		ug/L		99	39 - 150	3	23
Benzene	20.0	22.65		ug/L		113	70 - 130	6	12
Bromobenzene	20.0	19.22		ug/L		96	70 - 130	0	16
Bromochloromethane	20.0	24.07		ug/L		120	70 - 130	0	16
Bromodichloromethane	20.0	24.87		ug/L		124	70 - 130	1	14
Bromoform	20.0	24.68		ug/L		123	70 - 137	3	14
Bromomethane	20.0	21.91		ug/L		110	53 - 150	5	19
2-Butanone (MEK)	100	113.8		ug/L		114	55 - 143	3	19
Carbon disulfide	20.0	23.42		ug/L		117	64 - 135	2	16
Carbon tetrachloride	20.0	26.14		ug/L		131	70 - 147	5	16
Chlorobenzene	20.0	21.11		ug/L		106	70 - 130	4	12
Chlorodibromomethane	20.0	22.60		ug/L		113	70 - 133	4	13
Chloroethane	20.0	22.36		ug/L		112	60 - 138	3	15
Chloroform	20.0	23.14		ug/L		116	70 - 130	2	14
Chloromethane	20.0	20.86		ug/L		104	33 - 150	0	20
2-Chlorotoluene	20.0	19.60		ug/L		98	70 - 130	3	15
4-Chlorotoluene	20.0	20.00		ug/L		100	70 - 130	6	15
cis-1,2-Dichloroethene	20.0	23.14		ug/L		116	70 - 130	2	15
cis-1,3-Dichloropropene	20.0	21.21		ug/L		106	70 - 133	2	15
1,2-Dibromo-3-Chloropropane	20.0	18.76		ug/L		94	45 - 138	4	19
1,2-Dibromoethane (EDB)	20.0	21.03		ug/L		105	70 - 130	1	13
Dibromomethane	20.0	23.63		ug/L		118	70 - 130	1	14
1,2-Dichlorobenzene	20.0	21.22		ug/L		106	70 - 130	4	12
1,3-Dichlorobenzene	20.0	20.18		ug/L		101	70 - 130	2	13
1,4-Dichlorobenzene	20.0	20.71		ug/L		104	70 - 130	3	12
Dichlorodifluoromethane	20.0	22.95		ug/L		115	48 - 150	4	16
1,1-Dichloroethane	20.0	22.58		ug/L		113	70 - 130	3	17
1,2-Dichloroethane	20.0	23.25		ug/L		116	70 - 130	1	13
1,1-Dichloroethene	20.0	24.14		ug/L		121	70 - 132	6	20
1,2-Dichloropropane	20.0	23.23		ug/L		116	70 - 130	5	15
1,3-Dichloropropane	20.0	20.22		ug/L		101	70 - 130	2	12
2,2-Dichloropropane	20.0	22.20		ug/L		111	60 - 143	2	20
1,1-Dichloropropene	20.0	23.37		ug/L		117	70 - 130	4	16
Ethylbenzene	20.0	20.09		ug/L		100	70 - 130	2	12
Hexachlorobutadiene	20.0	21.33		ug/L		107	70 - 138	1	16
2-Hexanone	100	102.1		ug/L		102	54 - 142	6	17
Isopropylbenzene	20.0	20.17		ug/L		101	70 - 131	4	13
Methylene Chloride	20.0	23.23		ug/L		116	70 - 130	3	15
4-Methyl-2-pentanone (MIBK)	100	103.7		ug/L		104	60 - 137	4	21
Methyl tert-butyl ether	20.0	23.36		ug/L		117	70 - 130	1	16

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

Lab Sample ID: LCSD 490-537617/4
Matrix: Water
Analysis Batch: 537617

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene			20.0	19.56		ug/L		98	54 - 150	3	15
n-Butylbenzene			20.0	20.46		ug/L		102	68 - 137	3	14
N-Propylbenzene			20.0	19.71		ug/L		99	70 - 134	2	14
p-Isopropyltoluene			20.0	20.39		ug/L		102	66 - 130	4	13
sec-Butylbenzene			20.0	19.37		ug/L		97	70 - 135	1	14
Styrene			20.0	20.73		ug/L		104	70 - 130	5	12
tert-Butylbenzene			20.0	19.36		ug/L		97	70 - 130	2	14
1,1,1,2-Tetrachloroethane			20.0	22.34		ug/L		112	70 - 130	3	13
1,1,2,2-Tetrachloroethane			20.0	19.97		ug/L		100	69 - 131	1	15
Tetrachloroethene			20.0	21.34		ug/L		107	70 - 130	2	17
Toluene			20.0	19.96		ug/L		100	70 - 130	3	13
trans-1,2-Dichloroethene			20.0	23.25		ug/L		116	70 - 130	0	15
trans-1,3-Dichloropropene			20.0	21.71		ug/L		109	63 - 142	2	13
1,2,3-Trichlorobenzene			20.0	19.86		ug/L		99	46 - 150	7	16
1,2,4-Trichlorobenzene			20.0	20.18		ug/L		101	58 - 147	1	15
1,1,1-Trichloroethane			20.0	24.31		ug/L		122	70 - 135	1	15
1,1,2-Trichloroethane			20.0	20.17		ug/L		101	70 - 130	0	13
Trichloroethene			20.0	24.29		ug/L		121	70 - 130	3	14
Trichlorofluoromethane			20.0	22.34		ug/L		112	59 - 150	4	22
1,2,3-Trichloropropane			20.0	19.23		ug/L		96	70 - 131	1	14
1,2,4-Trimethylbenzene			20.0	19.52		ug/L		98	70 - 130	0	13
1,3,5-Trimethylbenzene			20.0	19.65		ug/L		98	70 - 130	2	14
Vinyl chloride			20.0	22.40		ug/L		112	57 - 137	5	15
Xylenes, Total			40.0	40.36		ug/L		101	70 - 132	4	11

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*106*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: 490-157684-B-8 MS
Matrix: Water
Analysis Batch: 537617

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		500	472.0		ug/L		94	39 - 150
Benzene	ND		100	102.7		ug/L		103	55 - 147
Bromobenzene	ND		100	90.04		ug/L		90	60 - 133
Bromochloromethane	ND		100	107.9		ug/L		108	59 - 132
Bromodichloromethane	ND		100	104.6		ug/L		105	70 - 140
Bromoform	ND		100	99.74		ug/L		100	53 - 150
Bromomethane	ND		100	90.56		ug/L		91	30 - 150
2-Butanone (MEK)	ND		500	568.0		ug/L		114	50 - 143
Carbon disulfide	ND		100	105.2		ug/L		105	35 - 150
Carbon tetrachloride	ND		100	113.4		ug/L		113	56 - 150
Chlorobenzene	ND		100	97.99		ug/L		98	70 - 130
Chlorodibromomethane	ND		100	92.91		ug/L		93	66 - 140

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

Lab Sample ID: 490-157684-B-8 MS
Matrix: Water
Analysis Batch: 537617

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	ND		100	112.3		ug/L		112	58 - 141
Chloroform	ND		100	103.0		ug/L		103	66 - 138
Chloromethane	ND		100	104.4		ug/L		104	10 - 150
2-Chlorotoluene	ND		100	94.67		ug/L		95	67 - 138
4-Chlorotoluene	ND		100	94.18		ug/L		94	69 - 138
cis-1,2-Dichloroethene	553		100	665.1	4	ug/L		112	68 - 131
cis-1,3-Dichloropropene	ND		100	95.21		ug/L		95	70 - 133
1,2-Dibromo-3-Chloropropane	ND		100	79.75		ug/L		80	38 - 138
1,2-Dibromoethane (EDB)	ND		100	96.72		ug/L		97	65 - 137
Dibromomethane	ND		100	102.9		ug/L		103	70 - 130
1,2-Dichlorobenzene	ND		100	94.68		ug/L		95	70 - 130
1,3-Dichlorobenzene	ND		100	92.54		ug/L		93	68 - 131
1,4-Dichlorobenzene	ND		100	92.86		ug/L		93	70 - 130
Dichlorodifluoromethane	ND		100	108.9		ug/L		109	10 - 150
1,1-Dichloroethane	ND		100	104.0		ug/L		104	61 - 139
1,2-Dichloroethane	ND		100	97.79		ug/L		98	64 - 136
1,1-Dichloroethene	ND		100	113.0		ug/L		113	54 - 150
1,2-Dichloropropane	ND		100	104.8		ug/L		105	67 - 130
1,3-Dichloropropane	ND		100	92.61		ug/L		93	70 - 130
2,2-Dichloropropane	ND		100	93.70		ug/L		94	50 - 146
1,1-Dichloropropene	ND		100	110.2		ug/L		110	54 - 150
Ethylbenzene	ND		100	94.59		ug/L		95	65 - 139
Hexachlorobutadiene	ND		100	99.92		ug/L		100	61 - 141
2-Hexanone	ND		500	471.7		ug/L		94	44 - 150
Isopropylbenzene	ND		100	93.75		ug/L		94	70 - 137
Methylene Chloride	ND		100	105.5		ug/L		105	64 - 130
4-Methyl-2-pentanone (MIBK)	ND		500	478.3		ug/L		96	50 - 140
Methyl tert-butyl ether	ND		100	104.6		ug/L		105	55 - 141
Naphthalene	ND		100	91.94		ug/L		92	32 - 150
n-Butylbenzene	ND		100	97.66		ug/L		98	61 - 141
N-Propylbenzene	ND		100	97.00		ug/L		97	53 - 150
p-Isopropyltoluene	ND		100	96.79		ug/L		97	66 - 137
sec-Butylbenzene	ND		100	96.63		ug/L		97	55 - 136
Styrene	ND		100	92.57		ug/L		93	70 - 130
tert-Butylbenzene	ND		100	95.37		ug/L		95	70 - 138
1,1,1,2-Tetrachloroethane	ND		100	94.26		ug/L		94	70 - 131
1,1,2,2-Tetrachloroethane	ND		100	96.53		ug/L		97	56 - 145
Tetrachloroethene	ND		100	100.1		ug/L		100	57 - 138
Toluene	ND		100	95.37		ug/L		95	64 - 136
trans-1,2-Dichloroethene	8.11		100	116.9		ug/L		109	59 - 143
trans-1,3-Dichloropropene	ND		100	93.00		ug/L		93	63 - 142
1,2,3-Trichlorobenzene	ND		100	88.90		ug/L		89	36 - 150
1,2,4-Trichlorobenzene	ND		100	92.16		ug/L		92	47 - 147
1,1,1-Trichloroethane	ND		100	108.3		ug/L		108	68 - 144
1,1,2-Trichloroethane	ND		100	94.50		ug/L		94	70 - 130
Trichloroethene	839		100	931.5	4	ug/L		93	63 - 135
Trichlorofluoromethane	ND		100	105.1		ug/L		105	44 - 150
1,2,3-Trichloropropane	ND		100	91.33		ug/L		91	65 - 131

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

Lab Sample ID: 490-157684-B-8 MS
Matrix: Water
Analysis Batch: 537617

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	ND		100	95.18		ug/L		95	64 - 136
1,3,5-Trimethylbenzene	ND		100	93.89		ug/L		94	69 - 139
Vinyl chloride	ND		100	111.3		ug/L		111	57 - 150
Xylenes, Total	ND		200	184.4		ug/L		92	69 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: 490-157684-B-8 MSD
Matrix: Water
Analysis Batch: 537617

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		500	490.4		ug/L		98	39 - 150	4	28
Benzene	ND		100	106.8		ug/L		107	55 - 147	4	22
Bromobenzene	ND		100	94.14		ug/L		94	60 - 133	4	18
Bromochloromethane	ND		100	110.7		ug/L		111	59 - 132	3	21
Bromodichloromethane	ND		100	107.0		ug/L		107	70 - 140	2	196
Bromoform	ND		100	101.7		ug/L		102	53 - 150	2	20
Bromomethane	ND		100	105.1		ug/L		105	30 - 150	15	44
2-Butanone (MEK)	ND		500	594.7		ug/L		119	50 - 143	5	28
Carbon disulfide	ND		100	107.7		ug/L		108	35 - 150	2	34
Carbon tetrachloride	ND		100	116.0		ug/L		116	56 - 150	2	18
Chlorobenzene	ND		100	98.13		ug/L		98	70 - 130	0	15
Chlorodibromomethane	ND		100	97.25		ug/L		97	66 - 140	5	19
Chloroethane	ND		100	113.7		ug/L		114	58 - 141	1	31
Chloroform	ND		100	105.2		ug/L		105	66 - 138	2	21
Chloromethane	ND		100	100.6		ug/L		101	10 - 150	4	43
2-Chlorotoluene	ND		100	96.53		ug/L		97	67 - 138	2	17
4-Chlorotoluene	ND		100	96.73		ug/L		97	69 - 138	3	15
cis-1,2-Dichloroethene	553		100	652.8	4	ug/L		100	68 - 131	2	21
cis-1,3-Dichloropropene	ND		100	95.93		ug/L		96	70 - 133	1	19
1,2-Dibromo-3-Chloropropane	ND		100	82.83		ug/L		83	38 - 138	4	26
1,2-Dibromoethane (EDB)	ND		100	99.33		ug/L		99	65 - 137	3	21
Dibromomethane	ND		100	107.1		ug/L		107	70 - 130	4	19
1,2-Dichlorobenzene	ND		100	97.06		ug/L		97	70 - 130	2	15
1,3-Dichlorobenzene	ND		100	96.09		ug/L		96	68 - 131	4	14
1,4-Dichlorobenzene	ND		100	95.48		ug/L		95	70 - 130	3	14
Dichlorodifluoromethane	ND		100	110.8		ug/L		111	10 - 150	2	50
1,1-Dichloroethane	ND		100	107.2		ug/L		107	61 - 139	3	23
1,2-Dichloroethane	ND		100	102.2		ug/L		102	64 - 136	4	22
1,1-Dichloroethene	ND		100	116.7		ug/L		117	54 - 150	3	24
1,2-Dichloropropane	ND		100	102.8		ug/L		103	67 - 130	2	19
1,3-Dichloropropane	ND		100	97.24		ug/L		97	70 - 130	5	17
2,2-Dichloropropane	ND		100	96.96		ug/L		97	50 - 146	3	20

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

Lab Sample ID: 490-157684-B-8 MSD
Matrix: Water
Analysis Batch: 537617

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloropropene	ND		100	113.3		ug/L		113	54 - 150	3	24
Ethylbenzene	ND		100	96.01		ug/L		96	65 - 139	1	18
Hexachlorobutadiene	ND		100	105.5		ug/L		106	61 - 141	5	26
2-Hexanone	ND		500	494.1		ug/L		99	44 - 150	5	21
Isopropylbenzene	ND		100	95.71		ug/L		96	70 - 137	2	17
Methylene Chloride	ND		100	109.9		ug/L		110	64 - 130	4	22
4-Methyl-2-pentanone (MIBK)	ND		500	497.0		ug/L		99	50 - 140	4	24
Methyl tert-butyl ether	ND		100	109.3		ug/L		109	55 - 141	4	24
Naphthalene	ND		100	95.21		ug/L		95	32 - 150	3	40
n-Butylbenzene	ND		100	100.2		ug/L		100	61 - 141	3	17
N-Propylbenzene	ND		100	99.12		ug/L		99	53 - 150	2	18
p-Isopropyltoluene	ND		100	100.1		ug/L		100	66 - 137	3	16
sec-Butylbenzene	ND		100	99.33		ug/L		99	55 - 136	3	50
Styrene	ND		100	95.55		ug/L		96	70 - 130	3	16
tert-Butylbenzene	ND		100	97.65		ug/L		98	70 - 138	2	17
1,1,1,2-Tetrachloroethane	ND		100	100.1		ug/L		100	70 - 131	6	16
1,1,2,2-Tetrachloroethane	ND		100	100.1		ug/L		100	56 - 145	4	19
Tetrachloroethene	ND		100	103.8		ug/L		104	57 - 138	4	17
Toluene	ND		100	98.50		ug/L		98	64 - 136	3	18
trans-1,2-Dichloroethene	8.11		100	119.9		ug/L		112	59 - 143	3	25
trans-1,3-Dichloropropene	ND		100	95.40		ug/L		95	63 - 142	3	18
1,2,3-Trichlorobenzene	ND		100	96.19		ug/L		96	36 - 150	8	43
1,2,4-Trichlorobenzene	ND		100	98.37		ug/L		98	47 - 147	7	24
1,1,1-Trichloroethane	ND		100	112.1		ug/L		112	68 - 144	3	17
1,1,2-Trichloroethane	ND		100	97.10		ug/L		97	70 - 130	3	18
Trichloroethene	839		100	910.6	4	ug/L		72	63 - 135	2	17
Trichlorofluoromethane	ND		100	112.1		ug/L		112	44 - 150	6	32
1,2,3-Trichloropropane	ND		100	93.99		ug/L		94	65 - 131	3	19
1,2,4-Trimethylbenzene	ND		100	99.92		ug/L		100	64 - 136	5	18
1,3,5-Trimethylbenzene	ND		100	97.43		ug/L		97	69 - 139	4	17
Vinyl chloride	ND		100	113.4		ug/L		113	57 - 150	2	37
Xylenes, Total	ND		200	190.7		ug/L		95	69 - 132	3	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: MB 490-537744/6
Matrix: Water
Analysis Batch: 537744

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.00		ug/L			08/22/18 01:49	1
Ethylbenzene	ND		1.00		ug/L			08/22/18 01:49	1
Naphthalene	ND		5.00		ug/L			08/22/18 01:49	1
Toluene	ND		1.00		ug/L			08/22/18 01:49	1

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

Lab Sample ID: MB 490-537744/6
Matrix: Water
Analysis Batch: 537744

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		3.00		ug/L			08/22/18 01:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/22/18 01:49*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*08/22/18 01:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/22/18 01:49*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/22/18 01:49*	*1*

Lab Sample ID: LCS 490-537744/3
Matrix: Water
Analysis Batch: 537744

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			20.0	19.25		ug/L		96	70 - 130		
Ethylbenzene			20.0	17.67		ug/L		88	70 - 130		
Naphthalene			20.0	18.52		ug/L		93	54 - 150		
Toluene			20.0	17.76		ug/L		89	70 - 130		
Xylenes, Total			40.0	35.61		ug/L		89	70 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 490-537744/4
Matrix: Water
Analysis Batch: 537744

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			20.0	20.59		ug/L		103	70 - 130	7	12
Ethylbenzene			20.0	18.31		ug/L		92	70 - 130	4	12
Naphthalene			20.0	17.79		ug/L		89	54 - 150	4	15
Toluene			20.0	18.41		ug/L		92	70 - 130	4	13
Xylenes, Total			40.0	35.68		ug/L		89	70 - 132	0	11

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*108*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

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

Lab Sample ID: 490-157729-6 MS
Matrix: Water
Analysis Batch: 537744

Client Sample ID: GW-060866-081418-LB-MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		20.0	21.96		ug/L		110	55 - 147
Ethylbenzene	ND		20.0	19.31		ug/L		97	65 - 139
Naphthalene	ND		20.0	15.49		ug/L		77	32 - 150
Toluene	ND		20.0	19.45		ug/L		97	64 - 136
Xylenes, Total	ND		40.0	37.21		ug/L		93	69 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: 490-157729-6 MSD
Matrix: Water
Analysis Batch: 537744

Client Sample ID: GW-060866-081418-LB-MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		20.0	20.82		ug/L		104	55 - 147	5	22
Ethylbenzene	ND		20.0	19.48		ug/L		97	65 - 139	1	18
Naphthalene	ND		20.0	18.47		ug/L		92	32 - 150	18	40
Toluene	ND		20.0	19.12		ug/L		96	64 - 136	2	18
Xylenes, Total	ND		40.0	37.30		ug/L		93	69 - 132	0	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: MB 490-537889/6
Matrix: Water
Analysis Batch: 537889

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0		ug/L			08/22/18 14:06	1
Benzene	ND		1.00		ug/L			08/22/18 14:06	1
Bromobenzene	ND		1.00		ug/L			08/22/18 14:06	1
Bromochloromethane	ND		1.00		ug/L			08/22/18 14:06	1
Bromodichloromethane	ND		1.00		ug/L			08/22/18 14:06	1
Bromoform	ND		1.00		ug/L			08/22/18 14:06	1
Bromomethane	ND		1.00		ug/L			08/22/18 14:06	1
2-Butanone (MEK)	ND		50.0		ug/L			08/22/18 14:06	1
Carbon disulfide	ND		1.00		ug/L			08/22/18 14:06	1
Carbon tetrachloride	ND		1.00		ug/L			08/22/18 14:06	1
Chlorobenzene	ND		1.00		ug/L			08/22/18 14:06	1
Chlorodibromomethane	ND		1.00		ug/L			08/22/18 14:06	1
Chloroethane	ND		1.00		ug/L			08/22/18 14:06	1

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

Lab Sample ID: MB 490-537889/6
Matrix: Water
Analysis Batch: 537889

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.00		ug/L			08/22/18 14:06	1
Chloromethane	ND		1.00		ug/L			08/22/18 14:06	1
2-Chlorotoluene	ND		1.00		ug/L			08/22/18 14:06	1
4-Chlorotoluene	ND		1.00		ug/L			08/22/18 14:06	1
cis-1,2-Dichloroethene	ND		1.00		ug/L			08/22/18 14:06	1
cis-1,3-Dichloropropene	ND		1.00		ug/L			08/22/18 14:06	1
1,2-Dibromo-3-Chloropropane	ND		10.0		ug/L			08/22/18 14:06	1
1,2-Dibromoethane (EDB)	ND		1.00		ug/L			08/22/18 14:06	1
Dibromomethane	ND		1.00		ug/L			08/22/18 14:06	1
1,2-Dichlorobenzene	ND		1.00		ug/L			08/22/18 14:06	1
1,3-Dichlorobenzene	ND		1.00		ug/L			08/22/18 14:06	1
1,4-Dichlorobenzene	ND		1.00		ug/L			08/22/18 14:06	1
Dichlorodifluoromethane	ND		1.00		ug/L			08/22/18 14:06	1
1,1-Dichloroethane	ND		1.00		ug/L			08/22/18 14:06	1
1,2-Dichloroethane	ND		1.00		ug/L			08/22/18 14:06	1
1,1-Dichloroethene	ND		1.00		ug/L			08/22/18 14:06	1
1,2-Dichloropropane	ND		1.00		ug/L			08/22/18 14:06	1
1,3-Dichloropropane	ND		1.00		ug/L			08/22/18 14:06	1
2,2-Dichloropropane	ND		1.00		ug/L			08/22/18 14:06	1
1,1-Dichloropropene	ND		1.00		ug/L			08/22/18 14:06	1
Ethylbenzene	ND		1.00		ug/L			08/22/18 14:06	1
Hexachlorobutadiene	ND		2.00		ug/L			08/22/18 14:06	1
2-Hexanone	ND		10.0		ug/L			08/22/18 14:06	1
Isopropylbenzene	ND		1.00		ug/L			08/22/18 14:06	1
Methylene Chloride	ND		5.00		ug/L			08/22/18 14:06	1
4-Methyl-2-pentanone (MIBK)	ND		10.0		ug/L			08/22/18 14:06	1
Methyl tert-butyl ether	ND		1.00		ug/L			08/22/18 14:06	1
Naphthalene	ND		5.00		ug/L			08/22/18 14:06	1
n-Butylbenzene	ND		1.00		ug/L			08/22/18 14:06	1
N-Propylbenzene	ND		1.00		ug/L			08/22/18 14:06	1
p-Isopropyltoluene	ND		1.00		ug/L			08/22/18 14:06	1
sec-Butylbenzene	ND		1.00		ug/L			08/22/18 14:06	1
Styrene	ND		1.00		ug/L			08/22/18 14:06	1
tert-Butylbenzene	ND		1.00		ug/L			08/22/18 14:06	1
1,1,1,2-Tetrachloroethane	ND		1.00		ug/L			08/22/18 14:06	1
1,1,2,2-Tetrachloroethane	ND		1.00		ug/L			08/22/18 14:06	1
Tetrachloroethene	ND		1.00		ug/L			08/22/18 14:06	1
Toluene	ND		1.00		ug/L			08/22/18 14:06	1
trans-1,2-Dichloroethene	ND		1.00		ug/L			08/22/18 14:06	1
trans-1,3-Dichloropropene	ND		1.00		ug/L			08/22/18 14:06	1
1,2,3-Trichlorobenzene	ND		1.00		ug/L			08/22/18 14:06	1
1,2,4-Trichlorobenzene	ND		1.00		ug/L			08/22/18 14:06	1
1,1,1-Trichloroethane	ND		1.00		ug/L			08/22/18 14:06	1
1,1,2-Trichloroethane	ND		1.00		ug/L			08/22/18 14:06	1
Trichloroethene	ND		1.00		ug/L			08/22/18 14:06	1
Trichlorofluoromethane	ND		1.00		ug/L			08/22/18 14:06	1
1,2,3-Trichloropropane	ND		1.00		ug/L			08/22/18 14:06	1
1,2,4-Trimethylbenzene	ND		1.00		ug/L			08/22/18 14:06	1

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

Lab Sample ID: MB 490-537889/6
Matrix: Water
Analysis Batch: 537889

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.00		ug/L			08/22/18 14:06	1
Vinyl chloride	ND		1.00		ug/L			08/22/18 14:06	1
Xylenes, Total	ND		3.00		ug/L			08/22/18 14:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/22/18 14:06*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*08/22/18 14:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/22/18 14:06*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*08/22/18 14:06*	*1*

Lab Sample ID: LCS 490-537889/3
Matrix: Water
Analysis Batch: 537889

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	78.30		ug/L		78	39 - 150
Benzene	20.0	17.00		ug/L		85	70 - 130
Bromobenzene	20.0	20.42		ug/L		102	70 - 130
Bromochloromethane	20.0	18.12		ug/L		91	70 - 130
Bromodichloromethane	20.0	17.82		ug/L		89	70 - 130
Bromoform	20.0	22.07		ug/L		110	70 - 137
Bromomethane	20.0	15.15		ug/L		76	53 - 150
2-Butanone (MEK)	100	94.09		ug/L		94	55 - 143
Carbon disulfide	20.0	16.37		ug/L		82	64 - 135
Carbon tetrachloride	20.0	17.62		ug/L		88	70 - 147
Chlorobenzene	20.0	20.77		ug/L		104	70 - 130
Chlorodibromomethane	20.0	20.49		ug/L		102	70 - 133
Chloroethane	20.0	16.97		ug/L		85	60 - 138
Chloroform	20.0	17.45		ug/L		87	70 - 130
Chloromethane	20.0	13.96		ug/L		70	33 - 150
2-Chlorotoluene	20.0	19.87		ug/L		99	70 - 130
4-Chlorotoluene	20.0	20.75		ug/L		104	70 - 130
cis-1,2-Dichloroethene	20.0	18.06		ug/L		90	70 - 130
cis-1,3-Dichloropropene	20.0	20.63		ug/L		103	70 - 133
1,2-Dibromo-3-Chloropropane	20.0	16.91		ug/L		85	45 - 138
1,2-Dibromoethane (EDB)	20.0	21.05		ug/L		105	70 - 130
Dibromomethane	20.0	18.27		ug/L		91	70 - 130
1,2-Dichlorobenzene	20.0	21.59		ug/L		108	70 - 130
1,3-Dichlorobenzene	20.0	20.82		ug/L		104	70 - 130
1,4-Dichlorobenzene	20.0	20.58		ug/L		103	70 - 130
Dichlorodifluoromethane	20.0	16.38		ug/L		82	48 - 150
1,1-Dichloroethane	20.0	17.04		ug/L		85	70 - 130
1,2-Dichloroethane	20.0	18.36		ug/L		92	70 - 130
1,1-Dichloroethene	20.0	17.55		ug/L		88	70 - 132
1,2-Dichloropropane	20.0	17.47		ug/L		87	70 - 130
1,3-Dichloropropane	20.0	20.99		ug/L		105	70 - 130
2,2-Dichloropropane	20.0	16.08		ug/L		80	60 - 143
1,1-Dichloropropene	20.0	17.05		ug/L		85	70 - 130

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

Lab Sample ID: LCS 490-537889/3
Matrix: Water
Analysis Batch: 537889

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	20.0	20.09		ug/L		100	70 - 130
Hexachlorobutadiene	20.0	22.27		ug/L		111	70 - 138
2-Hexanone	100	105.6		ug/L		106	54 - 142
Isopropylbenzene	20.0	19.37		ug/L		97	70 - 131
Methylene Chloride	20.0	18.28		ug/L		91	70 - 130
4-Methyl-2-pentanone (MIBK)	100	106.3		ug/L		106	60 - 137
Methyl tert-butyl ether	20.0	18.07		ug/L		90	70 - 130
Naphthalene	20.0	21.10		ug/L		105	54 - 150
n-Butylbenzene	20.0	20.26		ug/L		101	68 - 137
N-Propylbenzene	20.0	20.45		ug/L		102	70 - 134
p-Isopropyltoluene	20.0	20.19		ug/L		101	66 - 130
sec-Butylbenzene	20.0	20.11		ug/L		101	70 - 135
Styrene	20.0	20.24		ug/L		101	70 - 130
tert-Butylbenzene	20.0	20.14		ug/L		101	70 - 130
1,1,1,2-Tetrachloroethane	20.0	20.73		ug/L		104	70 - 130
1,1,2,2-Tetrachloroethane	20.0	21.68		ug/L		108	69 - 131
Tetrachloroethene	20.0	21.17		ug/L		106	70 - 130
Toluene	20.0	19.95		ug/L		100	70 - 130
trans-1,2-Dichloroethene	20.0	17.19		ug/L		86	70 - 130
trans-1,3-Dichloropropene	20.0	20.01		ug/L		100	63 - 142
1,2,3-Trichlorobenzene	20.0	21.60		ug/L		108	46 - 150
1,2,4-Trichlorobenzene	20.0	21.55		ug/L		108	58 - 147
1,1,1-Trichloroethane	20.0	17.45		ug/L		87	70 - 135
1,1,2-Trichloroethane	20.0	21.04		ug/L		105	70 - 130
Trichloroethene	20.0	18.23		ug/L		91	70 - 130
Trichlorofluoromethane	20.0	17.18		ug/L		86	59 - 150
1,2,3-Trichloropropane	20.0	20.87		ug/L		104	70 - 131
1,2,4-Trimethylbenzene	20.0	20.68		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	20.0	20.45		ug/L		102	70 - 130
Vinyl chloride	20.0	16.12		ug/L		81	57 - 137
Xylenes, Total	40.0	39.42		ug/L		99	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 490-537889/4
Matrix: Water
Analysis Batch: 537889

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	79.50		ug/L		80	39 - 150	2	23
Benzene	20.0	16.75		ug/L		84	70 - 130	2	12
Bromobenzene	20.0	20.64		ug/L		103	70 - 130	1	16
Bromochloromethane	20.0	18.39		ug/L		92	70 - 130	2	16
Bromodichloromethane	20.0	17.14		ug/L		86	70 - 130	4	14

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

Lab Sample ID: LCSD 490-537889/4
Matrix: Water
Analysis Batch: 537889

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	20.0	21.88		ug/L		109	70 - 137	1	14
Bromomethane	20.0	16.07		ug/L		80	53 - 150	6	19
2-Butanone (MEK)	100	92.72		ug/L		93	55 - 143	1	19
Carbon disulfide	20.0	16.86		ug/L		84	64 - 135	3	16
Carbon tetrachloride	20.0	18.04		ug/L		90	70 - 147	2	16
Chlorobenzene	20.0	21.17		ug/L		106	70 - 130	2	12
Chlorodibromomethane	20.0	20.61		ug/L		103	70 - 133	1	13
Chloroethane	20.0	17.40		ug/L		87	60 - 138	3	15
Chloroform	20.0	17.55		ug/L		88	70 - 130	1	14
Chloromethane	20.0	15.65		ug/L		78	33 - 150	11	20
2-Chlorotoluene	20.0	20.92		ug/L		105	70 - 130	5	15
4-Chlorotoluene	20.0	21.02		ug/L		105	70 - 130	1	15
cis-1,2-Dichloroethene	20.0	18.10		ug/L		91	70 - 130	0	15
cis-1,3-Dichloropropene	20.0	20.64		ug/L		103	70 - 133	0	15
1,2-Dibromo-3-Chloropropane	20.0	16.74		ug/L		84	45 - 138	1	19
1,2-Dibromoethane (EDB)	20.0	21.30		ug/L		107	70 - 130	1	13
Dibromomethane	20.0	18.06		ug/L		90	70 - 130	1	14
1,2-Dichlorobenzene	20.0	21.66		ug/L		108	70 - 130	0	12
1,3-Dichlorobenzene	20.0	21.24		ug/L		106	70 - 130	2	13
1,4-Dichlorobenzene	20.0	21.12		ug/L		106	70 - 130	3	12
Dichlorodifluoromethane	20.0	16.85		ug/L		84	48 - 150	3	16
1,1-Dichloroethane	20.0	16.99		ug/L		85	70 - 130	0	17
1,2-Dichloroethane	20.0	17.61		ug/L		88	70 - 130	4	13
1,1-Dichloroethene	20.0	18.13		ug/L		91	70 - 132	3	20
1,2-Dichloropropane	20.0	17.44		ug/L		87	70 - 130	0	15
1,3-Dichloropropane	20.0	21.00		ug/L		105	70 - 130	0	12
2,2-Dichloropropane	20.0	16.23		ug/L		81	60 - 143	1	20
1,1-Dichloropropene	20.0	18.02		ug/L		90	70 - 130	6	16
Ethylbenzene	20.0	20.31		ug/L		102	70 - 130	1	12
Hexachlorobutadiene	20.0	23.23		ug/L		116	70 - 138	4	16
2-Hexanone	100	104.2		ug/L		104	54 - 142	1	17
Isopropylbenzene	20.0	20.01		ug/L		100	70 - 131	3	13
Methylene Chloride	20.0	18.06		ug/L		90	70 - 130	1	15
4-Methyl-2-pentanone (MIBK)	100	105.8		ug/L		106	60 - 137	1	21
Methyl tert-butyl ether	20.0	18.06		ug/L		90	70 - 130	0	16
Naphthalene	20.0	21.84		ug/L		109	54 - 150	3	15
n-Butylbenzene	20.0	20.87		ug/L		104	68 - 137	3	14
N-Propylbenzene	20.0	20.76		ug/L		104	70 - 134	1	14
p-Isopropyltoluene	20.0	20.60		ug/L		103	66 - 130	2	13
sec-Butylbenzene	20.0	20.65		ug/L		103	70 - 135	3	14
Styrene	20.0	20.60		ug/L		103	70 - 130	2	12
tert-Butylbenzene	20.0	20.28		ug/L		101	70 - 130	1	14
1,1,1,2-Tetrachloroethane	20.0	21.22		ug/L		106	70 - 130	2	13
1,1,2,2-Tetrachloroethane	20.0	21.51		ug/L		108	69 - 131	1	15
Tetrachloroethene	20.0	21.33		ug/L		107	70 - 130	1	17
Toluene	20.0	20.25		ug/L		101	70 - 130	1	13
trans-1,2-Dichloroethene	20.0	17.41		ug/L		87	70 - 130	1	15
trans-1,3-Dichloropropene	20.0	20.54		ug/L		103	63 - 142	3	13

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

Lab Sample ID: LCSD 490-537889/4
Matrix: Water
Analysis Batch: 537889

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			20.0	22.80		ug/L		114	46 - 150	5	16
1,2,4-Trichlorobenzene			20.0	22.31		ug/L		112	58 - 147	3	15
1,1,1-Trichloroethane			20.0	17.98		ug/L		90	70 - 135	3	15
1,1,2-Trichloroethane			20.0	20.45		ug/L		102	70 - 130	3	13
Trichloroethene			20.0	18.22		ug/L		91	70 - 130	0	14
Trichlorofluoromethane			20.0	17.39		ug/L		87	59 - 150	1	22
1,2,3-Trichloropropane			20.0	21.00		ug/L		105	70 - 131	1	14
1,2,4-Trimethylbenzene			20.0	20.95		ug/L		105	70 - 130	1	13
1,3,5-Trimethylbenzene			20.0	20.70		ug/L		104	70 - 130	1	14
Vinyl chloride			20.0	17.08		ug/L		85	57 - 137	6	15
Xylenes, Total			40.0	40.49		ug/L		101	70 - 132	3	11

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Lab Sample ID: 490-157804-B-2 MS
Matrix: Water
Analysis Batch: 537889

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		100	82.19		ug/L		77	39 - 150
Benzene	ND		20.0	17.84		ug/L		89	55 - 147
Bromobenzene	ND		20.0	20.35		ug/L		102	60 - 133
Bromochloromethane	ND		20.0	18.50		ug/L		93	59 - 132
Bromodichloromethane	ND		20.0	18.22		ug/L		91	70 - 140
Bromoform	ND		20.0	21.74		ug/L		109	53 - 150
Bromomethane	ND		20.0	15.68		ug/L		78	30 - 150
2-Butanone (MEK)	ND		100	89.38		ug/L		89	50 - 143
Carbon disulfide	ND		20.0	18.24		ug/L		91	35 - 150
Carbon tetrachloride	ND		20.0	20.50		ug/L		103	56 - 150
Chlorobenzene	ND		20.0	22.03		ug/L		110	70 - 130
Chlorodibromomethane	ND		20.0	21.08		ug/L		105	66 - 140
Chloroethane	ND		20.0	17.92		ug/L		90	58 - 141
Chloroform	ND		20.0	18.70		ug/L		93	66 - 138
Chloromethane	ND		20.0	16.46		ug/L		82	10 - 150
2-Chlorotoluene	ND		20.0	21.67		ug/L		108	67 - 138
4-Chlorotoluene	ND		20.0	21.58		ug/L		108	69 - 138
cis-1,2-Dichloroethene	ND		20.0	18.79		ug/L		94	68 - 131
cis-1,3-Dichloropropene	ND		20.0	20.90		ug/L		105	70 - 133
1,2-Dibromo-3-Chloropropane	ND		20.0	17.09		ug/L		85	38 - 138
1,2-Dibromoethane (EDB)	ND		20.0	21.82		ug/L		109	65 - 137
Dibromomethane	ND		20.0	17.95		ug/L		90	70 - 130
1,2-Dichlorobenzene	ND		20.0	22.46		ug/L		112	70 - 130
1,3-Dichlorobenzene	ND		20.0	22.06		ug/L		110	68 - 131
1,4-Dichlorobenzene	ND		20.0	22.31		ug/L		112	70 - 130

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

Lab Sample ID: 490-157804-B-2 MS
Matrix: Water
Analysis Batch: 537889

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	ND		20.0	17.40		ug/L		87	10 - 150
1,1-Dichloroethane	ND		20.0	18.58		ug/L		93	61 - 139
1,2-Dichloroethane	ND		20.0	17.59		ug/L		88	64 - 136
1,1-Dichloroethene	ND		20.0	19.98		ug/L		100	54 - 150
1,2-Dichloropropane	ND		20.0	17.42		ug/L		87	67 - 130
1,3-Dichloropropane	ND		20.0	21.13		ug/L		106	70 - 130
2,2-Dichloropropane	ND		20.0	16.45		ug/L		82	50 - 146
1,1-Dichloropropene	ND		20.0	19.90		ug/L		100	54 - 150
Ethylbenzene	ND		20.0	22.14		ug/L		111	65 - 139
Hexachlorobutadiene	ND		20.0	23.11		ug/L		116	61 - 141
2-Hexanone	ND		100	101.2		ug/L		101	44 - 150
Isopropylbenzene	ND		20.0	21.74		ug/L		109	70 - 137
Methylene Chloride	ND		20.0	18.52		ug/L		93	64 - 130
4-Methyl-2-pentanone (MIBK)	ND		100	105.2		ug/L		105	50 - 140
Methyl tert-butyl ether	22.7		20.0	40.74		ug/L		90	55 - 141
Naphthalene	ND		20.0	18.52		ug/L		93	32 - 150
n-Butylbenzene	ND		20.0	22.19		ug/L		111	61 - 141
N-Propylbenzene	ND		20.0	21.51		ug/L		108	53 - 150
p-Isopropyltoluene	ND		20.0	22.29		ug/L		111	66 - 137
sec-Butylbenzene	ND		20.0	22.52		ug/L		113	55 - 136
Styrene	ND		20.0	21.31		ug/L		107	70 - 130
tert-Butylbenzene	ND		20.0	22.03		ug/L		110	70 - 138
1,1,1,2-Tetrachloroethane	ND		20.0	22.27		ug/L		111	70 - 131
1,1,2,2-Tetrachloroethane	ND		20.0	19.87		ug/L		99	56 - 145
Tetrachloroethene	ND		20.0	23.50		ug/L		117	57 - 138
Toluene	ND		20.0	21.69		ug/L		108	64 - 136
trans-1,2-Dichloroethene	ND		20.0	18.88		ug/L		94	59 - 143
trans-1,3-Dichloropropene	ND		20.0	20.21		ug/L		101	63 - 142
1,2,3-Trichlorobenzene	ND		20.0	18.66		ug/L		93	36 - 150
1,2,4-Trichlorobenzene	ND		20.0	20.82		ug/L		104	47 - 147
1,1,1-Trichloroethane	ND		20.0	19.81		ug/L		99	68 - 144
1,1,2-Trichloroethane	ND		20.0	20.84		ug/L		104	70 - 130
Trichloroethene	ND		20.0	19.68		ug/L		98	63 - 135
Trichlorofluoromethane	ND		20.0	20.27		ug/L		101	44 - 150
1,2,3-Trichloropropane	ND		20.0	19.81		ug/L		99	65 - 131
1,2,4-Trimethylbenzene	ND		20.0	21.65		ug/L		108	64 - 136
1,3,5-Trimethylbenzene	ND		20.0	21.83		ug/L		109	69 - 139
Vinyl chloride	ND		20.0	18.29		ug/L		91	57 - 150
Xylenes, Total	ND		40.0	42.37		ug/L		106	69 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

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

Lab Sample ID: 490-157804-C-2 MSD
Matrix: Water
Analysis Batch: 537889

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		100	82.64		ug/L		78	39 - 150	1	28
Benzene	ND		20.0	17.40		ug/L		87	55 - 147	3	22
Bromobenzene	ND		20.0	20.52		ug/L		103	60 - 133	1	18
Bromochloromethane	ND		20.0	18.51		ug/L		93	59 - 132	0	21
Bromodichloromethane	ND		20.0	17.82		ug/L		89	70 - 140	2	196
Bromoform	ND		20.0	21.41		ug/L		107	53 - 150	2	20
Bromomethane	ND		20.0	17.47		ug/L		87	30 - 150	11	44
2-Butanone (MEK)	ND		100	88.76		ug/L		89	50 - 143	1	28
Carbon disulfide	ND		20.0	18.32		ug/L		92	35 - 150	0	34
Carbon tetrachloride	ND		20.0	20.13		ug/L		101	56 - 150	2	18
Chlorobenzene	ND		20.0	21.95		ug/L		110	70 - 130	0	15
Chlorodibromomethane	ND		20.0	20.49		ug/L		102	66 - 140	3	19
Chloroethane	ND		20.0	18.55		ug/L		93	58 - 141	3	31
Chloroform	ND		20.0	18.79		ug/L		94	66 - 138	1	21
Chloromethane	ND		20.0	17.18		ug/L		86	10 - 150	4	43
2-Chlorotoluene	ND		20.0	21.61		ug/L		108	67 - 138	0	17
4-Chlorotoluene	ND		20.0	21.54		ug/L		108	69 - 138	0	15
cis-1,2-Dichloroethene	ND		20.0	17.85		ug/L		89	68 - 131	5	21
cis-1,3-Dichloropropene	ND		20.0	20.76		ug/L		104	70 - 133	1	19
1,2-Dibromo-3-Chloropropane	ND		20.0	17.34		ug/L		87	38 - 138	1	26
1,2-Dibromoethane (EDB)	ND		20.0	21.12		ug/L		106	65 - 137	3	21
Dibromomethane	ND		20.0	18.20		ug/L		91	70 - 130	1	19
1,2-Dichlorobenzene	ND		20.0	22.60		ug/L		113	70 - 130	1	15
1,3-Dichlorobenzene	ND		20.0	21.82		ug/L		109	68 - 131	1	14
1,4-Dichlorobenzene	ND		20.0	21.92		ug/L		110	70 - 130	2	14
Dichlorodifluoromethane	ND		20.0	17.40		ug/L		87	10 - 150	0	50
1,1-Dichloroethane	ND		20.0	18.04		ug/L		90	61 - 139	3	23
1,2-Dichloroethane	ND		20.0	17.42		ug/L		87	64 - 136	1	22
1,1-Dichloroethene	ND		20.0	19.32		ug/L		97	54 - 150	3	24
1,2-Dichloropropane	ND		20.0	18.36		ug/L		92	67 - 130	5	19
1,3-Dichloropropane	ND		20.0	20.76		ug/L		104	70 - 130	2	17
2,2-Dichloropropane	ND		20.0	16.63		ug/L		83	50 - 146	1	20
1,1-Dichloropropene	ND		20.0	19.81		ug/L		99	54 - 150	0	24
Ethylbenzene	ND		20.0	21.59		ug/L		108	65 - 139	3	18
Hexachlorobutadiene	ND		20.0	24.13		ug/L		121	61 - 141	4	26
2-Hexanone	ND		100	100.3		ug/L		100	44 - 150	1	21
Isopropylbenzene	ND		20.0	21.18		ug/L		106	70 - 137	3	17
Methylene Chloride	ND		20.0	17.53		ug/L		88	64 - 130	5	22
4-Methyl-2-pentanone (MIBK)	ND		100	102.4		ug/L		102	50 - 140	3	24
Methyl tert-butyl ether	22.7		20.0	39.72		ug/L		85	55 - 141	3	24
Naphthalene	ND		20.0	20.02		ug/L		100	32 - 150	8	40
n-Butylbenzene	ND		20.0	22.63		ug/L		113	61 - 141	2	17
N-Propylbenzene	ND		20.0	21.63		ug/L		108	53 - 150	1	18
p-Isopropyltoluene	ND		20.0	22.33		ug/L		112	66 - 137	0	16
sec-Butylbenzene	ND		20.0	22.00		ug/L		110	55 - 136	2	50
Styrene	ND		20.0	21.17		ug/L		106	70 - 130	1	16
tert-Butylbenzene	ND		20.0	21.92		ug/L		110	70 - 138	1	17
1,1,1,2-Tetrachloroethane	ND		20.0	21.74		ug/L		109	70 - 131	2	16

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

Lab Sample ID: 490-157804-C-2 MSD
Matrix: Water
Analysis Batch: 537889

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	ND		20.0	20.57		ug/L		103	56 - 145	3	19
Tetrachloroethene	ND		20.0	23.28		ug/L		116	57 - 138	1	17
Toluene	ND		20.0	21.56		ug/L		108	64 - 136	1	18
trans-1,2-Dichloroethene	ND		20.0	18.64		ug/L		93	59 - 143	1	25
trans-1,3-Dichloropropene	ND		20.0	19.81		ug/L		99	63 - 142	2	18
1,2,3-Trichlorobenzene	ND		20.0	20.74		ug/L		104	36 - 150	11	43
1,2,4-Trichlorobenzene	ND		20.0	20.84		ug/L		104	47 - 147	0	24
1,1,1-Trichloroethane	ND		20.0	19.41		ug/L		97	68 - 144	2	17
1,1,2-Trichloroethane	ND		20.0	20.89		ug/L		104	70 - 130	0	18
Trichloroethene	ND		20.0	19.42		ug/L		97	63 - 135	1	17
Trichlorofluoromethane	ND		20.0	18.95		ug/L		95	44 - 150	7	32
1,2,3-Trichloropropane	ND		20.0	19.99		ug/L		100	65 - 131	1	19
1,2,4-Trimethylbenzene	ND		20.0	21.89		ug/L		109	64 - 136	1	18
1,3,5-Trimethylbenzene	ND		20.0	21.05		ug/L		105	69 - 139	4	17
Vinyl chloride	ND		20.0	18.25		ug/L		91	57 - 150	0	37
Xylenes, Total	ND		40.0	41.45		ug/L		104	69 - 132	2	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

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

Lab Sample ID: MB 490-538078/8
Matrix: Water
Analysis Batch: 538078

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100		ug/L			08/23/18 10:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*100*		*50 - 150*		*08/23/18 10:28*	*1*

Lab Sample ID: LCS 490-538078/5
Matrix: Water
Analysis Batch: 538078

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12			1000	1149		ug/L		115	39 - 143		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*78*		*50 - 150*

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

Lab Sample ID: LCSD 490-538078/6
Matrix: Water
Analysis Batch: 538078

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12			1000	1127		ug/L		113	39 - 143	2	18

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*76*		*50 - 150*

Lab Sample ID: 490-157729-4 DU
Matrix: Water
Analysis Batch: 538078

Client Sample ID: GW-060866-081418-LB-MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C6-C12	ND			ND		ug/L				NC	18

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*99*		*50 - 150*

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

Lab Sample ID: MB 490-537484/1-A
Matrix: Water
Analysis Batch: 537966

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 537484

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		100		ug/L		08/21/18 09:14	08/22/18 16:29	1
C24-C40	ND		100		ug/L		08/21/18 09:14	08/22/18 16:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*87*		*50 - 150*	*08/21/18 09:14*	*08/22/18 16:29*	*1*

Lab Sample ID: LCS 490-537484/2-A
Matrix: Water
Analysis Batch: 537966

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 537484

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C24			1000	819.5		ug/L		82	51 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*82*		*50 - 150*

Lab Sample ID: 490-157729-4 DU
Matrix: Water
Analysis Batch: 537966

Client Sample ID: GW-060866-081418-LB-MW-4
Prep Type: Total/NA
Prep Batch: 537484

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C10-C24	ND			ND		ug/L				NC	41
C24-C40	ND			ND		ug/L				3	41

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

Lab Sample ID: 490-157729-4 DU
Matrix: Water
Analysis Batch: 537966

Client Sample ID: GW-060866-081418-LB-MW-4
Prep Type: Total/NA
Prep Batch: 537484

Surrogate	DU %Recovery	DU Qualifier	Limits
o-Terphenyl	*69*		*50 - 150*

Lab Sample ID: MB 490-538185/1-A
Matrix: Water
Analysis Batch: 538672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538185

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		100		ug/L		08/23/18 11:15	08/25/18 13:57	1
C24-C40	ND		100		ug/L		08/23/18 11:15	08/25/18 13:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*136*		*50 - 150*	*08/23/18 11:15*	*08/25/18 13:57*	*1*

Lab Sample ID: LCS 490-538185/2-A
Matrix: Water
Analysis Batch: 538672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538185

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C24			1000	1122		ug/L		112	51 - 132		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	*122*		*50 - 150*

Lab Sample ID: LCSD 490-538185/3-A
Matrix: Water
Analysis Batch: 538672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 538185

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C24			1000	1083		ug/L		108	51 - 132	4	41

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl	*119*		*50 - 150*

Lab Sample ID: 490-157870-G-4-B DU
Matrix: Water
Analysis Batch: 538672

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 538185

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C10-C24	154			127.2		ug/L				19	41
C24-C40	ND			ND		ug/L				NC	41

Surrogate	DU %Recovery	DU Qualifier	Limits
o-Terphenyl	*94*		*50 - 150*

GC/MS VOA

Analysis Batch: 537617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157729-2	GW-060866-081518-LB-MW-2	Total/NA	Water	8260B	
490-157729-5	GW-060866-081418-LB-MW-5	Total/NA	Water	8260B	
490-157729-11	GW-060866-081418-LB-MW-12	Total/NA	Water	8260B	
490-157729-12	GW-060866-081518-LB-MW-13	Total/NA	Water	8260B	
490-157729-13	GW-060866-081518-LB-MW-14	Total/NA	Water	8260B	
490-157729-14	GW-060866-081518-LB-MW-15	Total/NA	Water	8260B	
490-157729-16	GW-060866-081418-LB-TB	Total/NA	Water	8260B	
MB 490-537617/6	Method Blank	Total/NA	Water	8260B	
LCS 490-537617/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-537617/4	Lab Control Sample Dup	Total/NA	Water	8260B	
490-157684-B-8 MS	Matrix Spike	Total/NA	Water	8260B	
490-157684-B-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 537744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157729-1	GW-060866-081518-LB-MW-1	Total/NA	Water	8260B	
490-157729-3	GW-060866-081418-LB-MW-3	Total/NA	Water	8260B	
490-157729-4	GW-060866-081418-LB-MW-4	Total/NA	Water	8260B	
490-157729-6	GW-060866-081418-LB-MW-6	Total/NA	Water	8260B	
490-157729-7	GW-060866-081518-LB-MW-7	Total/NA	Water	8260B	
490-157729-8	GW-060866-081418-LB-MW-8	Total/NA	Water	8260B	
490-157729-9	GW-060866-081518-LB-MW-9	Total/NA	Water	8260B	
490-157729-10	GW-060866-081418-LB-MW-11	Total/NA	Water	8260B	
490-157729-15	GW-060866-081518-LB-DUP-1	Total/NA	Water	8260B	
MB 490-537744/6	Method Blank	Total/NA	Water	8260B	
LCS 490-537744/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-537744/4	Lab Control Sample Dup	Total/NA	Water	8260B	
490-157729-6 MS	GW-060866-081418-LB-MW-6	Total/NA	Water	8260B	
490-157729-6 MSD	GW-060866-081418-LB-MW-6	Total/NA	Water	8260B	

Analysis Batch: 537889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157729-2	GW-060866-081518-LB-MW-2	Total/NA	Water	8260B	
490-157729-14	GW-060866-081518-LB-MW-15	Total/NA	Water	8260B	
MB 490-537889/6	Method Blank	Total/NA	Water	8260B	
LCS 490-537889/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-537889/4	Lab Control Sample Dup	Total/NA	Water	8260B	
490-157804-B-2 MS	Matrix Spike	Total/NA	Water	8260B	
490-157804-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 538078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157729-1	GW-060866-081518-LB-MW-1	Total/NA	Water	NWTPH-Gx	
490-157729-2	GW-060866-081518-LB-MW-2	Total/NA	Water	NWTPH-Gx	
490-157729-3	GW-060866-081418-LB-MW-3	Total/NA	Water	NWTPH-Gx	
490-157729-4	GW-060866-081418-LB-MW-4	Total/NA	Water	NWTPH-Gx	
490-157729-5	GW-060866-081418-LB-MW-5	Total/NA	Water	NWTPH-Gx	
490-157729-6	GW-060866-081418-LB-MW-6	Total/NA	Water	NWTPH-Gx	

GC VOA (Continued)

Analysis Batch: 538078 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157729-7	GW-060866-081518-LB-MW-7	Total/NA	Water	NWTPH-Gx	
490-157729-8	GW-060866-081418-LB-MW-8	Total/NA	Water	NWTPH-Gx	
490-157729-9	GW-060866-081518-LB-MW-9	Total/NA	Water	NWTPH-Gx	
490-157729-10	GW-060866-081418-LB-MW-11	Total/NA	Water	NWTPH-Gx	
490-157729-11	GW-060866-081418-LB-MW-12	Total/NA	Water	NWTPH-Gx	
490-157729-12	GW-060866-081518-LB-MW-13	Total/NA	Water	NWTPH-Gx	
490-157729-13	GW-060866-081518-LB-MW-14	Total/NA	Water	NWTPH-Gx	
490-157729-14	GW-060866-081518-LB-MW-15	Total/NA	Water	NWTPH-Gx	
490-157729-15	GW-060866-081518-LB-DUP-1	Total/NA	Water	NWTPH-Gx	
490-157729-16	GW-060866-081418-LB-TB	Total/NA	Water	NWTPH-Gx	
MB 490-538078/8	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 490-538078/5	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 490-538078/6	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
490-157729-4 DU	GW-060866-081418-LB-MW-4	Total/NA	Water	NWTPH-Gx	

GC Semi VOA

Prep Batch: 537484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157729-1	GW-060866-081518-LB-MW-1	Total/NA	Water	3510C	
490-157729-2	GW-060866-081518-LB-MW-2	Total/NA	Water	3510C	
490-157729-3	GW-060866-081418-LB-MW-3	Total/NA	Water	3510C	
490-157729-4	GW-060866-081418-LB-MW-4	Total/NA	Water	3510C	
490-157729-5	GW-060866-081418-LB-MW-5	Total/NA	Water	3510C	
490-157729-6	GW-060866-081418-LB-MW-6	Total/NA	Water	3510C	
490-157729-7	GW-060866-081518-LB-MW-7	Total/NA	Water	3510C	
490-157729-8	GW-060866-081418-LB-MW-8	Total/NA	Water	3510C	
490-157729-9	GW-060866-081518-LB-MW-9	Total/NA	Water	3510C	
490-157729-12	GW-060866-081518-LB-MW-13	Total/NA	Water	3510C	
490-157729-13	GW-060866-081518-LB-MW-14	Total/NA	Water	3510C	
490-157729-14	GW-060866-081518-LB-MW-15	Total/NA	Water	3510C	
490-157729-15	GW-060866-081518-LB-DUP-1	Total/NA	Water	3510C	
MB 490-537484/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-537484/2-A	Lab Control Sample	Total/NA	Water	3510C	
490-157729-4 DU	GW-060866-081418-LB-MW-4	Total/NA	Water	3510C	

Analysis Batch: 537966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157729-1	GW-060866-081518-LB-MW-1	Total/NA	Water	NWTPH-Dx	537484
490-157729-2	GW-060866-081518-LB-MW-2	Total/NA	Water	NWTPH-Dx	537484
490-157729-3	GW-060866-081418-LB-MW-3	Total/NA	Water	NWTPH-Dx	537484
490-157729-4	GW-060866-081418-LB-MW-4	Total/NA	Water	NWTPH-Dx	537484
490-157729-5	GW-060866-081418-LB-MW-5	Total/NA	Water	NWTPH-Dx	537484
490-157729-6	GW-060866-081418-LB-MW-6	Total/NA	Water	NWTPH-Dx	537484
490-157729-7	GW-060866-081518-LB-MW-7	Total/NA	Water	NWTPH-Dx	537484
490-157729-8	GW-060866-081418-LB-MW-8	Total/NA	Water	NWTPH-Dx	537484
490-157729-9	GW-060866-081518-LB-MW-9	Total/NA	Water	NWTPH-Dx	537484
490-157729-12	GW-060866-081518-LB-MW-13	Total/NA	Water	NWTPH-Dx	537484
490-157729-13	GW-060866-081518-LB-MW-14	Total/NA	Water	NWTPH-Dx	537484
490-157729-14	GW-060866-081518-LB-MW-15	Total/NA	Water	NWTPH-Dx	537484

GC Semi VOA (Continued)

Analysis Batch: 537966 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157729-15	GW-060866-081518-LB-DUP-1	Total/NA	Water	NWTPH-Dx	537484
MB 490-537484/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	537484
LCS 490-537484/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	537484
490-157729-4 DU	GW-060866-081418-LB-MW-4	Total/NA	Water	NWTPH-Dx	537484

Prep Batch: 538185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157729-10	GW-060866-081418-LB-MW-11	Total/NA	Water	3510C	
MB 490-538185/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-538185/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-538185/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
490-157870-G-4-B DU	Duplicate	Total/NA	Water	3510C	

Analysis Batch: 538672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-157729-10	GW-060866-081418-LB-MW-11	Total/NA	Water	NWTPH-Dx	538185
MB 490-538185/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	538185
LCS 490-538185/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	538185
LCSD 490-538185/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	538185
490-157870-G-4-B DU	Duplicate	Total/NA	Water	NWTPH-Dx	538185

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157729-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-081518-LB-MW-1

Lab Sample ID: 490-157729-1
Date Collected: 08/15/18 11:50
Matrix: Water
Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537744	08/22/18 03:08	RP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	538078	08/23/18 12:40	S1S	TAL NSH
Total/NA	Prep	3510C			1023.9 mL	1 mL	537484	08/21/18 09:14	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			537966	08/22/18 21:50	LOJ	TAL NSH

Client Sample ID: GW-060866-081518-LB-MW-2

Lab Sample ID: 490-157729-2
Date Collected: 08/15/18 09:35
Matrix: Water
Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537617	08/21/18 21:25	P1B	TAL NSH
Total/NA	Analysis	8260B		10	5 mL	5 mL	537889	08/22/18 15:48	P1B	TAL NSH
Total/NA	Analysis	NWTPH-Gx		10	5 mL	5 mL	538078	08/23/18 16:16	S1S	TAL NSH
Total/NA	Prep	3510C			1022.9 mL	1 mL	537484	08/21/18 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			537966	08/22/18 22:08	LOJ	TAL NSH

Client Sample ID: GW-060866-081418-LB-MW-3

Lab Sample ID: 490-157729-3
Date Collected: 08/14/18 12:05
Matrix: Water
Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537744	08/22/18 03:35	RP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		10	5 mL	5 mL	538078	08/23/18 16:47	S1S	TAL NSH
Total/NA	Prep	3510C			1017.6 mL	1 mL	537484	08/21/18 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			537966	08/22/18 22:25	LOJ	TAL NSH

Client Sample ID: GW-060866-081418-LB-MW-4

Lab Sample ID: 490-157729-4
Date Collected: 08/14/18 15:20
Matrix: Water
Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537744	08/22/18 04:01	RP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	538078	08/23/18 11:38	S1S	TAL NSH
Total/NA	Prep	3510C			1040.7 mL	1 mL	537484	08/21/18 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			537966	08/22/18 17:23	LOJ	TAL NSH

Client Sample ID: GW-060866-081418-LB-MW-5

Lab Sample ID: 490-157729-5
Date Collected: 08/14/18 11:15
Matrix: Water
Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537617	08/21/18 20:05	P1B	TAL NSH

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157729-1
SDG: 701 Bozarth Ave, Woodland, WA

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	538078	08/23/18 13:10	S1S	TAL NSH
Total/NA	Prep	3510C			1053.2 mL	1 mL	537484	08/21/18 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			537966	08/22/18 22:43	LOJ	TAL NSH

Client Sample ID: GW-060866-081418-LB-MW-6

Lab Sample ID: 490-157729-6

Date Collected: 08/14/18 17:00

Matrix: Water

Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537744	08/22/18 04:28	RP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	538078	08/23/18 11:07	S1S	TAL NSH
Total/NA	Prep	3510C			1041.7 mL	1 mL	537484	08/21/18 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			537966	08/22/18 23:01	LOJ	TAL NSH

Client Sample ID: GW-060866-081518-LB-MW-7

Lab Sample ID: 490-157729-7

Date Collected: 08/15/18 10:50

Matrix: Water

Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537744	08/22/18 04:54	RP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	538078	08/23/18 13:41	S1S	TAL NSH
Total/NA	Prep	3510C			1048 mL	1 mL	537484	08/21/18 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			537966	08/22/18 23:54	LOJ	TAL NSH

Client Sample ID: GW-060866-081418-LB-MW-8

Lab Sample ID: 490-157729-8

Date Collected: 08/14/18 13:35

Matrix: Water

Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537744	08/22/18 05:21	RP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	538078	08/23/18 14:12	S1S	TAL NSH
Total/NA	Prep	3510C			1038.2 mL	1 mL	537484	08/21/18 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			537966	08/23/18 00:11	LOJ	TAL NSH

Client Sample ID: GW-060866-081518-LB-MW-9

Lab Sample ID: 490-157729-9

Date Collected: 08/15/18 14:05

Matrix: Water

Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537744	08/22/18 05:47	RP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	538078	08/23/18 20:23	S1S	TAL NSH
Total/NA	Prep	3510C			951.9 mL	1 mL	537484	08/21/18 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			537966	08/23/18 00:29	LOJ	TAL NSH

Client Sample ID: GW-060866-081418-LB-MW-11

Lab Sample ID: 490-157729-10

Date Collected: 08/14/18 09:55

Matrix: Water

Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537744	08/22/18 06:14	RP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	538078	08/23/18 14:43	S1S	TAL NSH
Total/NA	Prep	3510C			965.9 mL	1 mL	538185	08/24/18 11:26	KWS	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			538672	08/25/18 16:01	LOJ	TAL NSH

Client Sample ID: GW-060866-081418-LB-MW-12

Lab Sample ID: 490-157729-11

Date Collected: 08/14/18 09:13

Matrix: Water

Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537617	08/21/18 19:38	P1B	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	538078	08/23/18 15:14	S1S	TAL NSH

Client Sample ID: GW-060866-081518-LB-MW-13

Lab Sample ID: 490-157729-12

Date Collected: 08/15/18 08:10

Matrix: Water

Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537617	08/21/18 20:31	P1B	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	538078	08/24/18 06:57	S1S	TAL NSH
Total/NA	Prep	3510C			1034 mL	1 mL	537484	08/21/18 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		5			537966	08/23/18 01:04	LOJ	TAL NSH

Client Sample ID: GW-060866-081518-LB-MW-14

Lab Sample ID: 490-157729-13

Date Collected: 08/15/18 15:10

Matrix: Water

Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537617	08/21/18 20:58	P1B	TAL NSH
Total/NA	Analysis	NWTPH-Gx		5	5 mL	5 mL	538078	08/23/18 17:49	S1S	TAL NSH
Total/NA	Prep	3510C			1044.2 mL	1 mL	537484	08/21/18 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			537966	08/23/18 01:21	LOJ	TAL NSH

Client Sample ID: GW-060866-081518-LB-MW-15

Lab Sample ID: 490-157729-14

Date Collected: 08/15/18 13:10

Matrix: Water

Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537617	08/21/18 21:51	P1B	TAL NSH
Total/NA	Analysis	8260B		25	5 mL	5 mL	537889	08/22/18 15:21	P1B	TAL NSH
Total/NA	Analysis	NWTPH-Gx		5	5 mL	5 mL	538078	08/23/18 18:20	S1S	TAL NSH
Total/NA	Prep	3510C			1050.1 mL	1 mL	537484	08/21/18 09:15	MCO	TAL NSH

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157729-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-081518-LB-MW-15

Lab Sample ID: 490-157729-14

Date Collected: 08/15/18 13:10
Matrix: Water
Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Dx		5			537966	08/23/18 01:39	LOJ	TAL NSH

Client Sample ID: GW-060866-081518-LB-DUP-1

Lab Sample ID: 490-157729-15

Date Collected: 08/15/18 00:01
Matrix: Water
Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537744	08/22/18 06:40	RP	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	538078	08/23/18 18:51	S1S	TAL NSH
Total/NA	Prep	3510C			1030.6 mL	1 mL	537484	08/21/18 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			537966	08/23/18 01:56	LOJ	TAL NSH

Client Sample ID: GW-060866-081418-LB-TB

Lab Sample ID: 490-157729-16

Date Collected: 08/14/18 08:30
Matrix: Water
Date Received: 08/18/18 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	537617	08/21/18 19:12	P1B	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	538078	08/23/18 15:45	S1S	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157729-1
SDG: 701 Bozarth Ave, Woodland, WA

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	TAL NSH
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL NSH
5030B	Purge and Trap	SW846	TAL NSH

Protocol References:

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-157729-1
SDG: 701 Bozarth Ave, Woodland, WA

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Washington	State Program	10	C789	07-19-19

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	1,1,1,2-Tetrachloroethane
8260B		Water	1,1,1-Trichloroethane
8260B		Water	1,1,2,2-Tetrachloroethane
8260B		Water	1,1,2-Trichloroethane
8260B		Water	1,1-Dichloroethane
8260B		Water	1,1-Dichloroethene
8260B		Water	1,1-Dichloropropene
8260B		Water	1,2,3-Trichlorobenzene
8260B		Water	1,2,3-Trichloropropane
8260B		Water	1,2,4-Trichlorobenzene
8260B		Water	1,2,4-Trimethylbenzene
8260B		Water	1,2-Dibromo-3-Chloropropane
8260B		Water	1,2-Dibromoethane (EDB)
8260B		Water	1,2-Dichlorobenzene
8260B		Water	1,2-Dichloroethane
8260B		Water	1,2-Dichloropropane
8260B		Water	1,3,5-Trimethylbenzene
8260B		Water	1,3-Dichlorobenzene
8260B		Water	1,3-Dichloropropane
8260B		Water	1,4-Dichlorobenzene
8260B		Water	2,2-Dichloropropane
8260B		Water	2-Butanone (MEK)
8260B		Water	2-Chlorotoluene
8260B		Water	2-Hexanone
8260B		Water	4-Chlorotoluene
8260B		Water	4-Methyl-2-pentanone (MIBK)
8260B		Water	Acetone
8260B		Water	Benzene
8260B		Water	Bromobenzene
8260B		Water	Bromochloromethane
8260B		Water	Bromodichloromethane
8260B		Water	Bromoform
8260B		Water	Bromomethane
8260B		Water	Carbon disulfide
8260B		Water	Carbon tetrachloride
8260B		Water	Chlorobenzene
8260B		Water	Chlorodibromomethane
8260B		Water	Chloroethane
8260B		Water	Chloroform
8260B		Water	Chloromethane
8260B		Water	cis-1,2-Dichloroethene
8260B		Water	cis-1,3-Dichloropropene
8260B		Water	Dibromomethane
8260B		Water	Dichlorodifluoromethane
8260B		Water	Ethylbenzene
8260B		Water	Hexachlorobutadiene

Laboratory: TestAmerica Nashville (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Washington	State Program	10	C789	07-19-19

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	Isopropylbenzene
8260B		Water	Methyl tert-butyl ether
8260B		Water	Methylene Chloride
8260B		Water	Naphthalene
8260B		Water	n-Butylbenzene
8260B		Water	N-Propylbenzene
8260B		Water	p-Isopropyltoluene
8260B		Water	sec-Butylbenzene
8260B		Water	Styrene
8260B		Water	tert-Butylbenzene
8260B		Water	Tetrachloroethene
8260B		Water	Toluene
8260B		Water	trans-1,2-Dichloroethene
8260B		Water	trans-1,3-Dichloropropene
8260B		Water	Trichloroethene
8260B		Water	Trichlorofluoromethane
8260B		Water	Vinyl chloride
8260B		Water	Xylenes, Total

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-157729 Chain of Custody

Cooler Received/Opened On 08-18-2018 @ 09:55

Time Samples Removed From Cooler 1714 Time Samples Placed In Storage 1736 (2 Hour Window)

1. Tracking # 4430 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID 14740456 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 4.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) KD

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? GH 8-18-18 YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

● ⬅ Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) GH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) GH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) GH

I certify that I attached a label with the unique LIMS number to each container (intial) GH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

GH 8-18-18 GH 8-18-18

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

Loc: 490
157729

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 8/18/2018 @ 0955

Time Samples Removed From Cooler 1714 Time Samples Placed In Storage 1736 (2 Hour Window)

1. Tracking # 4429 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 160656838 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 0.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) J.Z.

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? GH 8-18-18 YES...NO...NA

b. Was there any observable headspace present in any VOA vial? GH 8-18-18 YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) GH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) GH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) GH

I certify that I attached a label with the unique LIMS number to each container (intial) GH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

Loc: 490
157729

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 8/18/2018 @ 0955

Time Samples Removed From Cooler 1914 Time Samples Placed In Storage 1736 (2 Hour Window)

1. Tracking # 4418 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 160656838 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 1.4 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) 22

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) GH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) GH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) GH

I certify that I attached a label with the unique LIMS number to each container (intial) GH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L.BURES	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 490-87706-25412.1
Client Contact: Brian Peters	Phone: (206)348-8985	E-Mail: roxanne.cisneros@testamericainc.com		Page: Page 1 of 2
Company: GHD Services Inc.				Job #:
Address: 20818 44th Ave W Suite 190	Due Date Requested:			
City: Lynnwood	TAT Requested (days): STANDARD			
State, Zip: WA, 98036				
Phone:	PO #: 4036058			
Email: brian.peters@ghd.com	WO #: 060866			
Project Name: Shell - Washington	Project #: 49001126			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B, NWTPH_Gx	NWTPH_Dx - NWTPH-Dx w/ SGT	8260B - 8260 BTEX + Naphthalene	FULL SCAN VOC'S	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	A	A		Loc: 490 157729 #1 B
GW-060866-081518-LB-MW-1	8/15/18	1150	G	Water			X	X	X		7	
GW-060866-081518-LB-MW-2	↓	0935	G	Water			X	X	X	X	8	
GW-060866-081418-LB-MW-3	8/14/18	1205	G	Water			X	X	X		8	
GW-060866-081418-LB-MW-4	↓	1520	G	Water			X	X	X		8	
GW-060866-081418-LB-MW-5		1115	G	Water			X	X	X	X	6	
GW-060866-081418-LB-MW-6		1700	G	Water			X	X	X		8	
GW-060866-081518-LB-MW-7	8/15/18	1050	G	Water			X	X	X		4	
GW-060866-081418-LB-MW-8	8/14/18	1335	G	Water			X	X	X		7	
GW-060866-081518-LB-MW-9	8/15/18	1405	G	Water			X	X	X		4	
GW-060866-081518-LB-MW-11	8/14/18	0955	G	Water			X	X	X		8	
GW-060866-081418-LB-MW-12	↓	0913	G	Water			X		X	X	4	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/16/18	RTS	SHIPPED VIA FEDEX		
2					8-18-18/0955	TA-NAS
3						

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4.1 / 0.6 / 1.4

Ver: 08/14/2016

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. BURES	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 490-87706-25412.2
Client Contact: Brian Peters	Phone: (206) 348-8985	E-Mail: roxanne.cisneros@testamericainc.com		Page: Page 2 of 2
Company: GHD Services Inc.				Job #:
Address: 20818 44th Ave W Suite 190	Due Date Requested:			
City: Lynnwood	TAT Requested (days): STANDARD			
State, Zip: WA, 98036				
Phone:	PO #: 4036058			
Email: brian.peters@ghd.com	WO #: 060866			
Project Name: Shell - Washington	Project #: 49001126			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_NWTPH_Gx	NWTPH_Dx - NWTPH-Dx w/ SGT	8260B - 8260 BTEX + Naphthalene	Full Scan VOCs	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N	A	A		
GW-060866-081518-LB-MW-13	8/15/18	0810	G	Water			X	X	X	X	8	Loc: 490
GW-060866-081518-LB-MW-14		1510	G	Water			X	X	X	X	7	157729
GW-060866-081518-LB-MW-15		1310	G	Water			X	X	X	X	8	#1
GW-060866-081518-LB-DUP-1		—	G	Water			X	X	X		4	C
GW-060866-081418-LB-TB	8/14/18	0830	G	WATER			X		X		3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/16/18	BTS	SHIPPED VIA FEDEX		
2					8-18-18/0955	TAL NAS
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4.1/0.6/1.4

Ver: 08/04/2016

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8/31/2018

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-169367-1
TestAmerica SDG: 701 Bozarth Ave, Woodland, WA
Client Project/Site: Shell Woodland
Revision: 1

For:
GHD Services Inc.
20818 44th Ave W
Suite 190
Lynnwood, Washington 98036

Attn: Brian Peters

Roxanne Cisneros

Authorized for release by:
3/15/2019 8:56:49 AM

Roxanne Cisneros, Senior Project Manager
(615)301-5761
roxanne.cisneros@testamericainc.com

Table of Contents

Sample Summary

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-169367-1
SDG: 701 Bozarth Ave, Woodland, WA

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-169367-1	GW-060866-022719-LB-MW-1	Water	02/27/19 11:24	03/01/19 09:50
490-169367-2	GW-060866-022619-LB-MW-2	Water	02/26/19 15:25	03/01/19 09:50
490-169367-3	GW-060866-022719-LB-MW-3	Water	02/27/19 09:37	03/01/19 09:50
490-169367-4	GW-060866-022719-LB-MW-4	Water	02/27/19 10:32	03/01/19 09:50
490-169367-5	GW-060866-022619-LB-MW-5	Water	02/26/19 16:26	03/01/19 09:50
490-169367-6	GW-060866-022619-LB-MW-6	Water	02/26/19 12:52	03/01/19 09:50
490-169367-7	GW-060866-022619-LB-MW-7	Water	02/26/19 14:36	03/01/19 09:50
490-169367-8	GW-060866-022719-LB-MW-8	Water	02/27/19 08:48	03/01/19 09:50
490-169367-9	GW-060866-022619-LB-MW-9	Water	02/26/19 13:41	03/01/19 09:50
490-169367-10	GW-060866-022619-LB-MW-11	Water	02/26/19 11:39	03/01/19 09:50
490-169367-11	GW-060866-022719-LB-MW-12	Water	02/27/19 10:50	03/01/19 09:50
490-169367-12	GW-060866-022619-LB-MW-13	Water	02/26/19 13:48	03/01/19 09:50
490-169367-13	GW-060866-022719-LB-MW-14	Water	02/27/19 12:48	03/01/19 09:50
490-169367-14	GW-060866-022719-LB-MW-15	Water	02/27/19 12:14	03/01/19 09:50
490-169367-15	GW-060866-022719-LB-MW-DUP	Water	02/27/19 01:01	03/01/19 09:50
490-169367-16	TB-1	Water	02/26/19 10:00	03/01/19 09:50

Job ID: 490-169367-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-169367-1

Comments
No additional comments.

Receipt
The samples were received on 3/1/2019 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.7º C, 1.6º C and 3.0º C.

GC/MS VOA
Method(s) 8260B: The following sample was diluted due to the nature of the sample matrix: GW-060866-022719-LB-MW-15 (490-169367-14). Elevated reporting limits (RLs) are provided.

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

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

GC Semi VOA
Method(s) NWTPH-Dx: The following samples contained a hydrocarbon pattern for analyte C10-C24 that most closely resembles a Diesel Fuel #2 product used by the laboratory for quantitative purposes: GW-060866-022719-LB-MW-1 (490-169367-1), GW-060866-022619-LB-MW-2 (490-169367-2), GW-060866-022719-LB-MW-14 (490-169367-13) and (490-169367-H-1-A DU). The following sample(s) contained a hydrocarbon pattern for analyte C24-C40 which does not match a typical Total Petroleum Hydrocarbon (TPH) pattern used by the laboratory for quantitative purposes:

Method(s) NWTPH-Dx: The following sample contained a hydrocarbon pattern which does not match a typical Total Petroleum Hydrocarbon (TPH) pattern used by the laboratory for quantitative purposes: GW-060866-022719-LB-MW-3 (490-169367-3).

Method(s) NWTPH-Dx: The following sample contained a hydrocarbon pattern for analyte C10-C24 that most closely resembles a Gasoline product used by the laboratory for quantitative purposes: GW-060866-022619-LB-MW-5 (490-169367-5).

Method(s) NWTPH-Dx: The following samples contained a hydrocarbon pattern for analyte C10-C24 which does not match a typical Total Petroleum Hydrocarbon (TPH) pattern used by the laboratory for quantitative purposes: GW-060866-022619-LB-MW-7 (490-169367-7) and GW-060866-022619-LB-MW-13 (490-169367-12).

Method(s) NWTPH-Dx: The following samples contained a hydrocarbon pattern for analyte C10-C24 that most closely resembles a Diesel Fuel #2 product used by the laboratory for quantitative purposes: GW-060866-022619-LB-MW-9 (490-169367-9) and GW-060866-022719-LB-MW-DUP (490-169367-15).

Method(s) NWTPH-Dx: The following sample contained a hydrocarbon pattern for analyte C10-C24 that most closely resembles a Gasoline product used by the laboratory for quantitative purposes: GW-060866-022719-LB-MW-15 (490-169367-14). The following sample contained a hydrocarbon pattern for analyte C24-C40 that most closely resembles a Motor oil product used by the laboratory for quantitative purposes: GW-060866-022719-LB-MW-15 (490-169367-14).

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

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

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Client Sample ID: GW-060866-022719-LB-MW-1
Date Collected: 02/27/19 11:24
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			03/01/19 20:53	1
Benzene	**0.428**	**J**	1.00	0.200	ug/L			03/01/19 20:53	1
Bromobenzene	ND		1.00	0.210	ug/L			03/01/19 20:53	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/01/19 20:53	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/01/19 20:53	1
Bromoform	ND		1.00	0.290	ug/L			03/01/19 20:53	1
Bromomethane	ND		1.00	0.350	ug/L			03/01/19 20:53	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/01/19 20:53	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/01/19 20:53	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/01/19 20:53	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/01/19 20:53	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/01/19 20:53	1
Chloroethane	ND		1.00	0.360	ug/L			03/01/19 20:53	1
Chloroform	ND		1.00	0.230	ug/L			03/01/19 20:53	1
Chloromethane	ND		1.00	0.360	ug/L			03/01/19 20:53	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			03/01/19 20:53	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/01/19 20:53	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			03/01/19 20:53	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 20:53	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/01/19 20:53	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/01/19 20:53	1
Dibromomethane	ND		1.00	0.450	ug/L			03/01/19 20:53	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			03/01/19 20:53	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			03/01/19 20:53	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/01/19 20:53	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/01/19 20:53	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/01/19 20:53	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/01/19 20:53	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/01/19 20:53	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/01/19 20:53	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/01/19 20:53	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/01/19 20:53	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/01/19 20:53	1
Ethylbenzene	**0.299**	**J**	1.00	0.190	ug/L			03/01/19 20:53	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/01/19 20:53	1
2-Hexanone	ND		10.0	1.28	ug/L			03/01/19 20:53	1
Isopropylbenzene	**6.32**		1.00	0.330	ug/L			03/01/19 20:53	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/01/19 20:53	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/01/19 20:53	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/01/19 20:53	1
Naphthalene	**4.57**	**J**	5.00	0.210	ug/L			03/01/19 20:53	1
n-Butylbenzene	**3.37**		1.00	0.240	ug/L			03/01/19 20:53	1
N-Propylbenzene	**10.1**		1.00	0.170	ug/L			03/01/19 20:53	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			03/01/19 20:53	1
sec-Butylbenzene	**3.13**		1.00	0.170	ug/L			03/01/19 20:53	1
Styrene	ND		1.00	0.280	ug/L			03/01/19 20:53	1
tert-Butylbenzene	**0.228**	**J**	1.00	0.170	ug/L			03/01/19 20:53	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/01/19 20:53	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/01/19 20:53	1

Client Sample ID: GW-060866-022719-LB-MW-1

Lab Sample ID: 490-169367-1

Date Collected: 02/27/19 11:24

Matrix: Water

Date Received: 03/01/19 09:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			03/01/19 20:53	1
Toluene	**0.496**	**J**	1.00	0.170	ug/L			03/01/19 20:53	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/01/19 20:53	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 20:53	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/01/19 20:53	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/01/19 20:53	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 20:53	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 20:53	1
Trichloroethene	ND		1.00	0.200	ug/L			03/01/19 20:53	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/01/19 20:53	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/01/19 20:53	1
1,2,4-Trimethylbenzene	**0.344**	**J**	1.00	0.170	ug/L			03/01/19 20:53	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 20:53	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/01/19 20:53	1
Xylenes, Total	**0.581**	**J**	3.00	0.580	ug/L			03/01/19 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*03/01/19 20:53*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*03/01/19 20:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*03/01/19 20:53*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*03/01/19 20:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**663**		100	55.0	ug/L			03/04/19 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*121*		*50 - 150*		*03/04/19 13:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**2730**		102	28.4	ug/L		03/05/19 09:15	03/06/19 17:46	1
C24-C40	**234**		102	50.8	ug/L		03/05/19 09:15	03/06/19 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*110*		*50 - 150*	*03/05/19 09:15*	*03/06/19 17:46*	*1*

Client Sample ID: GW-060866-022619-LB-MW-2
Date Collected: 02/26/19 15:25
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			03/02/19 21:51	1
Benzene	**70.0**		1.00	0.200	ug/L			03/02/19 21:51	1
Bromobenzene	ND		1.00	0.210	ug/L			03/02/19 21:51	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/02/19 21:51	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/02/19 21:51	1
Bromoform	ND		1.00	0.290	ug/L			03/02/19 21:51	1
Bromomethane	ND		1.00	0.350	ug/L			03/02/19 21:51	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/02/19 21:51	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/02/19 21:51	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/02/19 21:51	1
Chlorobenzene	**0.869**	**J**	1.00	0.180	ug/L			03/02/19 21:51	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/02/19 21:51	1
Chloroethane	ND		1.00	0.360	ug/L			03/02/19 21:51	1
Chloroform	ND		1.00	0.230	ug/L			03/02/19 21:51	1
Chloromethane	ND		1.00	0.360	ug/L			03/02/19 21:51	1
2-Chlorotoluene	**3.58**		1.00	0.180	ug/L			03/02/19 21:51	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/02/19 21:51	1
cis-1,2-Dichloroethene	**0.448**	**J**	1.00	0.210	ug/L			03/02/19 21:51	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/02/19 21:51	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/02/19 21:51	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/02/19 21:51	1
Dibromomethane	ND		1.00	0.450	ug/L			03/02/19 21:51	1
1,2-Dichlorobenzene	**6.43**		1.00	0.190	ug/L			03/02/19 21:51	1
1,3-Dichlorobenzene	**0.309**	**J**	1.00	0.180	ug/L			03/02/19 21:51	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/02/19 21:51	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/02/19 21:51	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/02/19 21:51	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/02/19 21:51	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/02/19 21:51	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/02/19 21:51	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/02/19 21:51	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/02/19 21:51	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/02/19 21:51	1
Ethylbenzene	**1.43**		1.00	0.190	ug/L			03/02/19 21:51	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/02/19 21:51	1
2-Hexanone	ND		10.0	1.28	ug/L			03/02/19 21:51	1
Isopropylbenzene	**49.3**		1.00	0.330	ug/L			03/02/19 21:51	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/02/19 21:51	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/02/19 21:51	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/02/19 21:51	1
Naphthalene	ND		5.00	0.210	ug/L			03/02/19 21:51	1
n-Butylbenzene	**4.61**		1.00	0.240	ug/L			03/02/19 21:51	1
N-Propylbenzene	**71.1**		1.00	0.170	ug/L			03/02/19 21:51	1
p-Isopropyltoluene	**0.512**	**J**	1.00	0.170	ug/L			03/02/19 21:51	1
sec-Butylbenzene	**5.53**		1.00	0.170	ug/L			03/02/19 21:51	1
Styrene	ND		1.00	0.280	ug/L			03/02/19 21:51	1
tert-Butylbenzene	**0.931**	**J**	1.00	0.170	ug/L			03/02/19 21:51	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/02/19 21:51	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/02/19 21:51	1

Client Sample ID: GW-060866-022619-LB-MW-2
Date Collected: 02/26/19 15:25
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			03/02/19 21:51	1
Toluene	**2.60**		1.00	0.170	ug/L			03/02/19 21:51	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/02/19 21:51	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/02/19 21:51	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/02/19 21:51	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/02/19 21:51	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/02/19 21:51	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/02/19 21:51	1
Trichloroethene	ND		1.00	0.200	ug/L			03/02/19 21:51	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/02/19 21:51	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/02/19 21:51	1
1,2,4-Trimethylbenzene	**7.70**		1.00	0.170	ug/L			03/02/19 21:51	1
1,3,5-Trimethylbenzene	**4.38**		1.00	0.170	ug/L			03/02/19 21:51	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/02/19 21:51	1
Xylenes, Total	**12.3**		3.00	0.580	ug/L			03/02/19 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*		*03/02/19 21:51*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*03/02/19 21:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*03/02/19 21:51*	*1*
Toluene-d8 (Surr)	*118*		*70 - 130*		*03/02/19 21:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**1710**		100	55.0	ug/L			03/04/19 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*50 - 150*		*03/04/19 13:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**2740**		98.9	27.7	ug/L		03/05/19 09:15	03/06/19 18:03	1
C24-C40	**299**		98.9	49.4	ug/L		03/05/19 09:15	03/06/19 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*74*		*50 - 150*	*03/05/19 09:15*	*03/06/19 18:03*	*1*

Client Sample ID: GW-060866-022719-LB-MW-3
Date Collected: 02/27/19 09:37
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2.75**	**J**	25.0	2.66	ug/L			03/01/19 21:20	1
Benzene	**1.14**		1.00	0.200	ug/L			03/01/19 21:20	1
Bromobenzene	ND		1.00	0.210	ug/L			03/01/19 21:20	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/01/19 21:20	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/01/19 21:20	1
Bromoform	ND		1.00	0.290	ug/L			03/01/19 21:20	1
Bromomethane	ND		1.00	0.350	ug/L			03/01/19 21:20	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/01/19 21:20	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/01/19 21:20	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/01/19 21:20	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/01/19 21:20	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/01/19 21:20	1
Chloroethane	ND		1.00	0.360	ug/L			03/01/19 21:20	1
Chloroform	ND		1.00	0.230	ug/L			03/01/19 21:20	1
Chloromethane	ND		1.00	0.360	ug/L			03/01/19 21:20	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			03/01/19 21:20	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/01/19 21:20	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			03/01/19 21:20	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 21:20	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/01/19 21:20	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/01/19 21:20	1
Dibromomethane	ND		1.00	0.450	ug/L			03/01/19 21:20	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			03/01/19 21:20	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			03/01/19 21:20	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/01/19 21:20	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/01/19 21:20	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/01/19 21:20	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/01/19 21:20	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/01/19 21:20	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/01/19 21:20	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/01/19 21:20	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/01/19 21:20	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/01/19 21:20	1
Ethylbenzene	**22.8**		1.00	0.190	ug/L			03/01/19 21:20	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/01/19 21:20	1
2-Hexanone	ND		10.0	1.28	ug/L			03/01/19 21:20	1
Isopropylbenzene	**15.6**		1.00	0.330	ug/L			03/01/19 21:20	1
Methylene Chloride	**1.90**	**J**	5.00	1.00	ug/L			03/01/19 21:20	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/01/19 21:20	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/01/19 21:20	1
Naphthalene	**5.17**		5.00	0.210	ug/L			03/01/19 21:20	1
n-Butylbenzene	**13.0**		1.00	0.240	ug/L			03/01/19 21:20	1
N-Propylbenzene	**55.7**		1.00	0.170	ug/L			03/01/19 21:20	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			03/01/19 21:20	1
sec-Butylbenzene	**6.77**		1.00	0.170	ug/L			03/01/19 21:20	1
Styrene	ND		1.00	0.280	ug/L			03/01/19 21:20	1
tert-Butylbenzene	**0.545**	**J**	1.00	0.170	ug/L			03/01/19 21:20	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/01/19 21:20	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/01/19 21:20	1

Client Sample ID: GW-060866-022719-LB-MW-3
Date Collected: 02/27/19 09:37
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			03/01/19 21:20	1
Toluene	**0.686**	**J**	1.00	0.170	ug/L			03/01/19 21:20	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/01/19 21:20	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 21:20	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/01/19 21:20	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/01/19 21:20	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 21:20	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 21:20	1
Trichloroethene	ND		1.00	0.200	ug/L			03/01/19 21:20	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/01/19 21:20	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/01/19 21:20	1
1,2,4-Trimethylbenzene	**0.531**	**J**	1.00	0.170	ug/L			03/01/19 21:20	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 21:20	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/01/19 21:20	1
Xylenes, Total	**1.93**	**J**	3.00	0.580	ug/L			03/01/19 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*03/01/19 21:20*	*1*
Dibromofluoromethane (Surr)	*91*		*70 - 130*		*03/01/19 21:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*03/01/19 21:20*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*03/01/19 21:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**2180**		100	55.0	ug/L			03/04/19 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*120*		*50 - 150*		*03/04/19 14:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**1860**		101	28.3	ug/L		03/05/19 09:15	03/06/19 18:19	1
C24-C40	**233**		101	50.5	ug/L		03/05/19 09:15	03/06/19 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*108*		*50 - 150*	*03/05/19 09:15*	*03/06/19 18:19*	*1*

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-169367-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-022719-LB-MW-4
Date Collected: 02/27/19 10:32
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			03/01/19 21:46	1
Benzene	ND		1.00	0.200	ug/L			03/01/19 21:46	1
Bromobenzene	ND		1.00	0.210	ug/L			03/01/19 21:46	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/01/19 21:46	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/01/19 21:46	1
Bromoform	ND		1.00	0.290	ug/L			03/01/19 21:46	1
Bromomethane	ND		1.00	0.350	ug/L			03/01/19 21:46	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/01/19 21:46	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/01/19 21:46	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/01/19 21:46	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/01/19 21:46	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/01/19 21:46	1
Chloroethane	ND		1.00	0.360	ug/L			03/01/19 21:46	1
Chloroform	**1.14**		1.00	0.230	ug/L			03/01/19 21:46	1
Chloromethane	ND		1.00	0.360	ug/L			03/01/19 21:46	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			03/01/19 21:46	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/01/19 21:46	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			03/01/19 21:46	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 21:46	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/01/19 21:46	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/01/19 21:46	1
Dibromomethane	ND		1.00	0.450	ug/L			03/01/19 21:46	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			03/01/19 21:46	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			03/01/19 21:46	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/01/19 21:46	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/01/19 21:46	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/01/19 21:46	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/01/19 21:46	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/01/19 21:46	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/01/19 21:46	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/01/19 21:46	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/01/19 21:46	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/01/19 21:46	1
Ethylbenzene	ND		1.00	0.190	ug/L			03/01/19 21:46	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/01/19 21:46	1
2-Hexanone	ND		10.0	1.28	ug/L			03/01/19 21:46	1
Isopropylbenzene	ND		1.00	0.330	ug/L			03/01/19 21:46	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/01/19 21:46	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/01/19 21:46	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/01/19 21:46	1
Naphthalene	**2.50**	**J**	5.00	0.210	ug/L			03/01/19 21:46	1
n-Butylbenzene	ND		1.00	0.240	ug/L			03/01/19 21:46	1
N-Propylbenzene	**0.204**	**J**	1.00	0.170	ug/L			03/01/19 21:46	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			03/01/19 21:46	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 21:46	1
Styrene	ND		1.00	0.280	ug/L			03/01/19 21:46	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 21:46	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/01/19 21:46	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/01/19 21:46	1

Client Sample ID: GW-060866-022719-LB-MW-4

Lab Sample ID: 490-169367-4

Date Collected: 02/27/19 10:32

Matrix: Water

Date Received: 03/01/19 09:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			03/01/19 21:46	1
Toluene	ND		1.00	0.170	ug/L			03/01/19 21:46	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/01/19 21:46	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 21:46	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/01/19 21:46	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/01/19 21:46	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 21:46	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 21:46	1
Trichloroethene	ND		1.00	0.200	ug/L			03/01/19 21:46	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/01/19 21:46	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/01/19 21:46	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 21:46	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 21:46	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/01/19 21:46	1
Xylenes, Total	ND		3.00	0.580	ug/L			03/01/19 21:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*03/01/19 21:46*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*03/01/19 21:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*03/01/19 21:46*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/01/19 21:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100	55.0	ug/L			03/04/19 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*50 - 150*		*03/04/19 12:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		94.6	26.5	ug/L		03/05/19 09:15	03/06/19 18:36	1
C24-C40	ND		94.6	47.3	ug/L		03/05/19 09:15	03/06/19 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*80*		*50 - 150*	*03/05/19 09:15*	*03/06/19 18:36*	*1*

Client Sample ID: GW-060866-022619-LB-MW-5

Date Collected: 02/26/19 16:26
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			03/01/19 17:47	1
Benzene	**0.369**	**J**	1.00	0.200	ug/L			03/01/19 17:47	1
Bromobenzene	ND		1.00	0.210	ug/L			03/01/19 17:47	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/01/19 17:47	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/01/19 17:47	1
Bromoform	ND		1.00	0.290	ug/L			03/01/19 17:47	1
Bromomethane	ND		1.00	0.350	ug/L			03/01/19 17:47	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/01/19 17:47	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/01/19 17:47	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/01/19 17:47	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/01/19 17:47	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/01/19 17:47	1
Chloroethane	ND		1.00	0.360	ug/L			03/01/19 17:47	1
Chloroform	ND		1.00	0.230	ug/L			03/01/19 17:47	1
Chloromethane	ND		1.00	0.360	ug/L			03/01/19 17:47	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			03/01/19 17:47	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/01/19 17:47	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			03/01/19 17:47	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 17:47	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/01/19 17:47	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/01/19 17:47	1
Dibromomethane	ND		1.00	0.450	ug/L			03/01/19 17:47	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			03/01/19 17:47	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			03/01/19 17:47	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/01/19 17:47	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/01/19 17:47	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/01/19 17:47	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/01/19 17:47	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/01/19 17:47	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/01/19 17:47	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/01/19 17:47	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/01/19 17:47	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/01/19 17:47	1
Ethylbenzene	**18.1**		1.00	0.190	ug/L			03/01/19 17:47	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/01/19 17:47	1
2-Hexanone	ND		10.0	1.28	ug/L			03/01/19 17:47	1
Isopropylbenzene	**4.88**		1.00	0.330	ug/L			03/01/19 17:47	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/01/19 17:47	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/01/19 17:47	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/01/19 17:47	1
Naphthalene	**1.71**	**J**	5.00	0.210	ug/L			03/01/19 17:47	1
n-Butylbenzene	**4.52**		1.00	0.240	ug/L			03/01/19 17:47	1
N-Propylbenzene	**10.2**		1.00	0.170	ug/L			03/01/19 17:47	1
p-Isopropyltoluene	**2.04**		1.00	0.170	ug/L			03/01/19 17:47	1
sec-Butylbenzene	**2.63**		1.00	0.170	ug/L			03/01/19 17:47	1
Styrene	ND		1.00	0.280	ug/L			03/01/19 17:47	1
tert-Butylbenzene	**0.249**	**J**	1.00	0.170	ug/L			03/01/19 17:47	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/01/19 17:47	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/01/19 17:47	1

Client Sample ID: GW-060866-022619-LB-MW-5
Date Collected: 02/26/19 16:26
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			03/01/19 17:47	1
Toluene	**0.321**	**J**	1.00	0.170	ug/L			03/01/19 17:47	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/01/19 17:47	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 17:47	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/01/19 17:47	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/01/19 17:47	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 17:47	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 17:47	1
Trichloroethene	ND		1.00	0.200	ug/L			03/01/19 17:47	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/01/19 17:47	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/01/19 17:47	1
1,2,4-Trimethylbenzene	**45.4**		1.00	0.170	ug/L			03/01/19 17:47	1
1,3,5-Trimethylbenzene	**12.3**		1.00	0.170	ug/L			03/01/19 17:47	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/01/19 17:47	1
Xylenes, Total	**4.87**		3.00	0.580	ug/L			03/01/19 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*		*03/01/19 17:47*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*03/01/19 17:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*03/01/19 17:47*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*03/01/19 17:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**833**		100	55.0	ug/L			03/04/19 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*102*		*50 - 150*		*03/04/19 14:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**463**		95.7	26.8	ug/L		03/05/19 09:15	03/06/19 18:52	1
C24-C40	**78.7**	**J**	95.7	47.8	ug/L		03/05/19 09:15	03/06/19 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*113*		*50 - 150*	*03/05/19 09:15*	*03/06/19 18:52*	*1*

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-169367-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-022619-LB-MW-6
Date Collected: 02/26/19 12:52
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			03/01/19 22:13	1
Benzene	ND		1.00	0.200	ug/L			03/01/19 22:13	1
Bromobenzene	ND		1.00	0.210	ug/L			03/01/19 22:13	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/01/19 22:13	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/01/19 22:13	1
Bromoform	ND		1.00	0.290	ug/L			03/01/19 22:13	1
Bromomethane	ND		1.00	0.350	ug/L			03/01/19 22:13	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/01/19 22:13	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/01/19 22:13	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/01/19 22:13	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/01/19 22:13	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/01/19 22:13	1
Chloroethane	ND		1.00	0.360	ug/L			03/01/19 22:13	1
Chloroform	ND		1.00	0.230	ug/L			03/01/19 22:13	1
Chloromethane	ND		1.00	0.360	ug/L			03/01/19 22:13	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			03/01/19 22:13	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/01/19 22:13	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			03/01/19 22:13	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 22:13	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/01/19 22:13	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/01/19 22:13	1
Dibromomethane	ND		1.00	0.450	ug/L			03/01/19 22:13	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			03/01/19 22:13	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			03/01/19 22:13	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/01/19 22:13	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/01/19 22:13	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/01/19 22:13	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/01/19 22:13	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/01/19 22:13	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/01/19 22:13	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/01/19 22:13	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/01/19 22:13	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/01/19 22:13	1
Ethylbenzene	ND		1.00	0.190	ug/L			03/01/19 22:13	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/01/19 22:13	1
2-Hexanone	ND		10.0	1.28	ug/L			03/01/19 22:13	1
Isopropylbenzene	ND		1.00	0.330	ug/L			03/01/19 22:13	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/01/19 22:13	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/01/19 22:13	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/01/19 22:13	1
Naphthalene	ND		5.00	0.210	ug/L			03/01/19 22:13	1
n-Butylbenzene	ND		1.00	0.240	ug/L			03/01/19 22:13	1
N-Propylbenzene	ND		1.00	0.170	ug/L			03/01/19 22:13	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			03/01/19 22:13	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 22:13	1
Styrene	ND		1.00	0.280	ug/L			03/01/19 22:13	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 22:13	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/01/19 22:13	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/01/19 22:13	1

Client Sample ID: GW-060866-022619-LB-MW-6
Date Collected: 02/26/19 12:52
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.521**	**J**	1.00	0.140	ug/L			03/01/19 22:13	1
Toluene	ND		1.00	0.170	ug/L			03/01/19 22:13	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/01/19 22:13	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 22:13	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/01/19 22:13	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/01/19 22:13	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 22:13	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 22:13	1
Trichloroethene	ND		1.00	0.200	ug/L			03/01/19 22:13	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/01/19 22:13	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/01/19 22:13	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 22:13	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 22:13	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/01/19 22:13	1
Xylenes, Total	ND		3.00	0.580	ug/L			03/01/19 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*03/01/19 22:13*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*03/01/19 22:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*03/01/19 22:13*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*03/01/19 22:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100	55.0	ug/L			03/04/19 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*		*03/04/19 15:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**200**		95.2	26.7	ug/L		03/05/19 09:15	03/06/19 19:09	1
C24-C40	**183**		95.2	47.6	ug/L		03/05/19 09:15	03/06/19 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*98*		*50 - 150*	*03/05/19 09:15*	*03/06/19 19:09*	*1*

Client Sample ID: GW-060866-022619-LB-MW-7
Date Collected: 02/26/19 14:36
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			03/01/19 22:39	1
Benzene	ND		1.00	0.200	ug/L			03/01/19 22:39	1
Bromobenzene	ND		1.00	0.210	ug/L			03/01/19 22:39	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/01/19 22:39	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/01/19 22:39	1
Bromoform	ND		1.00	0.290	ug/L			03/01/19 22:39	1
Bromomethane	ND		1.00	0.350	ug/L			03/01/19 22:39	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/01/19 22:39	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/01/19 22:39	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/01/19 22:39	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/01/19 22:39	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/01/19 22:39	1
Chloroethane	ND		1.00	0.360	ug/L			03/01/19 22:39	1
Chloroform	ND		1.00	0.230	ug/L			03/01/19 22:39	1
Chloromethane	ND		1.00	0.360	ug/L			03/01/19 22:39	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			03/01/19 22:39	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/01/19 22:39	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			03/01/19 22:39	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 22:39	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/01/19 22:39	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/01/19 22:39	1
Dibromomethane	ND		1.00	0.450	ug/L			03/01/19 22:39	1
1,2-Dichlorobenzene	**0.240**	**J**	1.00	0.190	ug/L			03/01/19 22:39	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			03/01/19 22:39	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/01/19 22:39	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/01/19 22:39	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/01/19 22:39	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/01/19 22:39	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/01/19 22:39	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/01/19 22:39	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/01/19 22:39	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/01/19 22:39	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/01/19 22:39	1
Ethylbenzene	ND		1.00	0.190	ug/L			03/01/19 22:39	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/01/19 22:39	1
2-Hexanone	ND		10.0	1.28	ug/L			03/01/19 22:39	1
Isopropylbenzene	ND		1.00	0.330	ug/L			03/01/19 22:39	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/01/19 22:39	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/01/19 22:39	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/01/19 22:39	1
Naphthalene	ND		5.00	0.210	ug/L			03/01/19 22:39	1
n-Butylbenzene	ND		1.00	0.240	ug/L			03/01/19 22:39	1
N-Propylbenzene	ND		1.00	0.170	ug/L			03/01/19 22:39	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			03/01/19 22:39	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 22:39	1
Styrene	ND		1.00	0.280	ug/L			03/01/19 22:39	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 22:39	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/01/19 22:39	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/01/19 22:39	1

Client Sample ID: GW-060866-022619-LB-MW-7
Date Collected: 02/26/19 14:36
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			03/01/19 22:39	1
Toluene	ND		1.00	0.170	ug/L			03/01/19 22:39	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/01/19 22:39	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 22:39	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/01/19 22:39	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/01/19 22:39	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 22:39	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 22:39	1
Trichloroethene	ND		1.00	0.200	ug/L			03/01/19 22:39	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/01/19 22:39	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/01/19 22:39	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 22:39	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 22:39	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/01/19 22:39	1
Xylenes, Total	ND		3.00	0.580	ug/L			03/01/19 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*03/01/19 22:39*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*03/01/19 22:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*03/01/19 22:39*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*03/01/19 22:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100	55.0	ug/L			03/04/19 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*		*03/04/19 15:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**290**		96.3	27.0	ug/L		03/05/19 09:15	03/06/19 19:25	1
C24-C40	**214**		96.3	48.2	ug/L		03/05/19 09:15	03/06/19 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*79*		*50 - 150*	*03/05/19 09:15*	*03/06/19 19:25*	*1*

Client Sample ID: GW-060866-022719-LB-MW-8
Date Collected: 02/27/19 08:48
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			03/01/19 23:06	1
Benzene	ND		1.00	0.200	ug/L			03/01/19 23:06	1
Bromobenzene	ND		1.00	0.210	ug/L			03/01/19 23:06	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/01/19 23:06	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/01/19 23:06	1
Bromoform	ND		1.00	0.290	ug/L			03/01/19 23:06	1
Bromomethane	ND		1.00	0.350	ug/L			03/01/19 23:06	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/01/19 23:06	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/01/19 23:06	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/01/19 23:06	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/01/19 23:06	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/01/19 23:06	1
Chloroethane	ND		1.00	0.360	ug/L			03/01/19 23:06	1
Chloroform	ND		1.00	0.230	ug/L			03/01/19 23:06	1
Chloromethane	ND		1.00	0.360	ug/L			03/01/19 23:06	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			03/01/19 23:06	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/01/19 23:06	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			03/01/19 23:06	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 23:06	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/01/19 23:06	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/01/19 23:06	1
Dibromomethane	ND		1.00	0.450	ug/L			03/01/19 23:06	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			03/01/19 23:06	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			03/01/19 23:06	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/01/19 23:06	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/01/19 23:06	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/01/19 23:06	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/01/19 23:06	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/01/19 23:06	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/01/19 23:06	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/01/19 23:06	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/01/19 23:06	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/01/19 23:06	1
Ethylbenzene	ND		1.00	0.190	ug/L			03/01/19 23:06	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/01/19 23:06	1
2-Hexanone	ND		10.0	1.28	ug/L			03/01/19 23:06	1
Isopropylbenzene	ND		1.00	0.330	ug/L			03/01/19 23:06	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/01/19 23:06	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/01/19 23:06	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/01/19 23:06	1
Naphthalene	ND		5.00	0.210	ug/L			03/01/19 23:06	1
n-Butylbenzene	ND		1.00	0.240	ug/L			03/01/19 23:06	1
N-Propylbenzene	ND		1.00	0.170	ug/L			03/01/19 23:06	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			03/01/19 23:06	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 23:06	1
Styrene	ND		1.00	0.280	ug/L			03/01/19 23:06	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 23:06	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/01/19 23:06	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/01/19 23:06	1

Client Sample ID: GW-060866-022719-LB-MW-8

Lab Sample ID: 490-169367-8

Date Collected: 02/27/19 08:48

Matrix: Water

Date Received: 03/01/19 09:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			03/01/19 23:06	1
Toluene	ND		1.00	0.170	ug/L			03/01/19 23:06	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/01/19 23:06	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 23:06	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/01/19 23:06	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/01/19 23:06	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 23:06	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 23:06	1
Trichloroethene	ND		1.00	0.200	ug/L			03/01/19 23:06	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/01/19 23:06	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/01/19 23:06	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 23:06	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 23:06	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/01/19 23:06	1
Xylenes, Total	ND		3.00	0.580	ug/L			03/01/19 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*03/01/19 23:06*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*03/01/19 23:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*03/01/19 23:06*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*03/01/19 23:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100	55.0	ug/L			03/04/19 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*		*03/04/19 16:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**46.2**	**J**	99.6	27.9	ug/L		03/05/19 09:15	03/06/19 20:14	1
C24-C40	**59.7**	**J**	99.6	49.8	ug/L		03/05/19 09:15	03/06/19 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*85*		*50 - 150*	*03/05/19 09:15*	*03/06/19 20:14*	*1*

Client Sample ID: GW-060866-022619-LB-MW-9
Date Collected: 02/26/19 13:41
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			03/01/19 23:33	1
Benzene	**1.75**		1.00	0.200	ug/L			03/01/19 23:33	1
Bromobenzene	ND		1.00	0.210	ug/L			03/01/19 23:33	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/01/19 23:33	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/01/19 23:33	1
Bromoform	ND		1.00	0.290	ug/L			03/01/19 23:33	1
Bromomethane	ND		1.00	0.350	ug/L			03/01/19 23:33	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/01/19 23:33	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/01/19 23:33	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/01/19 23:33	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/01/19 23:33	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/01/19 23:33	1
Chloroethane	ND		1.00	0.360	ug/L			03/01/19 23:33	1
Chloroform	ND		1.00	0.230	ug/L			03/01/19 23:33	1
Chloromethane	ND		1.00	0.360	ug/L			03/01/19 23:33	1
2-Chlorotoluene	**1.19**		1.00	0.180	ug/L			03/01/19 23:33	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/01/19 23:33	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			03/01/19 23:33	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 23:33	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/01/19 23:33	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/01/19 23:33	1
Dibromomethane	ND		1.00	0.450	ug/L			03/01/19 23:33	1
1,2-Dichlorobenzene	**1.14**		1.00	0.190	ug/L			03/01/19 23:33	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			03/01/19 23:33	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/01/19 23:33	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/01/19 23:33	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/01/19 23:33	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/01/19 23:33	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/01/19 23:33	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/01/19 23:33	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/01/19 23:33	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/01/19 23:33	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/01/19 23:33	1
Ethylbenzene	**0.925**	**J**	1.00	0.190	ug/L			03/01/19 23:33	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/01/19 23:33	1
2-Hexanone	ND		10.0	1.28	ug/L			03/01/19 23:33	1
Isopropylbenzene	**16.1**		1.00	0.330	ug/L			03/01/19 23:33	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/01/19 23:33	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/01/19 23:33	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/01/19 23:33	1
Naphthalene	ND		5.00	0.210	ug/L			03/01/19 23:33	1
n-Butylbenzene	**5.20**		1.00	0.240	ug/L			03/01/19 23:33	1
N-Propylbenzene	**24.0**		1.00	0.170	ug/L			03/01/19 23:33	1
p-Isopropyltoluene	**1.79**		1.00	0.170	ug/L			03/01/19 23:33	1
sec-Butylbenzene	**4.29**		1.00	0.170	ug/L			03/01/19 23:33	1
Styrene	ND		1.00	0.280	ug/L			03/01/19 23:33	1
tert-Butylbenzene	**0.537**	**J**	1.00	0.170	ug/L			03/01/19 23:33	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/01/19 23:33	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/01/19 23:33	1

Client Sample ID: GW-060866-022619-LB-MW-9
Date Collected: 02/26/19 13:41
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			03/01/19 23:33	1
Toluene	**2.53**		1.00	0.170	ug/L			03/01/19 23:33	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/01/19 23:33	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 23:33	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/01/19 23:33	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/01/19 23:33	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 23:33	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 23:33	1
Trichloroethene	ND		1.00	0.200	ug/L			03/01/19 23:33	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/01/19 23:33	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/01/19 23:33	1
1,2,4-Trimethylbenzene	**27.4**		1.00	0.170	ug/L			03/01/19 23:33	1
1,3,5-Trimethylbenzene	**12.1**		1.00	0.170	ug/L			03/01/19 23:33	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/01/19 23:33	1
Xylenes, Total	**14.2**		3.00	0.580	ug/L			03/01/19 23:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*03/01/19 23:33*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*03/01/19 23:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*03/01/19 23:33*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*03/01/19 23:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**1230**		100	55.0	ug/L			03/04/19 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*112*		*50 - 150*		*03/04/19 16:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**2080**		97.4	27.3	ug/L		03/05/19 09:15	03/06/19 20:31	1
C24-C40	**175**		97.4	48.7	ug/L		03/05/19 09:15	03/06/19 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*110*		*50 - 150*	*03/05/19 09:15*	*03/06/19 20:31*	*1*

Client Sample ID: GW-060866-022619-LB-MW-11
Date Collected: 02/26/19 11:39
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			03/01/19 23:59	1
Benzene	ND		1.00	0.200	ug/L			03/01/19 23:59	1
Bromobenzene	ND		1.00	0.210	ug/L			03/01/19 23:59	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/01/19 23:59	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/01/19 23:59	1
Bromoform	ND		1.00	0.290	ug/L			03/01/19 23:59	1
Bromomethane	ND		1.00	0.350	ug/L			03/01/19 23:59	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/01/19 23:59	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/01/19 23:59	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/01/19 23:59	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/01/19 23:59	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/01/19 23:59	1
Chloroethane	ND		1.00	0.360	ug/L			03/01/19 23:59	1
Chloroform	ND		1.00	0.230	ug/L			03/01/19 23:59	1
Chloromethane	ND		1.00	0.360	ug/L			03/01/19 23:59	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			03/01/19 23:59	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/01/19 23:59	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			03/01/19 23:59	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 23:59	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/01/19 23:59	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/01/19 23:59	1
Dibromomethane	ND		1.00	0.450	ug/L			03/01/19 23:59	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			03/01/19 23:59	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			03/01/19 23:59	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/01/19 23:59	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/01/19 23:59	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/01/19 23:59	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/01/19 23:59	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/01/19 23:59	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/01/19 23:59	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/01/19 23:59	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/01/19 23:59	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/01/19 23:59	1
Ethylbenzene	ND		1.00	0.190	ug/L			03/01/19 23:59	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/01/19 23:59	1
2-Hexanone	ND		10.0	1.28	ug/L			03/01/19 23:59	1
Isopropylbenzene	ND		1.00	0.330	ug/L			03/01/19 23:59	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/01/19 23:59	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/01/19 23:59	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/01/19 23:59	1
Naphthalene	ND		5.00	0.210	ug/L			03/01/19 23:59	1
n-Butylbenzene	ND		1.00	0.240	ug/L			03/01/19 23:59	1
N-Propylbenzene	ND		1.00	0.170	ug/L			03/01/19 23:59	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			03/01/19 23:59	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 23:59	1
Styrene	ND		1.00	0.280	ug/L			03/01/19 23:59	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 23:59	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/01/19 23:59	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/01/19 23:59	1

Client Sample ID: GW-060866-022619-LB-MW-11
Date Collected: 02/26/19 11:39
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			03/01/19 23:59	1
Toluene	ND		1.00	0.170	ug/L			03/01/19 23:59	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/01/19 23:59	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 23:59	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/01/19 23:59	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/01/19 23:59	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 23:59	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 23:59	1
Trichloroethene	ND		1.00	0.200	ug/L			03/01/19 23:59	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/01/19 23:59	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/01/19 23:59	1
1,2,4-Trimethylbenzene	**0.378**	**J**	1.00	0.170	ug/L			03/01/19 23:59	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 23:59	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/01/19 23:59	1
Xylenes, Total	ND		3.00	0.580	ug/L			03/01/19 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*03/01/19 23:59*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*03/01/19 23:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*03/01/19 23:59*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*03/01/19 23:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100	55.0	ug/L			03/04/19 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*		*03/04/19 17:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		94.8	26.5	ug/L		03/05/19 09:15	03/06/19 21:04	1
C24-C40	ND		94.8	47.4	ug/L		03/05/19 09:15	03/06/19 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*88*		*50 - 150*	*03/05/19 09:15*	*03/06/19 21:04*	*1*

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-169367-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-022719-LB-MW-12
Date Collected: 02/27/19 10:50
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			03/01/19 18:14	1
Benzene	ND		1.00	0.200	ug/L			03/01/19 18:14	1
Bromobenzene	ND		1.00	0.210	ug/L			03/01/19 18:14	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/01/19 18:14	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/01/19 18:14	1
Bromoform	ND		1.00	0.290	ug/L			03/01/19 18:14	1
Bromomethane	ND		1.00	0.350	ug/L			03/01/19 18:14	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/01/19 18:14	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/01/19 18:14	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/01/19 18:14	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/01/19 18:14	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/01/19 18:14	1
Chloroethane	ND		1.00	0.360	ug/L			03/01/19 18:14	1
Chloroform	ND		1.00	0.230	ug/L			03/01/19 18:14	1
Chloromethane	ND		1.00	0.360	ug/L			03/01/19 18:14	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			03/01/19 18:14	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/01/19 18:14	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			03/01/19 18:14	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 18:14	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/01/19 18:14	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/01/19 18:14	1
Dibromomethane	ND		1.00	0.450	ug/L			03/01/19 18:14	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			03/01/19 18:14	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			03/01/19 18:14	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/01/19 18:14	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/01/19 18:14	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/01/19 18:14	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/01/19 18:14	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/01/19 18:14	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/01/19 18:14	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/01/19 18:14	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/01/19 18:14	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/01/19 18:14	1
Ethylbenzene	ND		1.00	0.190	ug/L			03/01/19 18:14	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/01/19 18:14	1
2-Hexanone	ND		10.0	1.28	ug/L			03/01/19 18:14	1
Isopropylbenzene	ND		1.00	0.330	ug/L			03/01/19 18:14	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/01/19 18:14	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/01/19 18:14	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/01/19 18:14	1
Naphthalene	ND		5.00	0.210	ug/L			03/01/19 18:14	1
n-Butylbenzene	ND		1.00	0.240	ug/L			03/01/19 18:14	1
N-Propylbenzene	ND		1.00	0.170	ug/L			03/01/19 18:14	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			03/01/19 18:14	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 18:14	1
Styrene	ND		1.00	0.280	ug/L			03/01/19 18:14	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 18:14	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/01/19 18:14	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/01/19 18:14	1

Client Sample ID: GW-060866-022719-LB-MW-12
Date Collected: 02/27/19 10:50
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.541**	**J**	1.00	0.140	ug/L			03/01/19 18:14	1
Toluene	**0.214**	**J**	1.00	0.170	ug/L			03/01/19 18:14	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/01/19 18:14	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 18:14	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/01/19 18:14	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/01/19 18:14	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 18:14	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 18:14	1
Trichloroethene	ND		1.00	0.200	ug/L			03/01/19 18:14	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/01/19 18:14	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/01/19 18:14	1
1,2,4-Trimethylbenzene	**0.423**	**J**	1.00	0.170	ug/L			03/01/19 18:14	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 18:14	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/01/19 18:14	1
Xylenes, Total	ND		3.00	0.580	ug/L			03/01/19 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*03/01/19 18:14*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*03/01/19 18:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*03/01/19 18:14*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*03/01/19 18:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100	55.0	ug/L			03/04/19 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*		*03/04/19 17:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		102	28.5	ug/L		03/05/19 09:15	03/06/19 21:20	1
C24-C40	ND		102	50.9	ug/L		03/05/19 09:15	03/06/19 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*99*		*50 - 150*	*03/05/19 09:15*	*03/06/19 21:20*	*1*

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-169367-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-022619-LB-MW-13
Date Collected: 02/26/19 13:48
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			03/01/19 18:40	1
Benzene	ND		1.00	0.200	ug/L			03/01/19 18:40	1
Bromobenzene	ND		1.00	0.210	ug/L			03/01/19 18:40	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/01/19 18:40	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/01/19 18:40	1
Bromoform	ND		1.00	0.290	ug/L			03/01/19 18:40	1
Bromomethane	ND		1.00	0.350	ug/L			03/01/19 18:40	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/01/19 18:40	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/01/19 18:40	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/01/19 18:40	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/01/19 18:40	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/01/19 18:40	1
Chloroethane	ND		1.00	0.360	ug/L			03/01/19 18:40	1
Chloroform	ND		1.00	0.230	ug/L			03/01/19 18:40	1
Chloromethane	ND		1.00	0.360	ug/L			03/01/19 18:40	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			03/01/19 18:40	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/01/19 18:40	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			03/01/19 18:40	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 18:40	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/01/19 18:40	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/01/19 18:40	1
Dibromomethane	ND		1.00	0.450	ug/L			03/01/19 18:40	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			03/01/19 18:40	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			03/01/19 18:40	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/01/19 18:40	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/01/19 18:40	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/01/19 18:40	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/01/19 18:40	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/01/19 18:40	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/01/19 18:40	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/01/19 18:40	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/01/19 18:40	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/01/19 18:40	1
Ethylbenzene	ND		1.00	0.190	ug/L			03/01/19 18:40	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/01/19 18:40	1
2-Hexanone	ND		10.0	1.28	ug/L			03/01/19 18:40	1
Isopropylbenzene	ND		1.00	0.330	ug/L			03/01/19 18:40	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/01/19 18:40	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/01/19 18:40	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/01/19 18:40	1
Naphthalene	ND		5.00	0.210	ug/L			03/01/19 18:40	1
n-Butylbenzene	ND		1.00	0.240	ug/L			03/01/19 18:40	1
N-Propylbenzene	ND		1.00	0.170	ug/L			03/01/19 18:40	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			03/01/19 18:40	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 18:40	1
Styrene	ND		1.00	0.280	ug/L			03/01/19 18:40	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 18:40	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/01/19 18:40	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/01/19 18:40	1

Client Sample ID: GW-060866-022619-LB-MW-13
Date Collected: 02/26/19 13:48
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.427**	**J**	1.00	0.140	ug/L			03/01/19 18:40	1
Toluene	**0.204**	**J**	1.00	0.170	ug/L			03/01/19 18:40	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/01/19 18:40	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 18:40	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/01/19 18:40	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/01/19 18:40	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 18:40	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 18:40	1
Trichloroethene	ND		1.00	0.200	ug/L			03/01/19 18:40	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/01/19 18:40	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/01/19 18:40	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 18:40	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 18:40	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/01/19 18:40	1
Xylenes, Total	ND		3.00	0.580	ug/L			03/01/19 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*03/01/19 18:40*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*03/01/19 18:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*03/01/19 18:40*	*1*
Toluene-d8 (Surr)	*114*		*70 - 130*		*03/01/19 18:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100	55.0	ug/L			03/04/19 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*50 - 150*		*03/04/19 18:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**339**		95.4	26.7	ug/L		03/05/19 09:15	03/06/19 21:36	1
C24-C40	**342**		95.4	47.7	ug/L		03/05/19 09:15	03/06/19 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*50 - 150*	*03/05/19 09:15*	*03/06/19 21:36*	*1*

Client Sample ID: GW-060866-022719-LB-MW-14
Date Collected: 02/27/19 12:48
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**10.7**	**J**	25.0	2.66	ug/L			03/01/19 19:07	1
Benzene	**60.2**		1.00	0.200	ug/L			03/01/19 19:07	1
Bromobenzene	ND		1.00	0.210	ug/L			03/01/19 19:07	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/01/19 19:07	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/01/19 19:07	1
Bromoform	ND		1.00	0.290	ug/L			03/01/19 19:07	1
Bromomethane	ND		1.00	0.350	ug/L			03/01/19 19:07	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/01/19 19:07	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/01/19 19:07	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/01/19 19:07	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/01/19 19:07	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/01/19 19:07	1
Chloroethane	ND		1.00	0.360	ug/L			03/01/19 19:07	1
Chloroform	ND		1.00	0.230	ug/L			03/01/19 19:07	1
Chloromethane	ND		1.00	0.360	ug/L			03/01/19 19:07	1
2-Chlorotoluene	**5.58**		1.00	0.180	ug/L			03/01/19 19:07	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/01/19 19:07	1
cis-1,2-Dichloroethene	**0.710**	**J**	1.00	0.210	ug/L			03/01/19 19:07	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 19:07	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/01/19 19:07	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/01/19 19:07	1
Dibromomethane	ND		1.00	0.450	ug/L			03/01/19 19:07	1
1,2-Dichlorobenzene	**7.49**		1.00	0.190	ug/L			03/01/19 19:07	1
1,3-Dichlorobenzene	**0.342**	**J**	1.00	0.180	ug/L			03/01/19 19:07	1
1,4-Dichlorobenzene	**1.96**		1.00	0.170	ug/L			03/01/19 19:07	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/01/19 19:07	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/01/19 19:07	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/01/19 19:07	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/01/19 19:07	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/01/19 19:07	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/01/19 19:07	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/01/19 19:07	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/01/19 19:07	1
Ethylbenzene	**198**		1.00	0.190	ug/L			03/01/19 19:07	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/01/19 19:07	1
2-Hexanone	ND		10.0	1.28	ug/L			03/01/19 19:07	1
Isopropylbenzene	**54.6**		1.00	0.330	ug/L			03/01/19 19:07	1
Methylene Chloride	**1.19**	**J**	5.00	1.00	ug/L			03/01/19 19:07	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/01/19 19:07	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/01/19 19:07	1
Naphthalene	**117**		5.00	0.210	ug/L			03/01/19 19:07	1
n-Butylbenzene	**9.67**		1.00	0.240	ug/L			03/01/19 19:07	1
N-Propylbenzene	**83.7**		1.00	0.170	ug/L			03/01/19 19:07	1
p-Isopropyltoluene	**4.09**		1.00	0.170	ug/L			03/01/19 19:07	1
sec-Butylbenzene	**9.24**		1.00	0.170	ug/L			03/01/19 19:07	1
Styrene	ND		1.00	0.280	ug/L			03/01/19 19:07	1
tert-Butylbenzene	**1.28**		1.00	0.170	ug/L			03/01/19 19:07	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/01/19 19:07	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/01/19 19:07	1

Client Sample ID: GW-060866-022719-LB-MW-14
Date Collected: 02/27/19 12:48
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			03/01/19 19:07	1
Toluene	**10.7**		1.00	0.170	ug/L			03/01/19 19:07	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/01/19 19:07	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 19:07	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/01/19 19:07	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/01/19 19:07	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 19:07	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 19:07	1
Trichloroethene	**0.224**	**J**	1.00	0.200	ug/L			03/01/19 19:07	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/01/19 19:07	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/01/19 19:07	1
1,2,4-Trimethylbenzene	**231**		5.00	0.850	ug/L			03/02/19 23:37	5
1,3,5-Trimethylbenzene	**29.1**		1.00	0.170	ug/L			03/01/19 19:07	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/01/19 19:07	1
Xylenes, Total	**191**		3.00	0.580	ug/L			03/01/19 19:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*03/01/19 19:07*	*1*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*		*03/02/19 23:37*	*5*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*03/01/19 19:07*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*03/02/19 23:37*	*5*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*03/01/19 19:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*03/02/19 23:37*	*5*
Toluene-d8 (Surr)	*101*		*70 - 130*		*03/01/19 19:07*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*03/02/19 23:37*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**4740**		100	55.0	ug/L			03/04/19 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*124*		*50 - 150*		*03/04/19 18:50*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**3560**		98.2	27.5	ug/L		03/05/19 09:15	03/06/19 21:52	1
C24-C40	**248**		98.2	49.1	ug/L		03/05/19 09:15	03/06/19 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*119*		*50 - 150*	*03/05/19 09:15*	*03/06/19 21:52*	*1*

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-169367-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-022719-LB-MW-15
Date Collected: 02/27/19 12:14
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		125	13.3	ug/L			03/03/19 00:04	5
Benzene	**4.96**	**J**	5.00	1.00	ug/L			03/03/19 00:04	5
Bromobenzene	ND		5.00	1.05	ug/L			03/03/19 00:04	5
Bromochloromethane	ND		5.00	0.750	ug/L			03/03/19 00:04	5
Bromodichloromethane	ND		5.00	0.850	ug/L			03/03/19 00:04	5
Bromoform	ND		5.00	1.45	ug/L			03/03/19 00:04	5
Bromomethane	ND		5.00	1.75	ug/L			03/03/19 00:04	5
2-Butanone (MEK)	ND		250	13.2	ug/L			03/03/19 00:04	5
Carbon disulfide	ND		5.00	1.10	ug/L			03/03/19 00:04	5
Carbon tetrachloride	ND		5.00	0.900	ug/L			03/03/19 00:04	5
Chlorobenzene	ND		5.00	0.900	ug/L			03/03/19 00:04	5
Chlorodibromomethane	ND		5.00	1.25	ug/L			03/03/19 00:04	5
Chloroethane	ND		5.00	1.80	ug/L			03/03/19 00:04	5
Chloroform	ND		5.00	1.15	ug/L			03/03/19 00:04	5
Chloromethane	ND		5.00	1.80	ug/L			03/03/19 00:04	5
2-Chlorotoluene	ND		5.00	0.900	ug/L			03/03/19 00:04	5
4-Chlorotoluene	ND		5.00	0.850	ug/L			03/03/19 00:04	5
cis-1,2-Dichloroethene	ND		5.00	1.05	ug/L			03/03/19 00:04	5
cis-1,3-Dichloropropene	ND		5.00	0.850	ug/L			03/03/19 00:04	5
1,2-Dibromo-3-Chloropropane	ND		50.0	4.70	ug/L			03/03/19 00:04	5
1,2-Dibromoethane (EDB)	ND		5.00	1.05	ug/L			03/03/19 00:04	5
Dibromomethane	ND		5.00	2.25	ug/L			03/03/19 00:04	5
1,2-Dichlorobenzene	**15.9**		5.00	0.950	ug/L			03/03/19 00:04	5
1,3-Dichlorobenzene	**1.57**	**J**	5.00	0.900	ug/L			03/03/19 00:04	5
1,4-Dichlorobenzene	ND		5.00	0.850	ug/L			03/03/19 00:04	5
Dichlorodifluoromethane	ND		5.00	0.850	ug/L			03/03/19 00:04	5
1,1-Dichloroethane	ND		5.00	1.20	ug/L			03/03/19 00:04	5
1,2-Dichloroethane	ND		5.00	1.00	ug/L			03/03/19 00:04	5
1,1-Dichloroethene	ND		5.00	1.25	ug/L			03/03/19 00:04	5
1,2-Dichloropropane	ND		5.00	1.25	ug/L			03/03/19 00:04	5
1,3-Dichloropropane	ND		5.00	0.950	ug/L			03/03/19 00:04	5
2,2-Dichloropropane	ND		5.00	0.800	ug/L			03/03/19 00:04	5
1,1-Dichloropropene	ND		5.00	1.00	ug/L			03/03/19 00:04	5
Ethylbenzene	**330**		5.00	0.950	ug/L			03/03/19 00:04	5
Hexachlorobutadiene	ND		10.0	1.90	ug/L			03/03/19 00:04	5
2-Hexanone	ND		50.0	6.40	ug/L			03/03/19 00:04	5
Isopropylbenzene	**30.4**		5.00	1.65	ug/L			03/03/19 00:04	5
Methylene Chloride	ND		25.0	5.00	ug/L			03/03/19 00:04	5
4-Methyl-2-pentanone (MIBK)	ND		50.0	4.05	ug/L			03/03/19 00:04	5
Methyl tert-butyl ether	ND		5.00	0.850	ug/L			03/03/19 00:04	5
Naphthalene	**192**		25.0	1.05	ug/L			03/03/19 00:04	5
n-Butylbenzene	**20.8**		5.00	1.20	ug/L			03/03/19 00:04	5
N-Propylbenzene	**50.1**		5.00	0.850	ug/L			03/03/19 00:04	5
p-Isopropyltoluene	**12.4**		5.00	0.850	ug/L			03/03/19 00:04	5
sec-Butylbenzene	**6.32**		5.00	0.850	ug/L			03/03/19 00:04	5
Styrene	ND		5.00	1.40	ug/L			03/03/19 00:04	5
tert-Butylbenzene	**0.884**	**J**	5.00	0.850	ug/L			03/03/19 00:04	5
1,1,1,2-Tetrachloroethane	ND		5.00	0.750	ug/L			03/03/19 00:04	5
1,1,2,2-Tetrachloroethane	ND		5.00	0.950	ug/L			03/03/19 00:04	5

Client Sample ID: GW-060866-022719-LB-MW-15
Date Collected: 02/27/19 12:14
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		5.00	0.700	ug/L			03/03/19 00:04	5
Toluene	**4.24**	**J**	5.00	0.850	ug/L			03/03/19 00:04	5
trans-1,2-Dichloroethene	ND		5.00	1.15	ug/L			03/03/19 00:04	5
trans-1,3-Dichloropropene	ND		5.00	0.850	ug/L			03/03/19 00:04	5
1,2,3-Trichlorobenzene	ND		5.00	1.15	ug/L			03/03/19 00:04	5
1,2,4-Trichlorobenzene	ND		5.00	1.00	ug/L			03/03/19 00:04	5
1,1,1-Trichloroethane	ND		5.00	0.950	ug/L			03/03/19 00:04	5
1,1,2-Trichloroethane	ND		5.00	0.950	ug/L			03/03/19 00:04	5
Trichloroethene	ND		5.00	1.00	ug/L			03/03/19 00:04	5
Trichlorofluoromethane	ND		5.00	1.05	ug/L			03/03/19 00:04	5
1,2,3-Trichloropropane	ND		5.00	1.15	ug/L			03/03/19 00:04	5
1,2,4-Trimethylbenzene	**771**		5.00	0.850	ug/L			03/03/19 00:04	5
1,3,5-Trimethylbenzene	**317**		5.00	0.850	ug/L			03/03/19 00:04	5
Vinyl chloride	ND		5.00	0.900	ug/L			03/03/19 00:04	5
Xylenes, Total	**884**		15.0	2.90	ug/L			03/03/19 00:04	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*03/03/19 00:04*	*5*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*03/03/19 00:04*	*5*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*03/03/19 00:04*	*5*
Toluene-d8 (Surr)	*96*		*70 - 130*		*03/03/19 00:04*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**8600**		500	275	ug/L			03/05/19 07:10	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*		*03/05/19 07:10*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**2520**		98.4	27.6	ug/L		03/05/19 09:15	03/06/19 22:09	1
C24-C40	**337**		98.4	49.2	ug/L		03/05/19 09:15	03/06/19 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*82*		*50 - 150*	*03/05/19 09:15*	*03/06/19 22:09*	*1*

Client Sample ID: GW-060866-022719-LB-MW-DUP
Date Collected: 02/27/19 01:01
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**12.1**	**J**	25.0	2.66	ug/L			03/02/19 22:44	1
Benzene	**61.4**		1.00	0.200	ug/L			03/02/19 22:44	1
Bromobenzene	ND		1.00	0.210	ug/L			03/02/19 22:44	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/02/19 22:44	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/02/19 22:44	1
Bromoform	ND		1.00	0.290	ug/L			03/02/19 22:44	1
Bromomethane	ND		1.00	0.350	ug/L			03/02/19 22:44	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/02/19 22:44	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/02/19 22:44	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/02/19 22:44	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/02/19 22:44	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/02/19 22:44	1
Chloroethane	ND		1.00	0.360	ug/L			03/02/19 22:44	1
Chloroform	ND		1.00	0.230	ug/L			03/02/19 22:44	1
Chloromethane	ND		1.00	0.360	ug/L			03/02/19 22:44	1
2-Chlorotoluene	**5.46**		1.00	0.180	ug/L			03/02/19 22:44	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/02/19 22:44	1
cis-1,2-Dichloroethene	**0.700**	**J**	1.00	0.210	ug/L			03/02/19 22:44	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/02/19 22:44	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/02/19 22:44	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/02/19 22:44	1
Dibromomethane	ND		1.00	0.450	ug/L			03/02/19 22:44	1
1,2-Dichlorobenzene	**7.60**		1.00	0.190	ug/L			03/02/19 22:44	1
1,3-Dichlorobenzene	**0.325**	**J**	1.00	0.180	ug/L			03/02/19 22:44	1
1,4-Dichlorobenzene	**2.03**		1.00	0.170	ug/L			03/02/19 22:44	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/02/19 22:44	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/02/19 22:44	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/02/19 22:44	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/02/19 22:44	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/02/19 22:44	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/02/19 22:44	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/02/19 22:44	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/02/19 22:44	1
Ethylbenzene	**203**		5.00	0.950	ug/L			03/02/19 23:11	5
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/02/19 22:44	1
2-Hexanone	ND		10.0	1.28	ug/L			03/02/19 22:44	1
Isopropylbenzene	**57.0**		1.00	0.330	ug/L			03/02/19 22:44	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/02/19 22:44	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/02/19 22:44	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/02/19 22:44	1
Naphthalene	**119**		5.00	0.210	ug/L			03/02/19 22:44	1
n-Butylbenzene	**9.27**		1.00	0.240	ug/L			03/02/19 22:44	1
N-Propylbenzene	**85.2**		1.00	0.170	ug/L			03/02/19 22:44	1
p-Isopropyltoluene	**3.89**		1.00	0.170	ug/L			03/02/19 22:44	1
sec-Butylbenzene	**9.90**		1.00	0.170	ug/L			03/02/19 22:44	1
Styrene	ND		1.00	0.280	ug/L			03/02/19 22:44	1
tert-Butylbenzene	**1.31**		1.00	0.170	ug/L			03/02/19 22:44	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/02/19 22:44	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/02/19 22:44	1

Client Sample ID: GW-060866-022719-LB-MW-DUP
Date Collected: 02/27/19 01:01
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			03/02/19 22:44	1
Toluene	**12.2**		1.00	0.170	ug/L			03/02/19 22:44	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/02/19 22:44	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/02/19 22:44	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/02/19 22:44	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/02/19 22:44	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/02/19 22:44	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/02/19 22:44	1
Trichloroethene	ND		1.00	0.200	ug/L			03/02/19 22:44	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/02/19 22:44	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/02/19 22:44	1
1,2,4-Trimethylbenzene	**251**		5.00	0.850	ug/L			03/02/19 23:11	5
1,3,5-Trimethylbenzene	**27.9**		1.00	0.170	ug/L			03/02/19 22:44	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/02/19 22:44	1
Xylenes, Total	**194**		3.00	0.580	ug/L			03/02/19 22:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*03/02/19 22:44*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*03/02/19 23:11*	*5*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*03/02/19 22:44*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*03/02/19 23:11*	*5*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*03/02/19 22:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*03/02/19 23:11*	*5*
Toluene-d8 (Surr)	*110*		*70 - 130*		*03/02/19 22:44*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*03/02/19 23:11*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**4690**		100	55.0	ug/L			03/04/19 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*115*		*50 - 150*		*03/04/19 19:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	**3110**		94.9	26.6	ug/L		03/05/19 09:15	03/06/19 22:25	1
C24-C40	**152**		94.9	47.4	ug/L		03/05/19 09:15	03/06/19 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*124*		*50 - 150*	*03/05/19 09:15*	*03/06/19 22:25*	*1*

Client Sample ID: TB-1

Date Collected: 02/26/19 10:00
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-16

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.98	J	25.0	2.66	ug/L			03/01/19 17:11	1
Benzene	ND		1.00	0.200	ug/L			03/01/19 17:11	1
Bromobenzene	ND		1.00	0.210	ug/L			03/01/19 17:11	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/01/19 17:11	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/01/19 17:11	1
Bromoform	ND		1.00	0.290	ug/L			03/01/19 17:11	1
Bromomethane	ND		1.00	0.350	ug/L			03/01/19 17:11	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/01/19 17:11	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/01/19 17:11	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/01/19 17:11	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/01/19 17:11	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/01/19 17:11	1
Chloroethane	ND		1.00	0.360	ug/L			03/01/19 17:11	1
Chloroform	ND		1.00	0.230	ug/L			03/01/19 17:11	1
Chloromethane	ND		1.00	0.360	ug/L			03/01/19 17:11	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			03/01/19 17:11	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/01/19 17:11	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			03/01/19 17:11	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 17:11	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/01/19 17:11	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/01/19 17:11	1
Dibromomethane	ND		1.00	0.450	ug/L			03/01/19 17:11	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			03/01/19 17:11	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			03/01/19 17:11	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/01/19 17:11	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/01/19 17:11	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/01/19 17:11	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/01/19 17:11	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/01/19 17:11	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/01/19 17:11	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/01/19 17:11	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/01/19 17:11	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/01/19 17:11	1
Ethylbenzene	ND		1.00	0.190	ug/L			03/01/19 17:11	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/01/19 17:11	1
2-Hexanone	ND		10.0	1.28	ug/L			03/01/19 17:11	1
Isopropylbenzene	ND		1.00	0.330	ug/L			03/01/19 17:11	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/01/19 17:11	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/01/19 17:11	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/01/19 17:11	1
Naphthalene	ND		5.00	0.210	ug/L			03/01/19 17:11	1
n-Butylbenzene	ND		1.00	0.240	ug/L			03/01/19 17:11	1
N-Propylbenzene	ND		1.00	0.170	ug/L			03/01/19 17:11	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			03/01/19 17:11	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 17:11	1
Styrene	ND		1.00	0.280	ug/L			03/01/19 17:11	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 17:11	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/01/19 17:11	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/01/19 17:11	1

Client Sample ID: TB-1
Date Collected: 02/26/19 10:00
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			03/01/19 17:11	1
Toluene	ND		1.00	0.170	ug/L			03/01/19 17:11	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/01/19 17:11	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 17:11	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/01/19 17:11	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/01/19 17:11	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 17:11	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 17:11	1
Trichloroethene	ND		1.00	0.200	ug/L			03/01/19 17:11	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/01/19 17:11	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/01/19 17:11	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 17:11	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 17:11	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/01/19 17:11	1
Xylenes, Total	ND		3.00	0.580	ug/L			03/01/19 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*		*03/01/19 17:11*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*03/01/19 17:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*03/01/19 17:11*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*		*03/01/19 17:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100	55.0	ug/L			03/04/19 11:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*50 - 150*		*03/04/19 11:37*	*1*

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

Lab Sample ID: MB 490-578236/7
Matrix: Water
Analysis Batch: 578236

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			03/01/19 15:37	1
Benzene	ND		1.00	0.200	ug/L			03/01/19 15:37	1
Bromobenzene	ND		1.00	0.210	ug/L			03/01/19 15:37	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/01/19 15:37	1
Bromodichloromethane	ND		1.00	0.170	ug/L			03/01/19 15:37	1
Bromoform	ND		1.00	0.290	ug/L			03/01/19 15:37	1
Bromomethane	ND		1.00	0.350	ug/L			03/01/19 15:37	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/01/19 15:37	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/01/19 15:37	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/01/19 15:37	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/01/19 15:37	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/01/19 15:37	1
Chloroethane	ND		1.00	0.360	ug/L			03/01/19 15:37	1
Chloroform	ND		1.00	0.230	ug/L			03/01/19 15:37	1
Chloromethane	ND		1.00	0.360	ug/L			03/01/19 15:37	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			03/01/19 15:37	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/01/19 15:37	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			03/01/19 15:37	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 15:37	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/01/19 15:37	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/01/19 15:37	1
Dibromomethane	ND		1.00	0.450	ug/L			03/01/19 15:37	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			03/01/19 15:37	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			03/01/19 15:37	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/01/19 15:37	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/01/19 15:37	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/01/19 15:37	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/01/19 15:37	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/01/19 15:37	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/01/19 15:37	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/01/19 15:37	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/01/19 15:37	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/01/19 15:37	1
Ethylbenzene	ND		1.00	0.190	ug/L			03/01/19 15:37	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/01/19 15:37	1
2-Hexanone	ND		10.0	1.28	ug/L			03/01/19 15:37	1
Isopropylbenzene	ND		1.00	0.330	ug/L			03/01/19 15:37	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/01/19 15:37	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/01/19 15:37	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/01/19 15:37	1
Naphthalene	ND		5.00	0.210	ug/L			03/01/19 15:37	1
n-Butylbenzene	ND		1.00	0.240	ug/L			03/01/19 15:37	1
N-Propylbenzene	ND		1.00	0.170	ug/L			03/01/19 15:37	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			03/01/19 15:37	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 15:37	1
Styrene	ND		1.00	0.280	ug/L			03/01/19 15:37	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			03/01/19 15:37	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/01/19 15:37	1

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

Lab Sample ID: MB 490-578236/7
Matrix: Water
Analysis Batch: 578236

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/01/19 15:37	1
Tetrachloroethene	ND		1.00	0.140	ug/L			03/01/19 15:37	1
Toluene	ND		1.00	0.170	ug/L			03/01/19 15:37	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/01/19 15:37	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/01/19 15:37	1
1,2,3-Trichlorobenzene	0.8181	J	1.00	0.230	ug/L			03/01/19 15:37	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/01/19 15:37	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 15:37	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/01/19 15:37	1
Trichloroethene	ND		1.00	0.200	ug/L			03/01/19 15:37	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/01/19 15:37	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/01/19 15:37	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 15:37	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			03/01/19 15:37	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/01/19 15:37	1
Xylenes, Total	ND		3.00	0.580	ug/L			03/01/19 15:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*03/01/19 15:37*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*03/01/19 15:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*03/01/19 15:37*	*1*
Toluene-d8 (Surr)	*112*		*70 - 130*		*03/01/19 15:37*	*1*

Lab Sample ID: LCS 490-578236/3
Matrix: Water
Analysis Batch: 578236

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	88.46		ug/L		88	39 - 150
Benzene	20.0	20.91		ug/L		105	70 - 130
Bromobenzene	20.0	17.53		ug/L		88	70 - 130
Bromochloromethane	20.0	21.77		ug/L		109	70 - 130
Bromodichloromethane	20.0	21.47		ug/L		107	70 - 130
Bromoform	20.0	20.95		ug/L		105	70 - 137
Bromomethane	20.0	28.13		ug/L		141	53 - 150
2-Butanone (MEK)	100	99.12		ug/L		99	55 - 143
Carbon disulfide	20.0	21.15		ug/L		106	64 - 135
Carbon tetrachloride	20.0	23.25		ug/L		116	70 - 147
Chlorobenzene	20.0	21.59		ug/L		108	70 - 130
Chlorodibromomethane	20.0	20.93		ug/L		105	70 - 133
Chloroethane	20.0	21.12		ug/L		106	60 - 138
Chloroform	20.0	22.19		ug/L		111	70 - 130
Chloromethane	20.0	18.45		ug/L		92	33 - 150
2-Chlorotoluene	20.0	19.55		ug/L		98	70 - 130
4-Chlorotoluene	20.0	18.56		ug/L		93	70 - 130
cis-1,2-Dichloroethene	20.0	21.40		ug/L		107	70 - 130
cis-1,3-Dichloropropene	20.0	23.08		ug/L		115	70 - 133
1,2-Dibromo-3-Chloropropane	20.0	18.46		ug/L		92	45 - 138

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

Lab Sample ID: LCS 490-578236/3
Matrix: Water
Analysis Batch: 578236

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	20.0	19.61		ug/L		98	70 - 130
Dibromomethane	20.0	21.24		ug/L		106	70 - 130
1,2-Dichlorobenzene	20.0	22.26		ug/L		111	70 - 130
1,3-Dichlorobenzene	20.0	21.31		ug/L		107	70 - 130
1,4-Dichlorobenzene	20.0	20.56		ug/L		103	70 - 130
Dichlorodifluoromethane	20.0	19.93		ug/L		100	48 - 150
1,1-Dichloroethane	20.0	20.76		ug/L		104	70 - 130
1,2-Dichloroethane	20.0	20.05		ug/L		100	70 - 130
1,1-Dichloroethene	20.0	21.92		ug/L		110	70 - 132
1,2-Dichloropropane	20.0	20.20		ug/L		101	70 - 130
1,3-Dichloropropane	20.0	18.97		ug/L		95	70 - 130
2,2-Dichloropropane	20.0	22.75		ug/L		114	60 - 143
1,1-Dichloropropene	20.0	21.37		ug/L		107	70 - 130
Ethylbenzene	20.0	21.13		ug/L		106	70 - 130
Hexachlorobutadiene	20.0	18.96		ug/L		95	70 - 138
2-Hexanone	100	86.15		ug/L		86	54 - 142
Isopropylbenzene	20.0	22.97		ug/L		115	70 - 131
Methylene Chloride	20.0	19.20		ug/L		96	70 - 130
4-Methyl-2-pentanone (MIBK)	100	100.7		ug/L		101	60 - 137
Methyl tert-butyl ether	20.0	19.81		ug/L		99	70 - 130
Naphthalene	20.0	18.95		ug/L		95	54 - 150
n-Butylbenzene	20.0	20.52		ug/L		103	68 - 137
N-Propylbenzene	20.0	20.60		ug/L		103	70 - 134
p-Isopropyltoluene	20.0	22.31		ug/L		112	66 - 130
sec-Butylbenzene	20.0	21.39		ug/L		107	70 - 135
Styrene	20.0	20.86		ug/L		104	70 - 130
tert-Butylbenzene	20.0	21.20		ug/L		106	70 - 130
1,1,1,2-Tetrachloroethane	20.0	22.12		ug/L		111	70 - 130
1,1,2,2-Tetrachloroethane	20.0	18.90		ug/L		94	69 - 131
Tetrachloroethene	20.0	24.18		ug/L		121	70 - 130
Toluene	20.0	23.11		ug/L		116	70 - 130
trans-1,2-Dichloroethene	20.0	20.94		ug/L		105	70 - 130
trans-1,3-Dichloropropene	20.0	24.18		ug/L		121	63 - 142
1,2,3-Trichlorobenzene	20.0	21.91		ug/L		110	46 - 150
1,2,4-Trichlorobenzene	20.0	19.04		ug/L		95	58 - 147
1,1,1-Trichloroethane	20.0	23.03		ug/L		115	70 - 135
1,1,2-Trichloroethane	20.0	21.93		ug/L		110	70 - 130
Trichloroethene	20.0	23.31		ug/L		117	70 - 130
Trichlorofluoromethane	20.0	24.65		ug/L		123	59 - 150
1,2,3-Trichloropropane	20.0	19.43		ug/L		97	70 - 131
1,2,4-Trimethylbenzene	20.0	19.17		ug/L		96	70 - 130
1,3,5-Trimethylbenzene	20.0	21.29		ug/L		106	70 - 130
Vinyl chloride	20.0	20.20		ug/L		101	57 - 137
Xylenes, Total	40.0	41.82		ug/L		105	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*

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

Lab Sample ID: LCS 490-578236/3
Matrix: Water
Analysis Batch: 578236

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 490-578236/4
Matrix: Water
Analysis Batch: 578236

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	91.22		ug/L		91	39 - 150	3	23
Benzene	20.0	20.58		ug/L		103	70 - 130	2	12
Bromobenzene	20.0	17.59		ug/L		88	70 - 130	0	16
Bromochloromethane	20.0	21.15		ug/L		106	70 - 130	3	16
Bromodichloromethane	20.0	21.37		ug/L		107	70 - 130	0	14
Bromoform	20.0	20.32		ug/L		102	70 - 137	3	14
Bromomethane	20.0	27.66		ug/L		138	53 - 150	2	19
2-Butanone (MEK)	100	93.45		ug/L		93	55 - 143	6	19
Carbon disulfide	20.0	20.81		ug/L		104	64 - 135	2	16
Carbon tetrachloride	20.0	22.83		ug/L		114	70 - 147	2	16
Chlorobenzene	20.0	20.76		ug/L		104	70 - 130	4	12
Chlorodibromomethane	20.0	20.27		ug/L		101	70 - 133	3	13
Chloroethane	20.0	20.70		ug/L		103	60 - 138	2	15
Chloroform	20.0	20.98		ug/L		105	70 - 130	6	14
Chloromethane	20.0	18.23		ug/L		91	33 - 150	1	20
2-Chlorotoluene	20.0	18.13		ug/L		91	70 - 130	8	15
4-Chlorotoluene	20.0	19.23		ug/L		96	70 - 130	4	15
cis-1,2-Dichloroethene	20.0	20.57		ug/L		103	70 - 130	4	15
cis-1,3-Dichloropropene	20.0	23.43		ug/L		117	70 - 133	1	15
1,2-Dibromo-3-Chloropropane	20.0	17.92		ug/L		90	45 - 138	3	19
1,2-Dibromoethane (EDB)	20.0	19.27		ug/L		96	70 - 130	2	13
Dibromomethane	20.0	21.44		ug/L		107	70 - 130	1	14
1,2-Dichlorobenzene	20.0	21.33		ug/L		107	70 - 130	4	12
1,3-Dichlorobenzene	20.0	20.85		ug/L		104	70 - 130	2	13
1,4-Dichlorobenzene	20.0	20.35		ug/L		102	70 - 130	1	12
Dichlorodifluoromethane	20.0	21.41		ug/L		107	48 - 150	7	16
1,1-Dichloroethane	20.0	20.16		ug/L		101	70 - 130	3	17
1,2-Dichloroethane	20.0	20.22		ug/L		101	70 - 130	1	13
1,1-Dichloroethene	20.0	22.04		ug/L		110	70 - 132	1	20
1,2-Dichloropropane	20.0	19.92		ug/L		100	70 - 130	1	15
1,3-Dichloropropane	20.0	19.53		ug/L		98	70 - 130	3	12
2,2-Dichloropropane	20.0	21.75		ug/L		109	60 - 143	4	20
1,1-Dichloropropene	20.0	20.99		ug/L		105	70 - 130	2	16
Ethylbenzene	20.0	20.61		ug/L		103	70 - 130	2	12
Hexachlorobutadiene	20.0	20.00		ug/L		100	70 - 138	5	16
2-Hexanone	100	83.24		ug/L		83	54 - 142	3	17
Isopropylbenzene	20.0	22.02		ug/L		110	70 - 131	4	13
Methylene Chloride	20.0	19.36		ug/L		97	70 - 130	1	15
4-Methyl-2-pentanone (MIBK)	100	101.1		ug/L		101	60 - 137	0	21
Methyl tert-butyl ether	20.0	19.79		ug/L		99	70 - 130	0	16

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

Lab Sample ID: LCSD 490-578236/4
Matrix: Water
Analysis Batch: 578236

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene			20.0	19.84		ug/L		99	54 - 150	5	15
n-Butylbenzene			20.0	20.49		ug/L		102	68 - 137	0	14
N-Propylbenzene			20.0	20.34		ug/L		102	70 - 134	1	14
p-Isopropyltoluene			20.0	21.70		ug/L		108	66 - 130	3	13
sec-Butylbenzene			20.0	21.00		ug/L		105	70 - 135	2	14
Styrene			20.0	20.02		ug/L		100	70 - 130	4	12
tert-Butylbenzene			20.0	21.10		ug/L		105	70 - 130	0	14
1,1,1,2-Tetrachloroethane			20.0	21.50		ug/L		107	70 - 130	3	13
1,1,2,2-Tetrachloroethane			20.0	18.76		ug/L		94	69 - 131	1	15
Tetrachloroethene			20.0	23.64		ug/L		118	70 - 130	2	17
Toluene			20.0	23.53		ug/L		118	70 - 130	2	13
trans-1,2-Dichloroethene			20.0	20.95		ug/L		105	70 - 130	0	15
trans-1,3-Dichloropropene			20.0	22.79		ug/L		114	63 - 142	6	13
1,2,3-Trichlorobenzene			20.0	22.83		ug/L		114	46 - 150	4	16
1,2,4-Trichlorobenzene			20.0	20.43		ug/L		102	58 - 147	7	15
1,1,1-Trichloroethane			20.0	22.54		ug/L		113	70 - 135	2	15
1,1,2-Trichloroethane			20.0	21.45		ug/L		107	70 - 130	2	13
Trichloroethene			20.0	21.64		ug/L		108	70 - 130	7	14
Trichlorofluoromethane			20.0	24.20		ug/L		121	59 - 150	2	22
1,2,3-Trichloropropane			20.0	18.77		ug/L		94	70 - 131	3	14
1,2,4-Trimethylbenzene			20.0	18.91		ug/L		95	70 - 130	1	13
1,3,5-Trimethylbenzene			20.0	20.79		ug/L		104	70 - 130	2	14
Vinyl chloride			20.0	19.21		ug/L		96	57 - 137	5	15
Xylenes, Total			40.0	41.56		ug/L		104	70 - 132	1	11

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*106*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*116*		*70 - 130*

Lab Sample ID: 490-169356-B-2 MS
Matrix: Water
Analysis Batch: 578236

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		100	81.44		ug/L		81	39 - 150
Benzene	ND		20.0	21.03		ug/L		105	55 - 147
Bromobenzene	ND		20.0	18.32		ug/L		92	60 - 133
Bromochloromethane	ND		20.0	20.56		ug/L		103	59 - 132
Bromodichloromethane	ND		20.0	20.74		ug/L		104	70 - 140
Bromoform	ND		20.0	19.03		ug/L		95	53 - 150
Bromomethane	ND		20.0	26.63		ug/L		133	30 - 150
2-Butanone (MEK)	3.29	J	100	92.89		ug/L		90	50 - 143
Carbon disulfide	ND		20.0	21.45		ug/L		107	35 - 150
Carbon tetrachloride	ND		20.0	24.28		ug/L		121	56 - 150
Chlorobenzene	ND		20.0	20.91		ug/L		105	70 - 130
Chlorodibromomethane	ND		20.0	19.76		ug/L		99	66 - 140

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

Lab Sample ID: 490-169356-B-2 MS
Matrix: Water
Analysis Batch: 578236

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	ND		20.0	20.46		ug/L		102	58 - 141
Chloroform	ND		20.0	20.97		ug/L		105	66 - 138
Chloromethane	ND		20.0	21.68		ug/L		108	10 - 150
2-Chlorotoluene	ND		20.0	21.29		ug/L		106	67 - 138
4-Chlorotoluene	ND		20.0	19.95		ug/L		100	69 - 138
cis-1,2-Dichloroethene	ND		20.0	20.48		ug/L		102	68 - 131
cis-1,3-Dichloropropene	ND		20.0	21.54		ug/L		108	70 - 133
1,2-Dibromo-3-Chloropropane	ND		20.0	17.04		ug/L		85	38 - 138
1,2-Dibromoethane (EDB)	ND		20.0	18.56		ug/L		93	65 - 137
Dibromomethane	ND		20.0	20.03		ug/L		100	70 - 130
1,2-Dichlorobenzene	ND		20.0	21.73		ug/L		109	70 - 130
1,3-Dichlorobenzene	ND		20.0	21.27		ug/L		106	68 - 131
1,4-Dichlorobenzene	ND		20.0	20.88		ug/L		104	70 - 130
Dichlorodifluoromethane	ND		20.0	21.34		ug/L		107	10 - 150
1,1-Dichloroethane	ND		20.0	20.24		ug/L		101	61 - 139
1,2-Dichloroethane	ND		20.0	19.44		ug/L		97	64 - 136
1,1-Dichloroethene	ND		20.0	21.76		ug/L		109	54 - 150
1,2-Dichloropropane	ND		20.0	19.87		ug/L		99	67 - 130
1,3-Dichloropropane	ND		20.0	18.80		ug/L		94	70 - 130
2,2-Dichloropropane	ND		20.0	21.25		ug/L		106	50 - 146
1,1-Dichloropropene	ND		20.0	22.36		ug/L		112	54 - 150
Ethylbenzene	ND		20.0	21.07		ug/L		105	65 - 139
Hexachlorobutadiene	ND		20.0	15.17		ug/L		76	61 - 141
2-Hexanone	ND		100	77.61		ug/L		78	44 - 150
Isopropylbenzene	ND		20.0	22.65		ug/L		113	70 - 137
Methylene Chloride	ND		20.0	18.82		ug/L		94	64 - 130
4-Methyl-2-pentanone (MIBK)	ND		100	86.80		ug/L		87	50 - 140
Methyl tert-butyl ether	ND		20.0	18.80		ug/L		94	55 - 141
Naphthalene	ND		20.0	14.62		ug/L		73	32 - 150
n-Butylbenzene	ND		20.0	20.22		ug/L		101	61 - 141
N-Propylbenzene	ND		20.0	21.67		ug/L		108	53 - 150
p-Isopropyltoluene	ND		20.0	22.23		ug/L		111	66 - 137
sec-Butylbenzene	ND		20.0	21.95		ug/L		110	55 - 136
Styrene	ND		20.0	19.49		ug/L		97	70 - 130
tert-Butylbenzene	ND		20.0	22.25		ug/L		111	70 - 138
1,1,1,2-Tetrachloroethane	ND		20.0	21.51		ug/L		108	70 - 131
1,1,2,2-Tetrachloroethane	ND		20.0	18.52		ug/L		93	56 - 145
Tetrachloroethene	ND		20.0	23.22		ug/L		116	57 - 138
Toluene	1.07		20.0	22.24		ug/L		106	64 - 136
trans-1,2-Dichloroethene	ND		20.0	20.83		ug/L		104	59 - 143
trans-1,3-Dichloropropene	ND		20.0	20.91		ug/L		105	63 - 142
1,2,3-Trichlorobenzene	ND		20.0	14.52		ug/L		73	36 - 150
1,2,4-Trichlorobenzene	ND		20.0	16.18		ug/L		81	47 - 147
1,1,1-Trichloroethane	ND		20.0	23.66		ug/L		118	68 - 144
1,1,2-Trichloroethane	ND		20.0	19.47		ug/L		97	70 - 130
Trichloroethene	ND		20.0	22.99		ug/L		115	63 - 135
Trichlorofluoromethane	ND		20.0	25.20		ug/L		126	44 - 150
1,2,3-Trichloropropane	ND		20.0	19.02		ug/L		95	65 - 131

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

Lab Sample ID: 490-169356-B-2 MS
Matrix: Water
Analysis Batch: 578236

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	ND		20.0	19.98		ug/L		100	64 - 136
1,3,5-Trimethylbenzene	ND		20.0	21.39		ug/L		107	69 - 139
Vinyl chloride	ND		20.0	21.96		ug/L		110	57 - 150
Xylenes, Total	ND		40.0	41.82		ug/L		105	69 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: 490-169356-C-2 MSD
Matrix: Water
Analysis Batch: 578236

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		100	91.46		ug/L		91	39 - 150	12	28
Benzene	ND		20.0	23.61		ug/L		118	55 - 147	12	22
Bromobenzene	ND		20.0	20.34		ug/L		102	60 - 133	10	18
Bromochloromethane	ND		20.0	24.00		ug/L		120	59 - 132	15	21
Bromodichloromethane	ND		20.0	23.40		ug/L		117	70 - 140	12	196
Bromoform	ND		20.0	21.07		ug/L		105	53 - 150	10	20
Bromomethane	ND		20.0	29.94		ug/L		150	30 - 150	12	44
2-Butanone (MEK)	3.29	J	100	104.2		ug/L		101	50 - 143	11	28
Carbon disulfide	ND		20.0	25.55		ug/L		128	35 - 150	17	34
Carbon tetrachloride	ND		20.0	27.44		ug/L		137	56 - 150	12	18
Chlorobenzene	ND		20.0	23.11		ug/L		116	70 - 130	10	15
Chlorodibromomethane	ND		20.0	21.24		ug/L		106	66 - 140	7	19
Chloroethane	ND		20.0	22.15		ug/L		111	58 - 141	8	31
Chloroform	ND		20.0	24.24		ug/L		121	66 - 138	14	21
Chloromethane	ND		20.0	22.19		ug/L		111	10 - 150	2	43
2-Chlorotoluene	ND		20.0	23.47		ug/L		117	67 - 138	10	17
4-Chlorotoluene	ND		20.0	22.33		ug/L		112	69 - 138	11	15
cis-1,2-Dichloroethene	ND		20.0	23.87		ug/L		119	68 - 131	15	21
cis-1,3-Dichloropropene	ND		20.0	23.73		ug/L		119	70 - 133	10	19
1,2-Dibromo-3-Chloropropane	ND		20.0	19.52		ug/L		98	38 - 138	14	26
1,2-Dibromoethane (EDB)	ND		20.0	20.98		ug/L		105	65 - 137	12	21
Dibromomethane	ND		20.0	22.59		ug/L		113	70 - 130	12	19
1,2-Dichlorobenzene	ND		20.0	23.64		ug/L		118	70 - 130	8	15
1,3-Dichlorobenzene	ND		20.0	23.14		ug/L		116	68 - 131	8	14
1,4-Dichlorobenzene	ND		20.0	22.33		ug/L		112	70 - 130	7	14
Dichlorodifluoromethane	ND		20.0	21.51		ug/L		108	10 - 150	1	50
1,1-Dichloroethane	ND		20.0	23.35		ug/L		117	61 - 139	14	23
1,2-Dichloroethane	ND		20.0	21.76		ug/L		109	64 - 136	11	22
1,1-Dichloroethene	ND		20.0	25.94		ug/L		130	54 - 150	18	24
1,2-Dichloropropane	ND		20.0	22.71		ug/L		114	67 - 130	13	19
1,3-Dichloropropane	ND		20.0	20.96		ug/L		105	70 - 130	11	17
2,2-Dichloropropane	ND		20.0	24.44		ug/L		122	50 - 146	14	20

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

Lab Sample ID: 490-169356-C-2 MSD
Matrix: Water
Analysis Batch: 578236

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloropropene	ND		20.0	25.60		ug/L		128	54 - 150	13	24
Ethylbenzene	ND		20.0	23.64		ug/L		118	65 - 139	12	18
Hexachlorobutadiene	ND		20.0	16.92		ug/L		85	61 - 141	11	26
2-Hexanone	ND		100	86.03		ug/L		86	44 - 150	10	21
Isopropylbenzene	ND		20.0	25.45		ug/L		127	70 - 137	12	17
Methylene Chloride	ND		20.0	21.94		ug/L		110	64 - 130	15	22
4-Methyl-2-pentanone (MIBK)	ND		100	94.93		ug/L		95	50 - 140	9	24
Methyl tert-butyl ether	ND		20.0	21.96		ug/L		110	55 - 141	16	24
Naphthalene	ND		20.0	20.99		ug/L		105	32 - 150	36	40
n-Butylbenzene	ND		20.0	22.34		ug/L		112	61 - 141	10	17
N-Propylbenzene	ND		20.0	23.94		ug/L		120	53 - 150	10	18
p-Isopropyltoluene	ND		20.0	24.41		ug/L		122	66 - 137	9	16
sec-Butylbenzene	ND		20.0	23.09		ug/L		115	55 - 136	5	50
Styrene	ND		20.0	22.07		ug/L		110	70 - 130	12	16
tert-Butylbenzene	ND		20.0	24.18		ug/L		121	70 - 138	8	17
1,1,1,2-Tetrachloroethane	ND		20.0	22.90		ug/L		114	70 - 131	6	16
1,1,2,2-Tetrachloroethane	ND		20.0	20.23		ug/L		101	56 - 145	9	19
Tetrachloroethene	ND		20.0	24.89		ug/L		124	57 - 138	7	17
Toluene	1.07		20.0	25.46		ug/L		122	64 - 136	14	18
trans-1,2-Dichloroethene	ND		20.0	24.55		ug/L		123	59 - 143	16	25
trans-1,3-Dichloropropene	ND		20.0	23.11		ug/L		116	63 - 142	10	18
1,2,3-Trichlorobenzene	ND		20.0	21.59		ug/L		108	36 - 150	39	43
1,2,4-Trichlorobenzene	ND		20.0	20.22		ug/L		101	47 - 147	22	24
1,1,1-Trichloroethane	ND		20.0	26.42		ug/L		132	68 - 144	11	17
1,1,2-Trichloroethane	ND		20.0	20.85		ug/L		104	70 - 130	7	18
Trichloroethene	ND		20.0	25.47		ug/L		127	63 - 135	10	17
Trichlorofluoromethane	ND		20.0	27.00		ug/L		135	44 - 150	7	32
1,2,3-Trichloropropane	ND		20.0	20.68		ug/L		103	65 - 131	8	19
1,2,4-Trimethylbenzene	ND		20.0	22.10		ug/L		110	64 - 136	10	18
1,3,5-Trimethylbenzene	ND		20.0	22.77		ug/L		114	69 - 139	6	17
Vinyl chloride	ND		20.0	22.06		ug/L		110	57 - 150	0	37
Xylenes, Total	ND		40.0	47.97		ug/L		120	69 - 132	14	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*109*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: MB 490-578409/7
Matrix: Water
Analysis Batch: 578409

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25.0	2.66	ug/L			03/02/19 16:05	1
Benzene	ND		1.00	0.200	ug/L			03/02/19 16:05	1
Bromobenzene	ND		1.00	0.210	ug/L			03/02/19 16:05	1
Bromochloromethane	ND		1.00	0.150	ug/L			03/02/19 16:05	1

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

Lab Sample ID: MB 490-578409/7
Matrix: Water
Analysis Batch: 578409

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.00	0.170	ug/L			03/02/19 16:05	1
Bromoform	ND		1.00	0.290	ug/L			03/02/19 16:05	1
Bromomethane	ND		1.00	0.350	ug/L			03/02/19 16:05	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			03/02/19 16:05	1
Carbon disulfide	ND		1.00	0.220	ug/L			03/02/19 16:05	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			03/02/19 16:05	1
Chlorobenzene	ND		1.00	0.180	ug/L			03/02/19 16:05	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			03/02/19 16:05	1
Chloroethane	ND		1.00	0.360	ug/L			03/02/19 16:05	1
Chloroform	ND		1.00	0.230	ug/L			03/02/19 16:05	1
Chloromethane	ND		1.00	0.360	ug/L			03/02/19 16:05	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			03/02/19 16:05	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			03/02/19 16:05	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			03/02/19 16:05	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/02/19 16:05	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			03/02/19 16:05	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			03/02/19 16:05	1
Dibromomethane	ND		1.00	0.450	ug/L			03/02/19 16:05	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			03/02/19 16:05	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			03/02/19 16:05	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			03/02/19 16:05	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			03/02/19 16:05	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			03/02/19 16:05	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			03/02/19 16:05	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			03/02/19 16:05	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			03/02/19 16:05	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			03/02/19 16:05	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			03/02/19 16:05	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			03/02/19 16:05	1
Ethylbenzene	ND		1.00	0.190	ug/L			03/02/19 16:05	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			03/02/19 16:05	1
2-Hexanone	ND		10.0	1.28	ug/L			03/02/19 16:05	1
Isopropylbenzene	ND		1.00	0.330	ug/L			03/02/19 16:05	1
Methylene Chloride	ND		5.00	1.00	ug/L			03/02/19 16:05	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			03/02/19 16:05	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			03/02/19 16:05	1
Naphthalene	ND		5.00	0.210	ug/L			03/02/19 16:05	1
n-Butylbenzene	ND		1.00	0.240	ug/L			03/02/19 16:05	1
N-Propylbenzene	ND		1.00	0.170	ug/L			03/02/19 16:05	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			03/02/19 16:05	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			03/02/19 16:05	1
Styrene	ND		1.00	0.280	ug/L			03/02/19 16:05	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			03/02/19 16:05	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			03/02/19 16:05	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			03/02/19 16:05	1
Tetrachloroethene	ND		1.00	0.140	ug/L			03/02/19 16:05	1
Toluene	ND		1.00	0.170	ug/L			03/02/19 16:05	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			03/02/19 16:05	1

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

Lab Sample ID: MB 490-578409/7
Matrix: Water
Analysis Batch: 578409

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			03/02/19 16:05	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			03/02/19 16:05	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			03/02/19 16:05	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			03/02/19 16:05	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			03/02/19 16:05	1
Trichloroethene	ND		1.00	0.200	ug/L			03/02/19 16:05	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			03/02/19 16:05	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			03/02/19 16:05	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			03/02/19 16:05	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			03/02/19 16:05	1
Vinyl chloride	ND		1.00	0.180	ug/L			03/02/19 16:05	1
Xylenes, Total	ND		3.00	0.580	ug/L			03/02/19 16:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*03/02/19 16:05*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*03/02/19 16:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*03/02/19 16:05*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*03/02/19 16:05*	*1*

Lab Sample ID: LCS 490-578409/3
Matrix: Water
Analysis Batch: 578409

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	90.84		ug/L		91	39 - 150
Benzene	20.0	21.01		ug/L		105	70 - 130
Bromobenzene	20.0	18.77		ug/L		94	70 - 130
Bromochloromethane	20.0	22.73		ug/L		114	70 - 130
Bromodichloromethane	20.0	22.42		ug/L		112	70 - 130
Bromoform	20.0	20.66		ug/L		103	70 - 137
Bromomethane	20.0	26.81		ug/L		134	53 - 150
2-Butanone (MEK)	100	87.69		ug/L		88	55 - 143
Carbon disulfide	20.0	20.72		ug/L		104	64 - 135
Carbon tetrachloride	20.0	23.63		ug/L		118	70 - 147
Chlorobenzene	20.0	20.88		ug/L		104	70 - 130
Chlorodibromomethane	20.0	20.32		ug/L		102	70 - 133
Chloroethane	20.0	19.21		ug/L		96	60 - 138
Chloroform	20.0	22.30		ug/L		112	70 - 130
Chloromethane	20.0	19.82		ug/L		99	33 - 150
2-Chlorotoluene	20.0	18.74		ug/L		94	70 - 130
4-Chlorotoluene	20.0	19.50		ug/L		98	70 - 130
cis-1,2-Dichloroethene	20.0	21.17		ug/L		106	70 - 130
cis-1,3-Dichloropropene	20.0	20.54		ug/L		103	70 - 133
1,2-Dibromo-3-Chloropropane	20.0	18.02		ug/L		90	45 - 138
1,2-Dibromoethane (EDB)	20.0	19.89		ug/L		99	70 - 130
Dibromomethane	20.0	22.31		ug/L		112	70 - 130
1,2-Dichlorobenzene	20.0	22.12		ug/L		111	70 - 130
1,3-Dichlorobenzene	20.0	21.07		ug/L		105	70 - 130

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

Lab Sample ID: LCS 490-578409/3
Matrix: Water
Analysis Batch: 578409

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	20.0	20.40		ug/L		102	70 - 130
Dichlorodifluoromethane	20.0	19.99		ug/L		100	48 - 150
1,1-Dichloroethane	20.0	21.51		ug/L		108	70 - 130
1,2-Dichloroethane	20.0	20.30		ug/L		102	70 - 130
1,1-Dichloroethene	20.0	21.90		ug/L		109	70 - 132
1,2-Dichloropropane	20.0	20.66		ug/L		103	70 - 130
1,3-Dichloropropane	20.0	19.34		ug/L		97	70 - 130
2,2-Dichloropropane	20.0	21.59		ug/L		108	60 - 143
1,1-Dichloropropene	20.0	21.71		ug/L		109	70 - 130
Ethylbenzene	20.0	21.08		ug/L		105	70 - 130
Hexachlorobutadiene	20.0	18.04		ug/L		90	70 - 138
2-Hexanone	100	86.10		ug/L		86	54 - 142
Isopropylbenzene	20.0	22.38		ug/L		112	70 - 131
Methylene Chloride	20.0	19.76		ug/L		99	70 - 130
4-Methyl-2-pentanone (MIBK)	100	92.71		ug/L		93	60 - 137
Methyl tert-butyl ether	20.0	20.51		ug/L		103	70 - 130
Naphthalene	20.0	17.93		ug/L		90	54 - 150
n-Butylbenzene	20.0	21.07		ug/L		105	68 - 137
N-Propylbenzene	20.0	20.93		ug/L		105	70 - 134
p-Isopropyltoluene	20.0	22.50		ug/L		112	66 - 130
sec-Butylbenzene	20.0	21.44		ug/L		107	70 - 135
Styrene	20.0	20.76		ug/L		104	70 - 130
tert-Butylbenzene	20.0	21.67		ug/L		108	70 - 130
1,1,1,2-Tetrachloroethane	20.0	21.80		ug/L		109	70 - 130
1,1,2,2-Tetrachloroethane	20.0	19.30		ug/L		96	69 - 131
Tetrachloroethene	20.0	22.25		ug/L		111	70 - 130
Toluene	20.0	20.58		ug/L		103	70 - 130
trans-1,2-Dichloroethene	20.0	21.16		ug/L		106	70 - 130
trans-1,3-Dichloropropene	20.0	21.42		ug/L		107	63 - 142
1,2,3-Trichlorobenzene	20.0	20.40		ug/L		102	46 - 150
1,2,4-Trichlorobenzene	20.0	18.47		ug/L		92	58 - 147
1,1,1-Trichloroethane	20.0	23.53		ug/L		118	70 - 135
1,1,2-Trichloroethane	20.0	20.34		ug/L		102	70 - 130
Trichloroethene	20.0	22.18		ug/L		111	70 - 130
Trichlorofluoromethane	20.0	22.85		ug/L		114	59 - 150
1,2,3-Trichloropropane	20.0	19.65		ug/L		98	70 - 131
1,2,4-Trimethylbenzene	20.0	19.79		ug/L		99	70 - 130
1,3,5-Trimethylbenzene	20.0	19.95		ug/L		100	70 - 130
Vinyl chloride	20.0	19.35		ug/L		97	57 - 137
Xylenes, Total	40.0	42.84		ug/L		107	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*108*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

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

Lab Sample ID: LCSD 490-578409/4
Matrix: Water
Analysis Batch: 578409

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	82.32		ug/L		82	39 - 150	10	23
Benzene	20.0	20.79		ug/L		104	70 - 130	1	12
Bromobenzene	20.0	18.90		ug/L		94	70 - 130	1	16
Bromochloromethane	20.0	20.52		ug/L		103	70 - 130	10	16
Bromodichloromethane	20.0	20.85		ug/L		104	70 - 130	7	14
Bromoform	20.0	19.86		ug/L		99	70 - 137	4	14
Bromomethane	20.0	26.72		ug/L		134	53 - 150	0	19
2-Butanone (MEK)	100	86.73		ug/L		87	55 - 143	1	19
Carbon disulfide	20.0	19.20		ug/L		96	64 - 135	8	16
Carbon tetrachloride	20.0	22.82		ug/L		114	70 - 147	3	16
Chlorobenzene	20.0	21.41		ug/L		107	70 - 130	3	12
Chlorodibromomethane	20.0	20.77		ug/L		104	70 - 133	2	13
Chloroethane	20.0	18.72		ug/L		94	60 - 138	3	15
Chloroform	20.0	20.87		ug/L		104	70 - 130	7	14
Chloromethane	20.0	19.30		ug/L		96	33 - 150	3	20
2-Chlorotoluene	20.0	20.13		ug/L		101	70 - 130	7	15
4-Chlorotoluene	20.0	20.09		ug/L		100	70 - 130	3	15
cis-1,2-Dichloroethene	20.0	20.09		ug/L		100	70 - 130	5	15
cis-1,3-Dichloropropene	20.0	20.95		ug/L		105	70 - 133	2	15
1,2-Dibromo-3-Chloropropane	20.0	17.94		ug/L		90	45 - 138	0	19
1,2-Dibromoethane (EDB)	20.0	20.52		ug/L		103	70 - 130	3	13
Dibromomethane	20.0	20.46		ug/L		102	70 - 130	9	14
1,2-Dichlorobenzene	20.0	22.49		ug/L		112	70 - 130	2	12
1,3-Dichlorobenzene	20.0	21.56		ug/L		108	70 - 130	2	13
1,4-Dichlorobenzene	20.0	21.14		ug/L		106	70 - 130	4	12
Dichlorodifluoromethane	20.0	19.60		ug/L		98	48 - 150	2	16
1,1-Dichloroethane	20.0	20.16		ug/L		101	70 - 130	6	17
1,2-Dichloroethane	20.0	19.12		ug/L		96	70 - 130	6	13
1,1-Dichloroethene	20.0	20.60		ug/L		103	70 - 132	6	20
1,2-Dichloropropane	20.0	20.43		ug/L		102	70 - 130	1	15
1,3-Dichloropropane	20.0	19.60		ug/L		98	70 - 130	1	12
2,2-Dichloropropane	20.0	20.63		ug/L		103	60 - 143	5	20
1,1-Dichloropropene	20.0	21.27		ug/L		106	70 - 130	2	16
Ethylbenzene	20.0	21.62		ug/L		108	70 - 130	3	12
Hexachlorobutadiene	20.0	18.51		ug/L		93	70 - 138	3	16
2-Hexanone	100	85.37		ug/L		85	54 - 142	1	17
Isopropylbenzene	20.0	23.27		ug/L		116	70 - 131	4	13
Methylene Chloride	20.0	18.46		ug/L		92	70 - 130	7	15
4-Methyl-2-pentanone (MIBK)	100	88.17		ug/L		88	60 - 137	5	21
Methyl tert-butyl ether	20.0	18.87		ug/L		94	70 - 130	8	16
Naphthalene	20.0	19.55		ug/L		98	54 - 150	9	15
n-Butylbenzene	20.0	21.45		ug/L		107	68 - 137	2	14
N-Propylbenzene	20.0	21.70		ug/L		108	70 - 134	4	14
p-Isopropyltoluene	20.0	23.46		ug/L		117	66 - 130	4	13
sec-Butylbenzene	20.0	22.39		ug/L		112	70 - 135	4	14
Styrene	20.0	20.77		ug/L		104	70 - 130	0	12
tert-Butylbenzene	20.0	22.83		ug/L		114	70 - 130	5	14
1,1,1,2-Tetrachloroethane	20.0	22.09		ug/L		110	70 - 130	1	13

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

Lab Sample ID: LCSD 490-578409/4
Matrix: Water
Analysis Batch: 578409

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane			20.0	19.04		ug/L		95	69 - 131	1	15
Tetrachloroethene			20.0	23.07		ug/L		115	70 - 130	4	17
Toluene			20.0	20.66		ug/L		103	70 - 130	0	13
trans-1,2-Dichloroethene			20.0	19.97		ug/L		100	70 - 130	6	15
trans-1,3-Dichloropropene			20.0	20.74		ug/L		104	63 - 142	3	13
1,2,3-Trichlorobenzene			20.0	21.55		ug/L		108	46 - 150	6	16
1,2,4-Trichlorobenzene			20.0	18.69		ug/L		93	58 - 147	1	15
1,1,1-Trichloroethane			20.0	22.29		ug/L		111	70 - 135	5	15
1,1,2-Trichloroethane			20.0	20.23		ug/L		101	70 - 130	1	13
Trichloroethene			20.0	22.78		ug/L		114	70 - 130	3	14
Trichlorofluoromethane			20.0	21.35		ug/L		107	59 - 150	7	22
1,2,3-Trichloropropane			20.0	19.55		ug/L		98	70 - 131	1	14
1,2,4-Trimethylbenzene			20.0	20.42		ug/L		102	70 - 130	3	13
1,3,5-Trimethylbenzene			20.0	21.07		ug/L		105	70 - 130	5	14
Vinyl chloride			20.0	19.08		ug/L		95	57 - 137	1	15
Xylenes, Total			40.0	43.17		ug/L		108	70 - 132	1	11

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: 550-118720-B-1 MS
Matrix: Water
Analysis Batch: 578409

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	220		100	283.0		ug/L		63	39 - 150
Benzene	ND		20.0	22.60		ug/L		113	55 - 147
Bromobenzene	ND		20.0	20.10		ug/L		101	60 - 133
Bromochloromethane	ND		20.0	22.73		ug/L		114	59 - 132
Bromodichloromethane	ND		20.0	23.58		ug/L		118	70 - 140
Bromoform	ND		20.0	21.22		ug/L		106	53 - 150
Bromomethane	ND		20.0	25.32		ug/L		127	30 - 150
2-Butanone (MEK)	42.9	J	100	144.3		ug/L		101	50 - 143
Carbon disulfide	ND		20.0	20.58		ug/L		103	35 - 150
Carbon tetrachloride	ND		20.0	25.83		ug/L		129	56 - 150
Chlorobenzene	ND		20.0	22.86		ug/L		114	70 - 130
Chlorodibromomethane	ND		20.0	22.11		ug/L		111	66 - 140
Chloroethane	ND		20.0	20.40		ug/L		102	58 - 141
Chloroform	ND		20.0	24.30		ug/L		122	66 - 138
Chloromethane	3.99		20.0	21.98		ug/L		90	10 - 150
2-Chlorotoluene	ND		20.0	23.79		ug/L		119	67 - 138
4-Chlorotoluene	ND		20.0	22.63		ug/L		113	69 - 138
cis-1,2-Dichloroethene	ND		20.0	22.61		ug/L		113	68 - 131
cis-1,3-Dichloropropene	ND		20.0	21.88		ug/L		109	70 - 133
1,2-Dibromo-3-Chloropropane	ND		20.0	18.85		ug/L		94	38 - 138

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

Lab Sample ID: 550-118720-B-1 MS
Matrix: Water
Analysis Batch: 578409

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	ND		20.0	20.86		ug/L		104	65 - 137
Dibromomethane	ND		20.0	22.26		ug/L		111	70 - 130
1,2-Dichlorobenzene	ND		20.0	23.37		ug/L		117	70 - 130
1,3-Dichlorobenzene	ND		20.0	22.81		ug/L		114	68 - 131
1,4-Dichlorobenzene	ND		20.0	21.96		ug/L		110	70 - 130
Dichlorodifluoromethane	ND		20.0	20.09		ug/L		100	10 - 150
1,1-Dichloroethane	ND		20.0	22.97		ug/L		115	61 - 139
1,2-Dichloroethane	ND		20.0	21.35		ug/L		107	64 - 136
1,1-Dichloroethene	ND		20.0	24.31		ug/L		122	54 - 150
1,2-Dichloropropane	1.94		20.0	24.78		ug/L		114	67 - 130
1,3-Dichloropropane	ND		20.0	21.37		ug/L		107	70 - 130
2,2-Dichloropropane	ND		20.0	24.45		ug/L		122	50 - 146
1,1-Dichloropropene	ND		20.0	24.84		ug/L		124	54 - 150
Ethylbenzene	ND		20.0	23.63		ug/L		118	65 - 139
Hexachlorobutadiene	ND		20.0	16.16		ug/L		81	61 - 141
2-Hexanone	3.53	J	100	100.2		ug/L		97	44 - 150
Isopropylbenzene	ND		20.0	25.34		ug/L		127	70 - 137
Methylene Chloride	ND		20.0	19.75		ug/L		99	64 - 130
4-Methyl-2-pentanone (MIBK)	ND		100	99.31		ug/L		99	50 - 140
Methyl tert-butyl ether	ND		20.0	21.52		ug/L		108	55 - 141
Naphthalene	ND	F1	20.0	30.85	F1	ug/L		154	32 - 150
n-Butylbenzene	ND		20.0	23.36		ug/L		117	61 - 141
N-Propylbenzene	ND		20.0	24.00		ug/L		120	53 - 150
p-Isopropyltoluene	ND		20.0	24.18		ug/L		121	66 - 137
sec-Butylbenzene	ND		20.0	25.22		ug/L		126	55 - 136
Styrene	ND		20.0	22.32		ug/L		112	70 - 130
tert-Butylbenzene	ND		20.0	24.32		ug/L		122	70 - 138
1,1,1,2-Tetrachloroethane	ND		20.0	23.24		ug/L		116	70 - 131
1,1,2,2-Tetrachloroethane	ND		20.0	20.67		ug/L		103	56 - 145
Tetrachloroethene	ND		20.0	24.54		ug/L		123	57 - 138
Toluene	ND		20.0	22.66		ug/L		113	64 - 136
trans-1,2-Dichloroethene	ND		20.0	22.50		ug/L		113	59 - 143
trans-1,3-Dichloropropene	ND		20.0	21.97		ug/L		110	63 - 142
1,2,3-Trichlorobenzene	ND		20.0	15.89		ug/L		79	36 - 150
1,2,4-Trichlorobenzene	ND		20.0	17.15		ug/L		86	47 - 147
1,1,1-Trichloroethane	ND		20.0	26.10		ug/L		130	68 - 144
1,1,2-Trichloroethane	ND		20.0	20.98		ug/L		105	70 - 130
Trichloroethene	ND		20.0	24.79		ug/L		124	63 - 135
Trichlorofluoromethane	ND		20.0	25.34		ug/L		127	44 - 150
1,2,3-Trichloropropane	ND		20.0	20.44		ug/L		102	65 - 131
1,2,4-Trimethylbenzene	ND		20.0	22.49		ug/L		112	64 - 136
1,3,5-Trimethylbenzene	ND		20.0	23.17		ug/L		116	69 - 139
Vinyl chloride	ND		20.0	20.15		ug/L		101	57 - 150
Xylenes, Total	ND		40.0	48.90		ug/L		122	69 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*

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

Lab Sample ID: 550-118720-B-1 MS
Matrix: Water
Analysis Batch: 578409

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

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: 550-118720-C-1 MSD
Matrix: Water
Analysis Batch: 578409

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	220		100	315.9		ug/L		96	39 - 150	11	28
Benzene	ND		20.0	23.45		ug/L		117	55 - 147	4	22
Bromobenzene	ND		20.0	20.00		ug/L		100	60 - 133	0	18
Bromochloromethane	ND		20.0	25.53		ug/L		128	59 - 132	12	21
Bromodichloromethane	ND		20.0	23.64		ug/L		118	70 - 140	0	196
Bromoform	ND		20.0	21.18		ug/L		106	53 - 150	0	20
Bromomethane	ND		20.0	26.10		ug/L		130	30 - 150	3	44
2-Butanone (MEK)	42.9	J	100	150.1		ug/L		107	50 - 143	4	28
Carbon disulfide	ND		20.0	21.05		ug/L		105	35 - 150	2	34
Carbon tetrachloride	ND		20.0	28.38		ug/L		142	56 - 150	9	18
Chlorobenzene	ND		20.0	22.93		ug/L		115	70 - 130	0	15
Chlorodibromomethane	ND		20.0	22.11		ug/L		111	66 - 140	0	19
Chloroethane	ND		20.0	19.99		ug/L		100	58 - 141	2	31
Chloroform	ND		20.0	25.88		ug/L		129	66 - 138	6	21
Chloromethane	3.99		20.0	21.39		ug/L		87	10 - 150	3	43
2-Chlorotoluene	ND		20.0	23.70		ug/L		118	67 - 138	0	17
4-Chlorotoluene	ND		20.0	22.64		ug/L		113	69 - 138	0	15
cis-1,2-Dichloroethene	ND		20.0	23.52		ug/L		118	68 - 131	4	21
cis-1,3-Dichloropropene	ND		20.0	22.89		ug/L		114	70 - 133	5	19
1,2-Dibromo-3-Chloropropane	ND		20.0	20.68		ug/L		103	38 - 138	9	26
1,2-Dibromoethane (EDB)	ND		20.0	22.02		ug/L		110	65 - 137	5	21
Dibromomethane	ND		20.0	22.20		ug/L		111	70 - 130	0	19
1,2-Dichlorobenzene	ND		20.0	24.41		ug/L		122	70 - 130	4	15
1,3-Dichlorobenzene	ND		20.0	23.26		ug/L		116	68 - 131	2	14
1,4-Dichlorobenzene	ND		20.0	22.05		ug/L		110	70 - 130	0	14
Dichlorodifluoromethane	ND		20.0	20.46		ug/L		102	10 - 150	2	50
1,1-Dichloroethane	ND		20.0	23.21		ug/L		116	61 - 139	1	23
1,2-Dichloroethane	ND		20.0	21.79		ug/L		109	64 - 136	2	22
1,1-Dichloroethene	ND		20.0	23.83		ug/L		119	54 - 150	2	24
1,2-Dichloropropane	1.94		20.0	24.24		ug/L		111	67 - 130	2	19
1,3-Dichloropropane	ND		20.0	21.41		ug/L		107	70 - 130	0	17
2,2-Dichloropropane	ND		20.0	25.40		ug/L		127	50 - 146	4	20
1,1-Dichloropropene	ND		20.0	25.35		ug/L		127	54 - 150	2	24
Ethylbenzene	ND		20.0	23.32		ug/L		117	65 - 139	1	18
Hexachlorobutadiene	ND		20.0	19.43		ug/L		97	61 - 141	18	26
2-Hexanone	3.53	J	100	103.0		ug/L		99	44 - 150	3	21
Isopropylbenzene	ND		20.0	25.96		ug/L		130	70 - 137	2	17
Methylene Chloride	ND		20.0	20.01		ug/L		100	64 - 130	1	22
4-Methyl-2-pentanone (MIBK)	ND		100	101.6		ug/L		102	50 - 140	2	24
Methyl tert-butyl ether	ND		20.0	22.15		ug/L		111	55 - 141	3	24

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

Lab Sample ID: 550-118720-C-1 MSD
Matrix: Water
Analysis Batch: 578409

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	ND	F1	20.0	26.44		ug/L		132	32 - 150	15	40
n-Butylbenzene	ND		20.0	24.14		ug/L		121	61 - 141	3	17
N-Propylbenzene	ND		20.0	24.06		ug/L		120	53 - 150	0	18
p-Isopropyltoluene	ND		20.0	25.62		ug/L		128	66 - 137	6	16
sec-Butylbenzene	ND		20.0	25.45		ug/L		127	55 - 136	1	50
Styrene	ND		20.0	21.99		ug/L		110	70 - 130	1	16
tert-Butylbenzene	ND		20.0	24.68		ug/L		123	70 - 138	1	17
1,1,1,2-Tetrachloroethane	ND		20.0	23.34		ug/L		117	70 - 131	0	16
1,1,2,2-Tetrachloroethane	ND		20.0	21.52		ug/L		108	56 - 145	4	19
Tetrachloroethene	ND		20.0	25.41		ug/L		127	57 - 138	3	17
Toluene	ND		20.0	22.87		ug/L		114	64 - 136	1	18
trans-1,2-Dichloroethene	ND		20.0	23.03		ug/L		115	59 - 143	2	25
trans-1,3-Dichloropropene	ND		20.0	22.29		ug/L		111	63 - 142	1	18
1,2,3-Trichlorobenzene	ND		20.0	22.53		ug/L		113	36 - 150	35	43
1,2,4-Trichlorobenzene	ND		20.0	20.64		ug/L		103	47 - 147	18	24
1,1,1-Trichloroethane	ND		20.0	27.89		ug/L		139	68 - 144	7	17
1,1,2-Trichloroethane	ND		20.0	21.26		ug/L		106	70 - 130	1	18
Trichloroethene	ND		20.0	24.81		ug/L		124	63 - 135	0	17
Trichlorofluoromethane	ND		20.0	24.74		ug/L		124	44 - 150	2	32
1,2,3-Trichloropropane	ND		20.0	21.38		ug/L		107	65 - 131	4	19
1,2,4-Trimethylbenzene	ND		20.0	21.84		ug/L		109	64 - 136	3	18
1,3,5-Trimethylbenzene	ND		20.0	24.12		ug/L		121	69 - 139	4	17
Vinyl chloride	ND		20.0	19.68		ug/L		98	57 - 150	2	37
Xylenes, Total	ND		40.0	46.64		ug/L		117	69 - 132	5	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*107*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 490-578491/8
Matrix: Water
Analysis Batch: 578491

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	ND		100	55.0	ug/L			03/04/19 10:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*50 - 150*		*03/04/19 10:50*	*1*

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

Lab Sample ID: LCS 490-578491/5
Matrix: Water
Analysis Batch: 578491

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12			1000	1058		ug/L		106	39 - 143		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*142*		*50 - 150*

Lab Sample ID: LCSD 490-578491/6
Matrix: Water
Analysis Batch: 578491

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12			1000	1081		ug/L		108	39 - 143	2	18

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*142*		*50 - 150*

Lab Sample ID: 490-169367-4 DU
Matrix: Water
Analysis Batch: 578491

Client Sample ID: GW-060866-022719-LB-MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C6-C12	ND			ND		ug/L				NC	18

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*95*		*50 - 150*

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

Lab Sample ID: MB 490-578719/1-A
Matrix: Water
Analysis Batch: 579083

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 578719

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C24	ND		100	28.0	ug/L		03/05/19 09:15	03/06/19 17:13	1
C24-C40	ND		100	50.0	ug/L		03/05/19 09:15	03/06/19 17:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*112*		*50 - 150*	*03/05/19 09:15*	*03/06/19 17:13*	*1*

Lab Sample ID: LCS 490-578719/2-A
Matrix: Water
Analysis Batch: 579083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 578719

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C24			1000	798.7		ug/L		80	51 - 132		

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

Lab Sample ID: LCS 490-578719/2-A
Matrix: Water
Analysis Batch: 579083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 578719

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*91*		*50 - 150*

Lab Sample ID: 490-169367-1 DU
Matrix: Water
Analysis Batch: 579083

Client Sample ID: GW-060866-022719-LB-MW-1
Prep Type: Total/NA
Prep Batch: 578719

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C10-C24	2730			2935		ug/L				7	41
C24-C40	234			204.0		ug/L				14	41

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*125*		*50 - 150*

Lab Sample ID: 490-169367-10 DU
Matrix: Water
Analysis Batch: 579083

Client Sample ID: GW-060866-022619-LB-MW-11
Prep Type: Total/NA
Prep Batch: 578719

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
C10-C24	ND			ND		ug/L				NC	41
C24-C40	ND			ND		ug/L				NC	41

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
o-Terphenyl	*101*		*50 - 150*

GC/MS VOA

Analysis Batch: 578236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-169367-1	GW-060866-022719-LB-MW-1	Total/NA	Water	8260B	
490-169367-3	GW-060866-022719-LB-MW-3	Total/NA	Water	8260B	
490-169367-4	GW-060866-022719-LB-MW-4	Total/NA	Water	8260B	
490-169367-5	GW-060866-022619-LB-MW-5	Total/NA	Water	8260B	
490-169367-6	GW-060866-022619-LB-MW-6	Total/NA	Water	8260B	
490-169367-7	GW-060866-022619-LB-MW-7	Total/NA	Water	8260B	
490-169367-8	GW-060866-022719-LB-MW-8	Total/NA	Water	8260B	
490-169367-9	GW-060866-022619-LB-MW-9	Total/NA	Water	8260B	
490-169367-10	GW-060866-022619-LB-MW-11	Total/NA	Water	8260B	
490-169367-11	GW-060866-022719-LB-MW-12	Total/NA	Water	8260B	
490-169367-12	GW-060866-022619-LB-MW-13	Total/NA	Water	8260B	
490-169367-13	GW-060866-022719-LB-MW-14	Total/NA	Water	8260B	
490-169367-16	TB-1	Total/NA	Water	8260B	
MB 490-578236/7	Method Blank	Total/NA	Water	8260B	
LCS 490-578236/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-578236/4	Lab Control Sample Dup	Total/NA	Water	8260B	
490-169356-B-2 MS	Matrix Spike	Total/NA	Water	8260B	
490-169356-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 578409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-169367-2	GW-060866-022619-LB-MW-2	Total/NA	Water	8260B	
490-169367-13	GW-060866-022719-LB-MW-14	Total/NA	Water	8260B	
490-169367-14	GW-060866-022719-LB-MW-15	Total/NA	Water	8260B	
490-169367-15	GW-060866-022719-LB-MW-DUP	Total/NA	Water	8260B	
490-169367-15	GW-060866-022719-LB-MW-DUP	Total/NA	Water	8260B	
MB 490-578409/7	Method Blank	Total/NA	Water	8260B	
LCS 490-578409/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-578409/4	Lab Control Sample Dup	Total/NA	Water	8260B	
550-118720-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
550-118720-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 578491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-169367-1	GW-060866-022719-LB-MW-1	Total/NA	Water	NWTPH-Gx	
490-169367-2	GW-060866-022619-LB-MW-2	Total/NA	Water	NWTPH-Gx	
490-169367-3	GW-060866-022719-LB-MW-3	Total/NA	Water	NWTPH-Gx	
490-169367-4	GW-060866-022719-LB-MW-4	Total/NA	Water	NWTPH-Gx	
490-169367-5	GW-060866-022619-LB-MW-5	Total/NA	Water	NWTPH-Gx	
490-169367-6	GW-060866-022619-LB-MW-6	Total/NA	Water	NWTPH-Gx	
490-169367-7	GW-060866-022619-LB-MW-7	Total/NA	Water	NWTPH-Gx	
490-169367-8	GW-060866-022719-LB-MW-8	Total/NA	Water	NWTPH-Gx	
490-169367-9	GW-060866-022619-LB-MW-9	Total/NA	Water	NWTPH-Gx	
490-169367-10	GW-060866-022619-LB-MW-11	Total/NA	Water	NWTPH-Gx	
490-169367-11	GW-060866-022719-LB-MW-12	Total/NA	Water	NWTPH-Gx	
490-169367-12	GW-060866-022619-LB-MW-13	Total/NA	Water	NWTPH-Gx	
490-169367-13	GW-060866-022719-LB-MW-14	Total/NA	Water	NWTPH-Gx	
490-169367-14	GW-060866-022719-LB-MW-15	Total/NA	Water	NWTPH-Gx	

GC VOA (Continued)

Analysis Batch: 578491 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-169367-15	GW-060866-022719-LB-MW-DUP	Total/NA	Water	NWTPH-Gx	
490-169367-16	TB-1	Total/NA	Water	NWTPH-Gx	
MB 490-578491/8	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 490-578491/5	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 490-578491/6	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
490-169367-4 DU	GW-060866-022719-LB-MW-4	Total/NA	Water	NWTPH-Gx	

GC Semi VOA

Prep Batch: 578719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-169367-1	GW-060866-022719-LB-MW-1	Total/NA	Water	3510C	
490-169367-2	GW-060866-022619-LB-MW-2	Total/NA	Water	3510C	
490-169367-3	GW-060866-022719-LB-MW-3	Total/NA	Water	3510C	
490-169367-4	GW-060866-022719-LB-MW-4	Total/NA	Water	3510C	
490-169367-5	GW-060866-022619-LB-MW-5	Total/NA	Water	3510C	
490-169367-6	GW-060866-022619-LB-MW-6	Total/NA	Water	3510C	
490-169367-7	GW-060866-022619-LB-MW-7	Total/NA	Water	3510C	
490-169367-8	GW-060866-022719-LB-MW-8	Total/NA	Water	3510C	
490-169367-9	GW-060866-022619-LB-MW-9	Total/NA	Water	3510C	
490-169367-10	GW-060866-022619-LB-MW-11	Total/NA	Water	3510C	
490-169367-11	GW-060866-022719-LB-MW-12	Total/NA	Water	3510C	
490-169367-12	GW-060866-022619-LB-MW-13	Total/NA	Water	3510C	
490-169367-13	GW-060866-022719-LB-MW-14	Total/NA	Water	3510C	
490-169367-14	GW-060866-022719-LB-MW-15	Total/NA	Water	3510C	
490-169367-15	GW-060866-022719-LB-MW-DUP	Total/NA	Water	3510C	
MB 490-578719/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-578719/2-A	Lab Control Sample	Total/NA	Water	3510C	
490-169367-1 DU	GW-060866-022719-LB-MW-1	Total/NA	Water	3510C	
490-169367-10 DU	GW-060866-022619-LB-MW-11	Total/NA	Water	3510C	

Analysis Batch: 579083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-169367-1	GW-060866-022719-LB-MW-1	Total/NA	Water	NWTPH-Dx	578719
490-169367-2	GW-060866-022619-LB-MW-2	Total/NA	Water	NWTPH-Dx	578719
490-169367-3	GW-060866-022719-LB-MW-3	Total/NA	Water	NWTPH-Dx	578719
490-169367-4	GW-060866-022719-LB-MW-4	Total/NA	Water	NWTPH-Dx	578719
490-169367-5	GW-060866-022619-LB-MW-5	Total/NA	Water	NWTPH-Dx	578719
490-169367-6	GW-060866-022619-LB-MW-6	Total/NA	Water	NWTPH-Dx	578719
490-169367-7	GW-060866-022619-LB-MW-7	Total/NA	Water	NWTPH-Dx	578719
490-169367-8	GW-060866-022719-LB-MW-8	Total/NA	Water	NWTPH-Dx	578719
490-169367-9	GW-060866-022619-LB-MW-9	Total/NA	Water	NWTPH-Dx	578719
490-169367-10	GW-060866-022619-LB-MW-11	Total/NA	Water	NWTPH-Dx	578719
490-169367-11	GW-060866-022719-LB-MW-12	Total/NA	Water	NWTPH-Dx	578719
490-169367-12	GW-060866-022619-LB-MW-13	Total/NA	Water	NWTPH-Dx	578719
490-169367-13	GW-060866-022719-LB-MW-14	Total/NA	Water	NWTPH-Dx	578719
490-169367-14	GW-060866-022719-LB-MW-15	Total/NA	Water	NWTPH-Dx	578719
490-169367-15	GW-060866-022719-LB-MW-DUP	Total/NA	Water	NWTPH-Dx	578719
MB 490-578719/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	578719
LCS 490-578719/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	578719

GC Semi VOA (Continued)

Analysis Batch: 579083 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-169367-1 DU	GW-060866-022719-LB-MW-1	Total/NA	Water	NWTPH-Dx	578719
490-169367-10 DU	GW-060866-022619-LB-MW-11	Total/NA	Water	NWTPH-Dx	578719

Client Sample ID: GW-060866-022719-LB-MW-1

Lab Sample ID: 490-169367-1
Date Collected: 02/27/19 11:24
Matrix: Water
Date Received: 03/01/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578236	03/01/19 20:53	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 13:10	S1S	TAL NSH
Total/NA	Prep	3510C			985.2 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 17:46	AK1	TAL NSH

Client Sample ID: GW-060866-022619-LB-MW-2

Lab Sample ID: 490-169367-2
Date Collected: 02/26/19 15:25
Matrix: Water
Date Received: 03/01/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578409	03/02/19 21:51	S1S	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 13:41	S1S	TAL NSH
Total/NA	Prep	3510C			1011.5 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 18:03	AK1	TAL NSH

Client Sample ID: GW-060866-022719-LB-MW-3

Lab Sample ID: 490-169367-3
Date Collected: 02/27/19 09:37
Matrix: Water
Date Received: 03/01/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578236	03/01/19 21:20	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 14:12	S1S	TAL NSH
Total/NA	Prep	3510C			990.4 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 18:19	AK1	TAL NSH

Client Sample ID: GW-060866-022719-LB-MW-4

Lab Sample ID: 490-169367-4
Date Collected: 02/27/19 10:32
Matrix: Water
Date Received: 03/01/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578236	03/01/19 21:46	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 12:08	S1S	TAL NSH
Total/NA	Prep	3510C			1057.3 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 18:36	AK1	TAL NSH

Client Sample ID: GW-060866-022619-LB-MW-5

Lab Sample ID: 490-169367-5
Date Collected: 02/26/19 16:26
Matrix: Water
Date Received: 03/01/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578236	03/01/19 17:47	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 14:43	S1S	TAL NSH

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-169367-1
SDG: 701 Bozarth Ave, Woodland, WA

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1045 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 18:52	AK1	TAL NSH

Client Sample ID: GW-060866-022619-LB-MW-6

Lab Sample ID: 490-169367-6

Date Collected: 02/26/19 12:52
Matrix: Water
Date Received: 03/01/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578236	03/01/19 22:13	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 15:14	S1S	TAL NSH
Total/NA	Prep	3510C			1050.3 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 19:09	AK1	TAL NSH

Client Sample ID: GW-060866-022619-LB-MW-7

Lab Sample ID: 490-169367-7

Date Collected: 02/26/19 14:36
Matrix: Water
Date Received: 03/01/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578236	03/01/19 22:39	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 15:45	S1S	TAL NSH
Total/NA	Prep	3510C			1038 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 19:25	AK1	TAL NSH

Client Sample ID: GW-060866-022719-LB-MW-8

Lab Sample ID: 490-169367-8

Date Collected: 02/27/19 08:48
Matrix: Water
Date Received: 03/01/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578236	03/01/19 23:06	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 16:16	S1S	TAL NSH
Total/NA	Prep	3510C			1004.3 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 20:14	AK1	TAL NSH

Client Sample ID: GW-060866-022619-LB-MW-9

Lab Sample ID: 490-169367-9

Date Collected: 02/26/19 13:41
Matrix: Water
Date Received: 03/01/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578236	03/01/19 23:33	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 16:47	S1S	TAL NSH
Total/NA	Prep	3510C			1026.8 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 20:31	AK1	TAL NSH

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-169367-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-022619-LB-MW-11

Lab Sample ID: 490-169367-10
Date Collected: 02/26/19 11:39
Matrix: Water
Date Received: 03/01/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578236	03/01/19 23:59	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 17:17	S1S	TAL NSH
Total/NA	Prep	3510C			1055.4 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 21:04	AK1	TAL NSH

Client Sample ID: GW-060866-022719-LB-MW-12

Lab Sample ID: 490-169367-11
Date Collected: 02/27/19 10:50
Matrix: Water
Date Received: 03/01/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578236	03/01/19 18:14	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 17:48	S1S	TAL NSH
Total/NA	Prep	3510C			981.9 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 21:20	AK1	TAL NSH

Client Sample ID: GW-060866-022619-LB-MW-13

Lab Sample ID: 490-169367-12
Date Collected: 02/26/19 13:48
Matrix: Water
Date Received: 03/01/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578236	03/01/19 18:40	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 18:19	S1S	TAL NSH
Total/NA	Prep	3510C			1048.1 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 21:36	AK1	TAL NSH

Client Sample ID: GW-060866-022719-LB-MW-14

Lab Sample ID: 490-169367-13
Date Collected: 02/27/19 12:48
Matrix: Water
Date Received: 03/01/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578236	03/01/19 19:07	AK1	TAL NSH
Total/NA	Analysis	8260B		5	5 mL	5 mL	578409	03/02/19 23:37	S1S	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 18:50	S1S	TAL NSH
Total/NA	Prep	3510C			1018 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 21:52	AK1	TAL NSH

Client Sample ID: GW-060866-022719-LB-MW-15

Lab Sample ID: 490-169367-14
Date Collected: 02/27/19 12:14
Matrix: Water
Date Received: 03/01/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	578409	03/03/19 00:04	S1S	TAL NSH

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-169367-1
SDG: 701 Bozarth Ave, Woodland, WA

Client Sample ID: GW-060866-022719-LB-MW-15

Date Collected: 02/27/19 12:14
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	NWTPH-Gx		5	5 mL	5 mL	578491	03/05/19 07:10	S1S	TAL NSH
Total/NA	Prep	3510C			1015.8 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 22:09	AK1	TAL NSH

Client Sample ID: GW-060866-022719-LB-MW-DUP

Date Collected: 02/27/19 01:01
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578409	03/02/19 22:44	S1S	TAL NSH
Total/NA	Analysis	8260B		5	5 mL	5 mL	578409	03/02/19 23:11	S1S	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 19:52	S1S	TAL NSH
Total/NA	Prep	3510C			1054.1 mL	1 mL	578719	03/05/19 09:15	MCO	TAL NSH
Total/NA	Analysis	NWTPH-Dx		1			579083	03/06/19 22:25	AK1	TAL NSH

Client Sample ID: TB-1

Date Collected: 02/26/19 10:00
Date Received: 03/01/19 09:50

Lab Sample ID: 490-169367-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	578236	03/01/19 17:11	AK1	TAL NSH
Total/NA	Analysis	NWTPH-Gx		1	5 mL	5 mL	578491	03/04/19 11:37	S1S	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-169367-1
SDG: 701 Bozarth Ave, Woodland, WA

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL NSH
NWTPH-Dx	Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup	NWTPH	TAL NSH
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL NSH
5030B	Purge and Trap	SW846	TAL NSH

Protocol References:

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Shell Woodland

TestAmerica Job ID: 490-169367-1
SDG: 701 Bozarth Ave, Woodland, WA

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Washington	State Program	10	C789	07-19-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	1,1,1,2-Tetrachloroethane
8260B		Water	1,1,1-Trichloroethane
8260B		Water	1,1,2,2-Tetrachloroethane
8260B		Water	1,1,2-Trichloroethane
8260B		Water	1,1-Dichloroethane
8260B		Water	1,1-Dichloroethene
8260B		Water	1,1-Dichloropropene
8260B		Water	1,2,3-Trichlorobenzene
8260B		Water	1,2,3-Trichloropropane
8260B		Water	1,2,4-Trichlorobenzene
8260B		Water	1,2,4-Trimethylbenzene
8260B		Water	1,2-Dibromo-3-Chloropropane
8260B		Water	1,2-Dibromoethane (EDB)
8260B		Water	1,2-Dichlorobenzene
8260B		Water	1,2-Dichloroethane
8260B		Water	1,2-Dichloropropane
8260B		Water	1,3,5-Trimethylbenzene
8260B		Water	1,3-Dichlorobenzene
8260B		Water	1,3-Dichloropropane
8260B		Water	1,4-Dichlorobenzene
8260B		Water	2,2-Dichloropropane
8260B		Water	2-Butanone (MEK)
8260B		Water	2-Chlorotoluene
8260B		Water	2-Hexanone
8260B		Water	4-Chlorotoluene
8260B		Water	4-Methyl-2-pentanone (MIBK)
8260B		Water	Acetone
8260B		Water	Benzene
8260B		Water	Bromobenzene
8260B		Water	Bromochloromethane
8260B		Water	Bromodichloromethane
8260B		Water	Bromoform
8260B		Water	Bromomethane
8260B		Water	Carbon disulfide
8260B		Water	Carbon tetrachloride
8260B		Water	Chlorobenzene
8260B		Water	Chlorodibromomethane
8260B		Water	Chloroethane
8260B		Water	Chloroform
8260B		Water	Chloromethane
8260B		Water	cis-1,2-Dichloroethene
8260B		Water	cis-1,3-Dichloropropene
8260B		Water	Dibromomethane
8260B		Water	Dichlorodifluoromethane
8260B		Water	Ethylbenzene

Laboratory: TestAmerica Nashville (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Washington	State Program	10	C789	07-19-19
8260B	Water	Hexachlorobutadiene		
8260B	Water	Isopropylbenzene		
8260B	Water	Methyl tert-butyl ether		
8260B	Water	Methylene Chloride		
8260B	Water	Naphthalene		
8260B	Water	n-Butylbenzene		
8260B	Water	N-Propylbenzene		
8260B	Water	p-Isopropyltoluene		
8260B	Water	sec-Butylbenzene		
8260B	Water	Styrene		
8260B	Water	tert-Butylbenzene		
8260B	Water	Tetrachloroethene		
8260B	Water	Toluene		
8260B	Water	trans-1,2-Dichloroethene		
8260B	Water	trans-1,3-Dichloropropene		
8260B	Water	Trichloroethene		
8260B	Water	Trichlorofluoromethane		
8260B	Water	Vinyl chloride		
8260B	Water	Xylenes, Total		

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-169367 Chain of Custody

Cooler Received/Opened On 3/1/2019 @ 9:50

Time Samples Removed From Cooler 1530 Time Samples Placed In Storage 1600 (2 Hour Window)

1. Tracking # 4339 (last 4 digits, FedEx) Courier: Fedex

IR Gun ID 31470366 pH Strip Lot ✓ Chlorine Strip Lot —

2. Temperature of rep. sample or temp blank when opened: 0.1 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) ACG

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

● ⬅ Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) TR

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) TR

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) TR

I certify that I attached a label with the unique LIMS number to each container (intial) TR

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 3/1/2019 @ 9:50

Time Samples Removed From Cooler 1530 Time Samples Placed In Storage 1600 (2 Hour Window)

1. Tracking # 4340 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960358 pH Strip Lot ____ Chlorine Strip Lot ____

2. Temperature of rep. sample or temp blank when opened: 1.6 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

TR 3/1/19

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #____

I certify that I unloaded the cooler and answered questions 7-14 (intial) TR

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) TR

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) TR

I certify that I attached a label with the unique LIMS number to each container (intial) TR

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO #____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 3/1/2019 @ 9:50

Time Samples Removed From Cooler 1530 Time Samples Placed In Storage 1600 (2 Hour Window)

1. Tracking # 4440 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960358 pH Strip Lot ✓ Chlorine Strip Lot —

2. Temperature of rep. sample or temp blank when opened: 3.0 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

● ⬅ Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) TR

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) TR

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) TR

I certify that I attached a label with the unique LIMS number to each container (intial) TR

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. BURES	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 490-95876-27140.1
Client Contact: Brian Peters	Phone: (206) 348-8985	E-Mail: roxanne.cisneros@testamericainc.com		Page: Page 1 of 2
Company: GHD Services Inc.				Job #:
Address: 20818 44th Ave W Suite 190	Due Date Requested:			
City: Lynnwood	TAT Requested (days): STANDARD			
State, Zip: WA, 98036				
Phone:	PO #: 4036058			
Email: brian.peters@ghd.com	WO #: 060866			
Project Name: Shell - Washington	Project #: 49001126			
Site: 701 BOZARTH AVE, WOODLAND	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B, NWTPH_Gx	NWTPH_Dx - NWTPH-Dx w/ SGT	8260B - 8260 VOC											Total Number of Containers	Special Instructions/Note:
Preservation Code:							A	N	A												
GW-060866-022719-LB-MW-1	2/27/19	1124	G	Water	N	N	X	X	X											8	
GW-060866-022619-LB-MW-2	2/26/19	1525	G	Water	N	N	X	X	X											8	
GW-060866-022719-LB-MW-3	2/27/19	0937	G	Water	N	N	X	X	X											8	
GW-060866-022719-LB-MW-4	2/27/19	1032	G	Water	N	N	X	X	X											8	
GW-060866-022619-LB-MW-5	2/26/19	1626	G	Water	N	N	X	X	X											8	
GW-060866-022619-LB-MW-6	2/26/19	1252	G	Water	N	N	X	X	X											8	
GW-060866-022619-LB-MW-7	2/26/19	1436	G	Water	N	N	X	X	X											8	
GW-060866-022719-LB-MW-8	2/27/19	0848	G	Water	N	N	X	X	X											8	
GW-060866-022719-LB-MW-9	2/27/19	1341	G	Water	N	N	X	X	X											8	
GW-060866-022619-LB-MW-11	2/26/19	1139	G	Water	N	N	X	X	X											8	
GW-060866-022619-LB-MW-12	2/26/19	1050	G	Water	N	N	X	X	X											8	

Loc: 490
169367

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/28/19 1600	BTS	SHIPPED VIA FEDEX		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				3/1/19 950	TA-JAS

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.7, 1.6, 3.0

Ver: 08/04/2016

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. BORES	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 490-95876-27140.2
Client Contact: Brian Peters	Phone: (206) 348-8985	E-Mail: roxanne.cisneros@testamericainc.com		Page: Page 2 of 2
Company: GHD Services Inc.		Analysis Requested		Job #:
Address: 20818 44th Ave W Suite 190	Due Date Requested:			
City: Lynnwood	TAT Requested (days): STANDARD			
State, Zip: WA, 98036				
Phone:	PO #: 4036058			
Email: brian.peters@ghd.com	WO #: 060866			
Project Name: Shell - Washington	Project #: 49001126			
Site: 701 BOZARTH AVE, WOODLAND	SSOW#:			

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B, NWTPH_Gx	NWTPH_Dx - NWTPH-Dx w/ SGT	8260B - 8260 VOC	Total Number of Containers	Special Instructions/Note:
			Preservation Code:				A	N	A		
GW-060866-022619-LB-MW-13	2/26/19	1348	G	Water	N	N	X	X	X	8	
GW-060866-022719-LB-MW-14	2/27/19	1248	G	Water	N	N	X	X	X	8	
GW-060866-022719-LB-MW-15	2/27/19	1214	G	Water	N	N	X	X	X	8	
GW-060866-022719-LB-DUP	2/27/19	—	G	Water	N	N	X	X	X	8	
TB-1	2/26/19	1000	G	Water	N	N	X		X	2	
				Water							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		2/28/19 1600	BTS	SHIPPED VIA FEDEX		
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
					3/1/19 950	TA-NAS

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.7, L6, 3.0

Ver: 08/04/2016

Shell Global Solutions

Brian Faulkner
Shell Oil Company
Legal - Manufacturing & Regulatory
910 Louisiana #4683
One Shell Plaza
Houston, TX

Shell Global Solutions (US) Inc.
Westhollow Technology Center
3333 Highway 6 South
Houston, TX 77082-3101
USA
Tel +1 281-544 8215
+1 281-703-5669
Email Ileana.Rhodes@Shell.com

June 23, 2016

Re: Analysis of Separate Phase Hydrocarbon Sample from MW10 - 701 Bozarth Ave., Woodland WA

Brian,

We analyzed a sample from MW-10 taken May 11, 2016. This sample contains hydrocarbons primarily in the C7 to C14 carbon range. This range can include heavily weathered gasoline, aromatic and mineral spirit type solvents. The types of detected compounds (primarily xylenes and aliphatics n-octane to n-tetradecane range) indicate the presence of hydrocarbon type solvents and not fuels. These hydrocarbons are too heavy for gasoline and too narrow and light range for kerosene.

No lead was detected in the sample and gasoline before 1970 contained lead. Unleaded gasoline is defined as <0.05 g/gallon or 13 ppm. These results confirm no impact from gasoline from Shell operations at this site since Shell exited the site in 1969.

Selected target compounds are listed in Table 1. The chromatogram from analysis of the sample is shown in Figure 1.

Please let me know if you wish to discuss.

Best regards,

Ileana Rhodes, Ph.D.

Principal Consultant

cc: Andrea Wing
Beth Flowers
Emiliano Hinojosa

Table 1: Summary of Target Compounds.

Compound	Method	Units	MW-10
Ethanol	GC/MS	wt%	ND(<0.01)
MTBE	GC/MS	wt%	ND(<0.01)
DIPE	GC/MS	wt%	ND(<0.01)
ETBE	GC/MS	wt%	ND(<0.01)
TAME	GC/MS	wt%	ND(<0.01)
Isopentane	GC/FID	wt%	ND(<0.01)
n-Heptane	GC/FID	wt%	0.25
n-Octane	GC/FID	wt%	0.64
Methylcyclohexane	GC/FID	wt%	0.33
Isooctane	GC/MS	wt%	0.12
Benzene	GC/MS	wt%	ND(<0.01)
Toluene	GC/MS	wt%	0.69
Ethylbenzene	GC/MS	wt%	0.49
Xylene2	GC/MS	wt%	3.2
1,2,4-Trimethylbenzene	GC/FID	wt%	3.2
Total Sulfur	D5453	wt%	0.22
Organic Lead	GC/MS	g/gallon	ND<0.0054)
<nC10	GC/FID	wt%	35
GC/MS: Gas chromatography with mass spectrometry detection			
GC/FID: Gas chromatography with flame ionization detection			
UVF: Ultraviolet fluorescence, ASTM D5453			

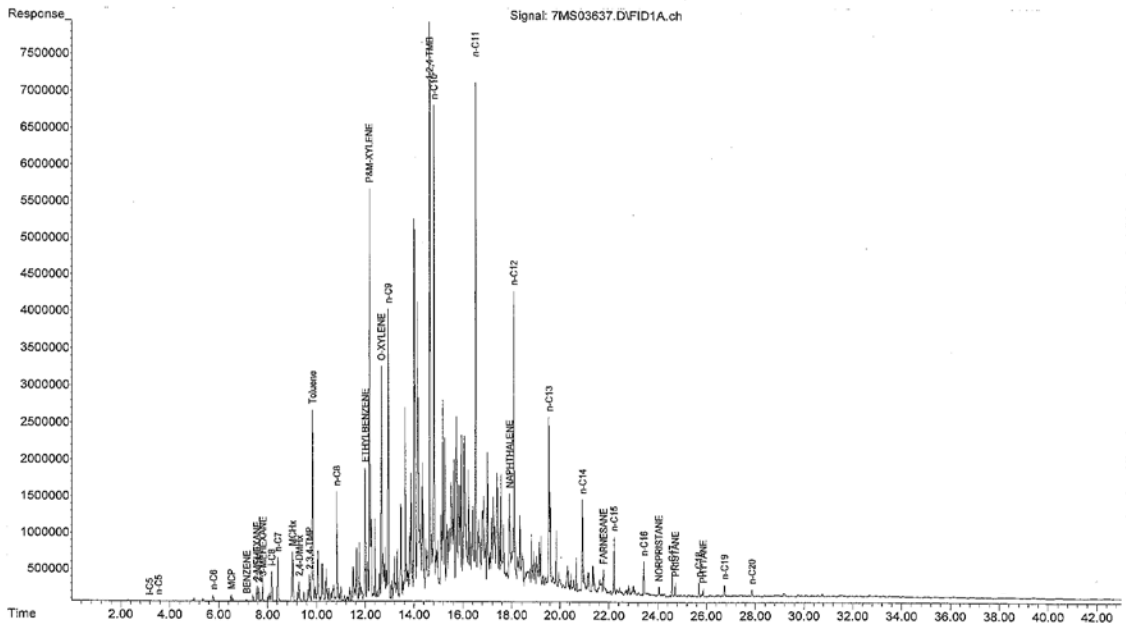


Figure 1: Gas chromatogram with flame ionization detection of MW-10. Hydrocarbons detected are generally in the C7 to C14 range.

Shell Oil Products US Chain Of Custody Record

LAB (LOCATION)
☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☐ TESTAMERICA (_____)
☑ Other (_____)
Lab Vendor # 1364569 (TestAmerica)

Please Check Appropriate Box:
☐ GW PDG ☐ PIPELINE ☑ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☐ OTHER _____

Print Bill To Contact Name: Brian Peters
PO: #
PlaNet Site or Project ID
GSAP Project ID
☐ CHECK IF NO INCIDENT # APPLIES
DATE: 5/11/16
PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services
LOG CODE: BTSS
SITE ADDRESS: Street and City: 701 Bozarth Ave., Woodland
State: WA
GHD Project / Task Number:
ADDRESS: 1680 Rogers Ave., San Jose, CA
EDF DELIVERABLE TO (Name, Company, Office Location): Brian Peters, GHD, Lynnwood, WA
PHONE NO.: 425-563-6506
E-MAIL: brian.peters@aecom.com
AECOM Other ID
PROJECT CONTACT (Hardcopy or PDF Report to): Brian Peters
TELEPHONE: 206-438-2371
FAX:
EB To Contact E-MAIL: brian.peters@ghd.com
SAMPLER NAME(S) (Print): LEE BORES
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 7 DAYS ☐ 5 DAYS ☐ 3 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☑ UST AGENCY: Washington Dept of Ecology

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☐ LEVEL 4 ☐ OTHER (SPECIFY) _____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☐ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
UNIT COST
NON-UNIT COST
COE FINGERPRINT

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	COE FINGERPRINT
	SPH-060866-051116-MW-MW-D	5/11/16	1150	SPH				X		2	X

Relinquished by: (Signature)
Received by: (Signature) SHIPPED VIA FEDEX
Date:
Time:

Relinquished by: (Signature)
Received by: (Signature) Emiliano M. Hinojosa
Date: 5/27/16
Time: 1000

Relinquished by: (Signature)
Received by: (Signature)
Date:
Time:

Version: 14Dec15

March 15, 2019

Brian Peters
GHD, Inc
20818 44th Ave West
Suite 190
Lynnwood, WA 98036

RE: Shell Woodland
Project Number: 060866-18.04

Pace Analytical received 3 samples on March 1, 2019 for analysis labeled P.060866.022619.DT.Sump, P.060866.022619.DT.Stand Pipe, and P.060866.022619.DT.MW10. Per client request, the following analyses were performed:

1. (C3-C12) Quantitative Molecular Characterization by GC/MS - full scan mode
2. (C8-C40) Semi-Quantitative Molecular Characterization by GC/MS - full scan mode
3. Organic Lead Speciation by GC/ECD

The sample analysis was performed under laboratory number **29604**.

Please call the lab at 412-826-5245, or you may email any questions or concerns to ruth.welsh@pacelabs.com regarding any analytical data reports.

Respectfully submitted,

Ruth Welsh

Ruth Welsh
Customer Service

(C3-C12) Quantitative Molecular Characterization by GC/MS - full scan mode

PIANO, Oxygenated Blending Agents, Lead Scavengers, MMT & Thiophenes

Brian Peters
GHD
20818 44th West Suite 190
Lynnwood, WA 98036

Lab ID: 29604-1
Collected: 2/26/2019
Received: 3/1/2019
Matrix: Product

Client ID: P.060866.022619.DT.SUMP

Project: Shell Woodland
Project #: 34033821
Collected by: D. Trudeau

Analyzed: 3/7/2019
Q Method: 030519.M

CONSTITUENTS	CLASS	ABBR.	ssRL mg/kg	RESULT mg/kg	QUALIFIER
Isopentane (2-Methylbutane)	I	IP	140.9	140.9	U
1-Pentene	O	1P	140.9	140.9	U
2-Methyl-1-butene	O	2M1B	140.9	140.9	U
Pentane (nC5)	P	C5	140.9	140.9	U
trans-2-pentene	O	T2P	140.9	140.9	U
cis-2-pentene	O	C2P	140.9	140.9	U
2-Methyl-2-butene (t)	O	2M2B	140.9	140.9	U
2,2-Dimethylbutane (t)	I	22DMB	140.9	140.9	U
Cyclopentane	N	CYP	140.9	140.9	U
2,3-Dimethylbutane	I	23DMB	140.9	140.9	U
2-Methylpentane	I	2MP	140.9	140.9	U
Methyl-tert-butyl ether (MTBE)	ADD	MTBE	105.6	105.6	U
3-Methylpentane	I	3MP	140.9	140.9	U
1-Hexene	O	1HX	140.9	140.9	U
Hexane (nC6)	P	C6	140.9	140.9	U
Di-isopropyl ether (DIPE)	ADD	DIPE	105.6	105.6	U
trans-2-hexene (t)	O	T2HE	140.9	140.9	U
2-Methyl-2-pentene (t)	O	2M2P	140.9	140.9	U
cis-2-hexene (t)	O	C2HE	140.9	140.9	U
cis-3-Methyl-2-pentene (t)	O	C3M2P	140.9	140.9	U
Ethyl-tert-butyl ether (ETBE)	ADD	ETBE	105.6	105.6	U
2,2-Dimethylpentane (t)	I	22DMP	140.9	140.9	U
Methylcyclopentane	N	MCYP	140.9	140.9	U
2,4-Dimethylpentane	I	24DMP	140.9	140.9	U
1,2-Dichloroethane (EDC)	ADD	EDC	105.6	105.6	U
Benzene	A	B	140.9	140.9	U
3,3-Dimethylpentane (t)	I	33DMP	140.9	140.9	U
Thiophene	S	THIO	105.6	105.6	U
Cyclohexane	N	CYH	140.9	140.9	U
2-Methylhexane	I	2MH	140.9	140.9	U
2,3-Dimethylpentane	I	23DMP	140.9	140.9	U

Brian Peters
GHD
20818 44th West Suite 190
Lynnwood, WA 98036

Lab ID: 29604-1
Collected: 2/26/2019
Received: 3/1/2019
Matrix: Product
Client ID: P.060866.022619.DT.SUMP

Project: Shell Woodland
Project #: 34033821
Collected by: D. Trudeau

Analyzed: 3/7/2019
Q Method: 030519.M

CONSTITUENTS	CLASS	ABBR.	ssRL mg/kg	RESULT mg/kg	QUALIFIER
Tert-amyl methyl ether (TAME)	ADD	TAME	105.6	105.6	U
3-Methylhexane	I	3MH	140.9	140.9	U
trans-1,3-Dimethylcyclopentane (t)	N	T13DMCYP	140.9	140.9	U
cis-1,3-Dimethylcyclopentane (t)	N	C13DMCYP	140.9	140.9	U
trans-1,2-Dimethylcyclopentane (t)	N	T12DMCYP	140.9	140.9	U
2,2,4-Trimethylpentane (isooctane)	I	224TMP	422.5	422.5	U
1-Heptene	O	1HP	140.9	140.9	U
Heptane (nC7)	P	C7	140.9	140.9	U
trans-2-heptene (t)	O	T2HP	140.9	140.9	U
Methylcyclohexane	N	MCYH	140.9	140.9	U
2,5-Dimethylhexane	I	25DMH	422.5	422.5	U
2,2,3-Trimethylpentane	I	233TMP	140.9	140.9	U
2,4-Dimethylhexane	I	24DMH	140.9	140.9	U
2,3,4-Trimethylpentane	I	234TMP	140.9	140.9	U
2,3,3-Trimethylpentane	I	233TMP	140.9	140.9	U
Toluene	A	T	140.9	140.9	U
2-Methylthiophene	S	2MTHIO	105.6	105.6	U
2,3-Dimethylhexane	I	23DMH	140.9	140.9	U
3-Methylthiophene	S	3MTHIO	105.6	105.6	U
2-Methylheptane	I	2MHP	140.9	140.9	U
4-Methylheptane (t)	I	4MHP	140.9	140.9	U
3-Methylheptane	I	3MHP	281.7	281.7	U
3-Ethylhexane	I	3EHX	281.7	281.7	U
1,2-Dibromoethane (EDB)	ADD	EDB	140.9	140.9	U
1-Octene	O	1O	140.9	140.9	U
Octane (nC8)	P	C8	140.9	140.9	U
2,4-Dimethylheptane (t)	I	24DMHP	140.9	140.9	U
2,5-Dimethylheptane (t)	I	25DMHP	140.9	140.9	U
Ethylbenzene	A	EB	140.9	140.9	U
2-Ethylthiophene	S	2ETHIO	211.3	211.3	U
2,3-Dimethylheptane (t)	I	23DMHP	140.9	140.9	U

Brian Peters
GHD
20818 44th West Suite 190
Lynnwood, WA 98036

Lab ID: 29604-1
Collected: 2/26/2019
Received: 3/1/2019
Matrix: Product
Client ID: P.060866.022619.DT.SUMP

Project: Shell Woodland
Project #: 34033821
Collected by: D. Trudeau

Analyzed: 3/7/2019
Q Method: 030519.M

CONSTITUENTS	CLASS	ABBR.	ssRL mg/kg	RESULT mg/kg	QUALIFIER
m-Xylene	A	MX	140.9	140.9	U
p-Xylene	A	PX	140.9	140.9	U
4-Methyloctane (t)	I	4MO	140.9	140.9	U
2-Methyloctane (t)	I	2MO	140.9	140.9	U
3-Methyloctane (t)	I	3MO	140.9	140.9	U
Styrene	A	STRE	140.9	140.9	U
o-Xylene	A	OX	140.9	140.9	U
1-Nonene	O	1N	422.5	422.5	U
Nonane (nC9)	P	C9	281.7	281.7	U
Isopropylbenzene (cumene)	A	IPROPB	140.9	140.9	U
n-Propylbenzene	A	NPRPPB	281.7	281.7	U
1-Methyl-3-ethylbenzene	A	1M3EB	281.7	281.7	U
1-Methyl-4-ethylbenzene	A	1M4EB	281.7	281.7	U
1,3,5-Trimethylbenzene (mesitylene)	A	135TMB	281.7	281.7	U
1-Methyl-2-ethylbenzene	A	1M2EB	281.7	281.7	U
1,2,4-Trimethylbenzene	A	124TMB	140.9	140.9	U
1-Decene	O	1D	422.5	422.5	U
Decane (nC10)	P	C10	422.5	422.5	U
sec-Butylbenzene	A	SBUB	140.9	140.9	U
1-Methyl-3-isopropylbenzene (m-cymene)	A	1M3IPROPB	140.9	140.9	U
1-Methyl-4-isopropylbenzene (p-cymene)	A	1M4IPROPB	140.9	140.9	U
Indane	A	IA	140.9	140.9	U
Indene	A	IE	140.9	140.9	U
1-Methyl-2-isopropybenzene (o-cymene)	A	1M2IPROPB	140.9	140.9	U
1-Methyl-3-propylbenzene	A	1M3PROPB	281.7	281.7	U
1-Methyl-4-propylbenzene	A	1M4PROPB	140.9	140.9	U
n-Butylbenzene	A	NBB	140.9	140.9	U
1,3-Dimethyl-5-ethylbenzene	A	13DM5EB	140.9	140.9	U
1,2,diethylbenzene	A	12DEB	140.9	140.9	U
1-Methyl-2-propylbenzene	A	1M2PROPB	140.9	140.9	U
1,4-Dimethyl-2-ethylbenzene	A	14DM2EB	281.7	281.7	U

Brian Peters
GHD
20818 44th West Suite 190
Lynnwood, WA 98036

Lab ID: 29604-1
Collected: 2/26/2019
Received: 3/1/2019
Matrix: Product

Client ID: P.060866.022619.DT.SUMP

Project: Shell Woodland
Project #: 34033821
Collected by: D. Trudeau

Analyzed: 3/7/2019
Q Method: 030519.M

CONSTITUENTS	CLASS	ABBR.	ssRL mg/kg	RESULT mg/kg	QUALIFIER
1,3-Dimethyl-4-ethylbenzene	A	13DM4EB	281.7	281.7	U
1,2-Dimethyl-4-ethylbenzene	A	12DM4EB	281.7	281.7	U
1,2-Dimethyl-3-ethylbenzene	A	12DM3EB	281.7	281.7	U
Undecane (nC11)	P	C11	845.1	845.1	U
1,2,4,5-Tetramethylbenzene	A	1245TMB	281.7	281.7	U
1,2,3,5-Tetramethylbenzene (t)	A	1235TMB	281.7	281.7	U
n-Pentylbenzene	A	NPYB	140.9	140.9	U
Naphthalene	A	N	140.9	140.9	U
Benzothiophene	S	BTHIO	105.6	105.6	U
Dodecane (nC12)	P	C12	563.4	563.4	U
1,2,3,4-Tetramethylbenzene (t)	A	1234TMB	281.7	281.7	U
MMT	ADD	MMT	105.6	105.6	U
2-Methylnaphthalene	A	2MN	140.9	179.7	
1-Methylnaphthalene	A	1MN	140.9	140.9	U

Benzene d-6 (RS)	96.51	%
Toluene-d8 (RS)	91.56	%
Ethylbenzene d10 (RS)	108.58	%

ssRL - Sample Specific Reporting Limit
Results listed as U would have been reported if present at or above the listed ssRL
J - Values greater than the ssRL but less than the PQL (3 x ssRL).
D - Secondary dilution perfomed
Q - Surrogate recovery limit exceedance
I - Matrix Interference
NC - Not calibrated
Note: Extracted by EPA 5030 (Purge and Trap).

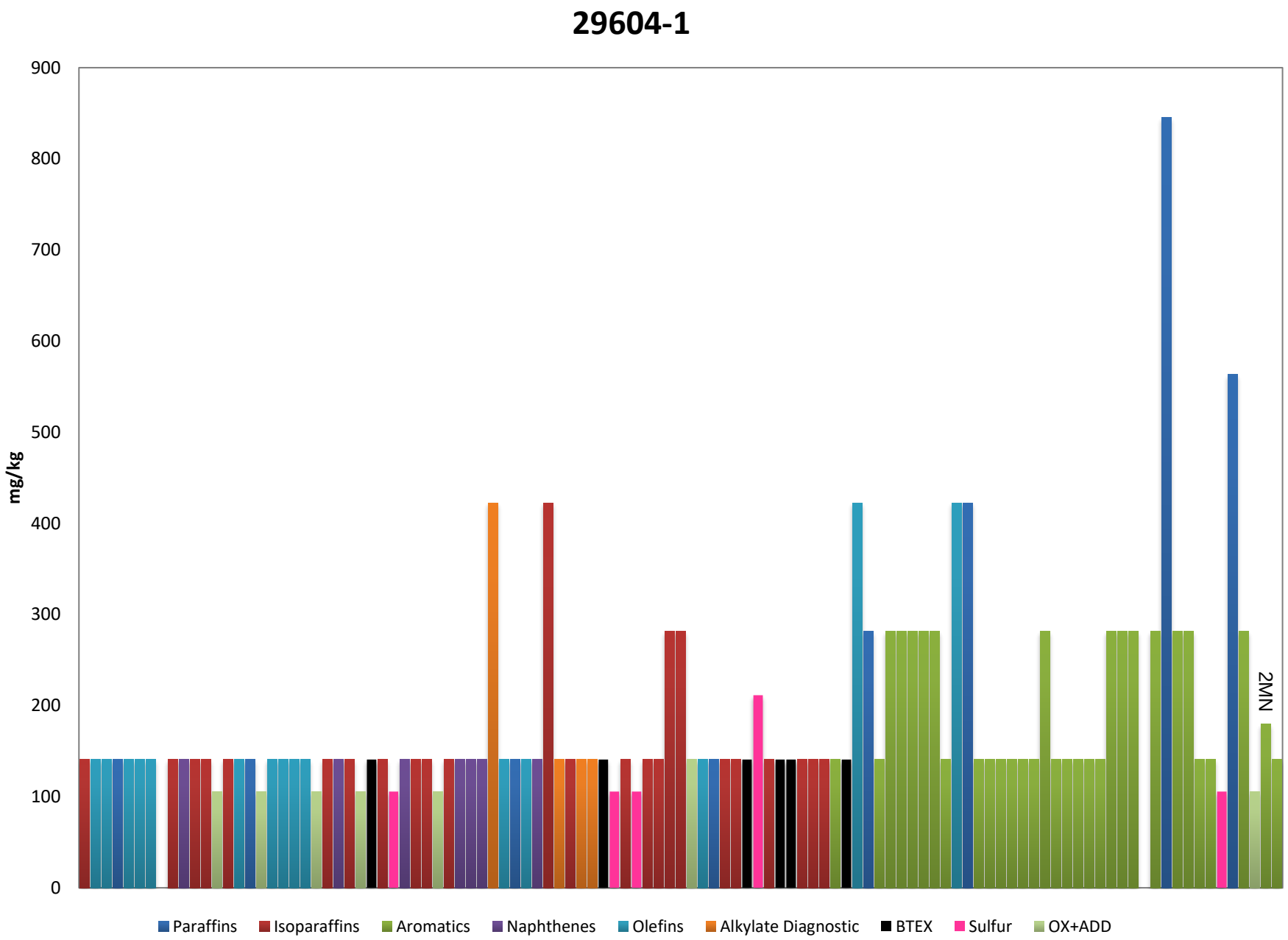
US631

030619-PROD12.D & dilution 030619-PROD12.D

Submitted by,
Pace Energy Services, LLC

PAES ID	**29604-1**
Sample ID	**P.060866.022619.DT.SUMP**
Evaporation	
n-Pentane / (n-Pentane+n-Heptane)	NR
2-Methylpentane / (2-Methylpentane+2-Methylheptane)	NR
Waterwashing	
Benzene / (Benzene+Cyclohexane)	
Toluene / (Toluene+Methylcyclohexane)	NR
Aromatics / Total Paraffins (n+iso+cyc)	NR
Aromatics / Naphthenes	NR
wt% < o-xylene	0.00
Biodegradation	
(C4-C8 Para +Isopara) / C4-C8 Olefins	NR
3-Methylhexane / n-Heptane	NR
Methylcyclohexane / n-Heptane	NR
Isoparaffins + Naphthenes / Paraffins	NR
Diagnostic Ratios (Refining Properties)	
2,2,4-Trimethylpentane / (2,2,4-Trimethylpentane+Methylcyclohexane)	NR
2,2,4-Trimethylpentane / Total TMPs	NR
nC9 / Isopropylbenzene	NR
nC10 / 1-Methyl-2-ethylbenzene	NR
nC11 / 1,4-Dimethyl-2-ethylbenzene	NR
iC5 / (iC5+nC5)	NR
(2-methylhexane + 2,3dimethylpentane) / (3-methylhexane + 2,4 dimethylpentane)	NR
Naphthalene / (Naphthalene+nC12)	NR
Methylcyclohexane/(Methylcyclohexane+Toluene)	NR
Toluene/n-Octane	NR
Oxygenates & Other (mg/kg)	
Methyl-tert-butyl ether (MTBE)	U
Di-isopropyl ether (DIPE)	U
Ethyl-tert-butyl ether (ETBE)	U
Tert-amyl methyl ether (TAME)	U
MMT	U
Lead Scavengers (mg/kg)	
1,2-Dichloroethane (EDC)	U
1,2-Dibromoethane (EDB)	U
Sulfur containing HCs (mg/kg)	
Thiophene	U
2-Methylthiophene	U
3-Methylthiophene	U
2-Ethylthiophene	U
Benzothiophene	U
Relative Percentages	
% Paraffinic	0.0
% Isoparaffinic	0.0
% Aromatic	100.0
% Naphthenic	0.0
% Olefinic	0.0

SAMPLE HISTOGRAM



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Lab ID: 29604-2
Collected: 2/26/2019
Received: 3/1/2019
Matrix: Product

Client ID: P.060866.022619.DT.Stand Pipe
Project: Shell Woodland
Project #: 34033821
Collected by: D. Trudeau
Analyzed: 3/7/2019
Q Method: 030519.M

CONSTITUENTS	CLASS	ABBR.	ssRL mg/kg	RESULT mg/kg	QUALIFIER
Isopentane (2-Methylbutane)	I	IP	160.0	160.0	U
1-Pentene	O	1P	160.0	160.0	U
2-Methyl-1-butene	O	2M1B	160.0	160.0	U
Pentane (nC5)	P	C5	160.0	160.0	U
trans-2-pentene	O	T2P	160.0	160.0	U
cis-2-pentene	O	C2P	160.0	160.0	U
2-Methyl-2-butene (t)	O	2M2B	160.0	160.0	U
2,2-Dimethylbutane (t)	I	22DMB	160.0	160.0	U
Cyclopentane	N	CYP	160.0	160.0	U
2,3-Dimethylbutane	I	23DMB	160.0	160.0	U
2-Methylpentane	I	2MP	160.0	160.0	U
Methyl-tert-butyl ether (MTBE)	ADD	MTBE	120.0	120.0	U
3-Methylpentane	I	3MP	160.0	160.0	U
1-Hexene	O	1HX	160.0	160.0	U
Hexane (nC6)	P	C6	160.0	160.0	U
Di-isopropyl ether (DIPE)	ADD	DIPE	120.0	120.0	U
trans-2-hexene (t)	O	T2HE	160.0	160.0	U
2-Methyl-2-pentene (t)	O	2M2P	160.0	160.0	U
cis-2-hexene (t)	O	C2HE	160.0	160.0	U
cis-3-Methyl-2-pentene (t)	O	C3M2P	160.0	160.0	U
Ethyl-tert-butyl ether (ETBE)	ADD	ETBE	120.0	120.0	U
2,2-Dimethylpentane (t)	I	22DMP	160.0	160.0	U
Methylcyclopentane	N	MCYP	160.0	160.0	U
2,4-Dimethylpentane	I	24DMP	160.0	160.0	U
1,2-Dichloroethane (EDC)	ADD	EDC	120.0	120.0	U
Benzene	A	B	160.0	160.0	U
3,3-Dimethylpentane (t)	I	33DMP	160.0	160.0	U
Thiophene	S	THIO	120.0	120.0	U
Cyclohexane	N	CYH	160.0	160.0	U
2-Methylhexane	I	2MH	160.0	160.0	U
2,3-Dimethylpentane	I	23DMP	160.0	160.0	U

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Lab ID: 29604-2
Collected: 2/26/2019
Received: 3/1/2019
Matrix: Product

Client ID: P.060866.022619.DT.Stand Pipe

Project: Shell Woodland
Project #: 34033821
Collected by: D. Trudeau

Analyzed: 3/7/2019
Q Method: 030519.M

CONSTITUENTS	CLASS	ABBR.	ssRL mg/kg	RESULT mg/kg	QUALIFIER
Tert-amyl methyl ether (TAME)	ADD	TAME	120.0	120.0	U
3-Methylhexane	I	3MH	160.0	160.0	U
trans-1,3-Dimethylcyclopentane (t)	N	T13DMCYP	160.0	160.0	U
cis-1,3-Dimethylcyclopentane (t)	N	C13DMCYP	160.0	160.0	U
trans-1,2-Dimethylcyclopentane (t)	N	T12DMCYP	160.0	160.0	U
2,2,4-Trimethylpentane (isooctane)	I	224TMP	480.0	480.0	U
1-Heptene	O	1HP	160.0	160.0	U
Heptane (nC7)	P	C7	160.0	160.0	U
trans-2-heptene (t)	O	T2HP	160.0	160.0	U
Methylcyclohexane	N	MCYH	160.0	160.0	U
2,5-Dimethylhexane	I	25DMH	480.0	480.0	U
2,2,3-Trimethylpentane	I	233TMP	160.0	160.0	U
2,4-Dimethylhexane	I	24DMH	160.0	160.0	U
2,3,4-Trimethylpentane	I	234TMP	160.0	160.0	U
2,3,3-Trimethylpentane	I	233TMP	160.0	160.0	U
Toluene	A	T	160.0	160.0	U
2-Methylthiophene	S	2MTHIO	120.0	120.0	U
2,3-Dimethylhexane	I	23DMH	160.0	160.0	U
3-Methylthiophene	S	3MTHIO	120.0	120.0	U
2-Methylheptane	I	2MHP	160.0	160.0	U
4-Methylheptane (t)	I	4MHP	160.0	160.0	U
3-Methylheptane	I	3MHP	320.0	320.0	U
3-Ethylhexane	I	3EHX	320.0	320.0	U
1,2-Dibromoethane (EDB)	ADD	EDB	160.0	160.0	U
1-Octene	O	1O	160.0	160.0	U
Octane (nC8)	P	C8	160.0	160.0	U
2,4-Dimethylheptane (t)	I	24DMHP	160.0	160.0	U
2,5-Dimethylheptane (t)	I	25DMHP	160.0	160.0	U
Ethylbenzene	A	EB	160.0	160.0	U
2-Ethylthiophene	S	2ETHIO	240.0	240.0	U
2,3-Dimethylheptane (t)	I	23DMHP	160.0	160.0	U

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Lab ID: 29604-2
Collected: 2/26/2019
Received: 3/1/2019
Matrix: Product

Client ID: P.060866.022619.DT.Stand Pipe
Project: Shell Woodland
Project #: 34033821
Collected by: D. Trudeau
Analyzed: 3/7/2019
Q Method: 030519.M

CONSTITUENTS	CLASS	ABBR.	ssRL mg/kg	RESULT mg/kg	QUALIFIER
m-Xylene	A	MX	160.0	160.0	U
p-Xylene	A	PX	160.0	160.0	U
4-Methyloctane (t)	I	4MO	160.0	160.0	U
2-Methyloctane (t)	I	2MO	160.0	160.0	U
3-Methyloctane (t)	I	3MO	160.0	160.0	U
Styrene	A	STRE	160.0	160.0	U
o-Xylene	A	OX	160.0	160.0	U
1-Nonene	O	1N	480.0	480.0	U
Nonane (nC9)	P	C9	320.0	320.0	U
Isopropylbenzene (cumene)	A	IPROPB	160.0	160.0	U
n-Propylbenzene	A	NPRPPB	320.0	320.0	U
1-Methyl-3-ethylbenzene	A	1M3EB	320.0	320.0	U
1-Methyl-4-ethylbenzene	A	1M4EB	320.0	320.0	U
1,3,5-Trimethylbenzene (mesitylene)	A	135TMB	320.0	320.0	U
1-Methyl-2-ethylbenzene	A	1M2EB	320.0	320.0	U
1,2,4-Trimethylbenzene	A	124TMB	160.0	160.0	U
1-Decene	O	1D	480.0	480.0	U
Decane (nC10)	P	C10	480.0	480.0	U
sec-Butylbenzene	A	SBUB	160.0	160.0	U
1-Methyl-3-isopropylbenzene (m-cymene)	A	1M3IPROPB	160.0	160.0	U
1-Methyl-4-isopropylbenzene (p-cymene)	A	1M4IPROPB	160.0	160.0	U
Indane	A	IA	160.0	160.0	U
Indene	A	IE	160.0	160.0	U
1-Methyl-2-isopropybenzene (o-cymene)	A	1M2IPROPB	160.0	160.0	U
1-Methyl-3-propylbenzene	A	1M3PROPB	320.0	320.0	U
1-Methyl-4-propylbenzene	A	1M4PROPB	160.0	160.0	U
n-Butylbenzene	A	NBB	160.0	160.0	U
1,3-Dimethyl-5-ethylbenzene	A	13DM5EB	160.0	160.0	U
1,2,diethylbenzene	A	12DEB	160.0	160.0	U
1-Methyl-2-propylbenzene	A	1M2PROPB	160.0	160.0	U
1,4-Dimethyl-2-ethylbenzene	A	14DM2EB	320.0	320.0	U

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Lab ID: 29604-2
Collected: 2/26/2019
Received: 3/1/2019
Matrix: Product

Project: Shell Woodland
Project #: 34033821
Collected by: D. Trudeau

Client ID: P.060866.022619.DT.Stand Pipe
Analyzed: 3/7/2019
Q Method: 030519.M

CONSTITUENTS	CLASS	ABBR.	ssRL mg/kg	RESULT mg/kg	QUALIFIER
1,3-Dimethyl-4-ethylbenzene	A	13DM4EB	320.0	320.0	U
1,2-Dimethyl-4-ethylbenzene	A	12DM4EB	320.0	320.0	U
1,2-Dimethyl-3-ethylbenzene	A	12DM3EB	320.0	320.0	U
Undecane (nC11)	P	C11	960.0	960.0	U
1,2,4,5-Tetramethylbenzene	A	1245TMB	320.0	320.0	U
1,2,3,5-Tetramethylbenzene (t)	A	1235TMB	320.0	320.0	U
n-Pentylbenzene	A	NPYB	160.0	160.0	U
Naphthalene	A	N	160.0	160.0	U
Benzothiophene	S	BTHIO	120.0	120.0	U
Dodecane (nC12)	P	C12	640.0	969.0	
1,2,3,4-Tetramethylbenzene (t)	A	1234TMB	320.0	320.0	U
MMT	ADD	MMT	120.0	120.0	U
2-Methylnaphthalene	A	2MN	160.0	398.8	
1-Methylnaphthalene	A	1MN	160.0	261.3	

Benzene d-6 (RS)	95.93	%
Toluene-d8 (RS)	93.43	%
Ethylbenzene d10 (RS)	107.00	%

ssRL - Sample Specific Reporting Limit
Results listed as U would have been reported if present at or above the listed ssRL
J - Values greater than the ssRL but less than the PQL (3 x ssRL).
D - Secondary dilution perfomed
Q - Surrogate recovery limit exceedance
I - Matrix Interference
NC - Not calibrated
Note: Extracted by EPA 5030 (Purge and Trap).

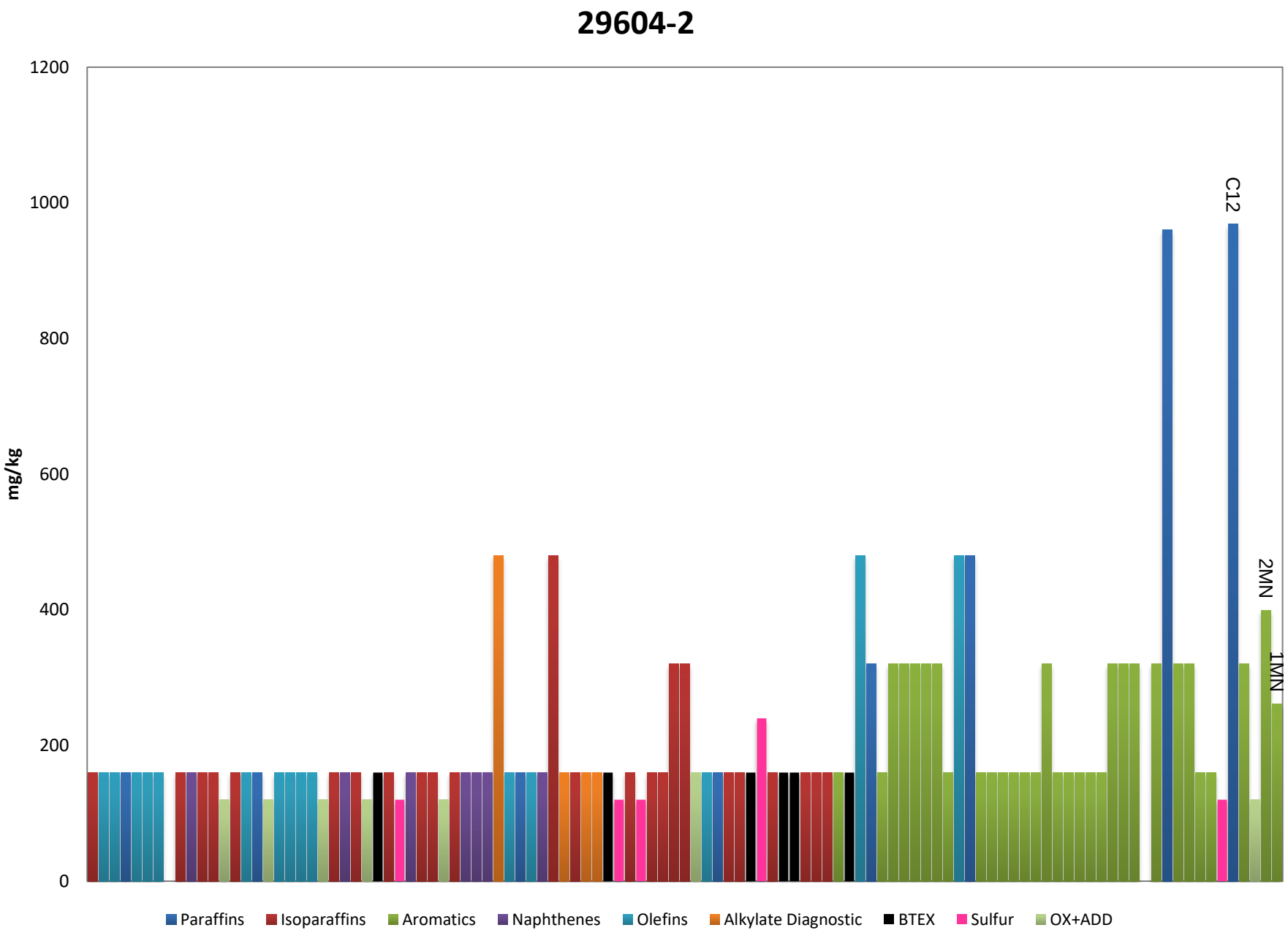
US631

030619-PROD13.D & dilution 030619-PROD13.D

Submitted by,
Pace Energy Services, LLC

PAES ID	**29604-2**
Sample ID	**P.060866.022619.DT.Stand Pipe**
Evaporation	
n-Pentane / (n-Pentane+n-Heptane)	NR
2-Methylpentane / (2-Methylpentane+2-Methylheptane)	NR
Waterwashing	
Benzene / (Benzene+Cyclohexane)	
Toluene / (Toluene+Methylcyclohexane)	NR
Aromatics / Total Paraffins (n+iso+cyc)	0.68
Aromatics / Naphthenes	NR
wt% < o-xylene	0.00
Biodegradation	
(C4-C8 Para +Isopara) / C4-C8 Olefins	NR
3-Methylhexane / n-Heptane	NR
Methylcyclohexane / n-Heptane	NR
Isoparaffins + Naphthenes / Paraffins	0.00
Diagnostic Ratios (Refining Properties)	
2,2,4-Trimethylpentane / (2,2,4-Trimethylpentane+Methylcyclohexane)	NR
2,2,4-Trimethylpentane / Total TMPs	NR
nC9 / Isopropylbenzene	NR
nC10 / 1-Methyl-2-ethylbenzene	NR
nC11 / 1,4-Dimethyl-2-ethylbenzene	NR
iC5 / (iC5+nC5)	NR
(2-methylhexane + 2,3dimethylpentane) / (3-methylhexane + 2,4 dimethylpentane)	NR
Naphthalene / (Naphthalene+nC12)	NR
Methylcyclohexane/(Methylcyclohexane+Toluene)	NR
Toluene/n-Octane	NR
Oxygenates & Other (mg/kg)	
Methyl-tert-butyl ether (MTBE)	U
Di-isopropyl ether (DIPE)	U
Ethyl-tert-butyl ether (ETBE)	U
Tert-amyl methyl ether (TAME)	U
MMT	U
Lead Scavengers (mg/kg)	
1,2-Dichloroethane (EDC)	U
1,2-Dibromoethane (EDB)	U
Sulfur containing HCs (mg/kg)	
Thiophene	U
2-Methylthiophene	U
3-Methylthiophene	U
2-Ethylthiophene	U
Benzothiophene	U
Relative Percentages	
% Paraffinic	59.5
% Isoparaffinic	0.0
% Aromatic	40.5
% Naphthenic	0.0
% Olefinic	0.0

SAMPLE HISTOGRAM



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Lab ID: 29604-3
Collected: 2/26/2019
Received: 3/1/2019
Matrix: Product
Client ID: P.060866.022619.MW10

Project: Shell Woodland
Project #: 34033821
Collected by: D. Trudeau

Analyzed: 3/7/2019
Q Method: 030519.M

CONSTITUENTS	CLASS	ABBR.	ssRL mg/kg	RESULT mg/kg	QUALIFIER
Isopentane (2-Methylbutane)	I	IP	119.8	119.8	U
1-Pentene	O	1P	119.8	119.8	U
2-Methyl-1-butene	O	2M1B	119.8	119.8	U
Pentane (nC5)	P	C5	119.8	119.8	U
trans-2-pentene	O	T2P	119.8	119.8	U
cis-2-pentene	O	C2P	119.8	119.8	U
2-Methyl-2-butene (t)	O	2M2B	119.8	119.8	U
2,2-Dimethylbutane (t)	I	22DMB	119.8	119.8	U
Cyclopentane	N	CYP	119.8	119.8	U
2,3-Dimethylbutane	I	23DMB	119.8	119.8	U
2-Methylpentane	I	2MP	119.8	119.8	U
Methyl-tert-butyl ether (MTBE)	ADD	MTBE	89.8	89.8	U
3-Methylpentane	I	3MP	119.8	119.8	U
1-Hexene	O	1HX	119.8	119.8	U
Hexane (nC6)	P	C6	119.8	119.8	U
Di-isopropyl ether (DIPE)	ADD	DIPE	89.8	89.8	U
trans-2-hexene (t)	O	T2HE	119.8	119.8	U
2-Methyl-2-pentene (t)	O	2M2P	119.8	119.8	U
cis-2-hexene (t)	O	C2HE	119.8	119.8	U
cis-3-Methyl-2-pentene (t)	O	C3M2P	119.8	119.8	U
Ethyl-tert-butyl ether (ETBE)	ADD	ETBE	89.8	89.8	U
2,2-Dimethylpentane (t)	I	22DMP	119.8	119.8	U
Methylcyclopentane	N	MCYP	119.8	238.0	
2,4-Dimethylpentane	I	24DMP	119.8	134.0	
1,2-Dichloroethane (EDC)	ADD	EDC	89.8	89.8	U
Benzene	A	B	119.8	119.8	U
3,3-Dimethylpentane (t)	I	33DMP	119.8	119.8	U
Thiophene	S	THIO	89.8	89.8	U
Cyclohexane	N	CYH	119.8	327.1	
2-Methylhexane	I	2MH	119.8	413.9	
2,3-Dimethylpentane	I	23DMP	119.8	367.2	

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Lab ID: 29604-3
Collected: 2/26/2019
Received: 3/1/2019
Matrix: Product
Client ID: P.060866.022619.MW10

Project: Shell Woodland
Project #: 34033821
Collected by: D. Trudeau

Analyzed: 3/7/2019
Q Method: 030519.M

CONSTITUENTS	CLASS	ABBR.	ssRL mg/kg	RESULT mg/kg	QUALIFIER
Tert-amyl methyl ether (TAME)	ADD	TAME	89.8	89.8	U
3-Methylhexane	I	3MH	119.8	566.0	
trans-1,3-Dimethylcyclopentane (t)	N	T13DMCYP	119.8	119.8	U
cis-1,3-Dimethylcyclopentane (t)	N	C13DMCYP	119.8	119.8	U
trans-1,2-Dimethylcyclopentane (t)	N	T12DMCYP	119.8	163.5	
2,2,4-Trimethylpentane (isooctane)	I	224TMP	359.3	1252.8	
1-Heptene	O	1HP	119.8	119.8	U
Heptane (nC7)	P	C7	119.8	1368.9	
trans-2-heptene (t)	O	T2HP	119.8	119.8	U
Methylcyclohexane	N	MCYH	119.8	1620.6	
2,5-Dimethylhexane	I	25DMH	359.3	585.9	
2,2,3-Trimethylpentane	I	233TMP	119.8	119.8	U
2,4-Dimethylhexane	I	24DMH	119.8	414.0	
2,3,4-Trimethylpentane	I	234TMP	119.8	928.5	
2,3,3-Trimethylpentane	I	233TMP	119.8	871.6	
Toluene	A	T	1197.6	6879.7	D
2-Methylthiophene	S	2MTHIO	89.8	89.8	U
2,3-Dimethylhexane	I	23DMH	119.8	552.8	
3-Methylthiophene	S	3MTHIO	89.8	89.8	U
2-Methylheptane	I	2MHP	119.8	2619.6	
4-Methylheptane (t)	I	4MHP	119.8	828.2	
3-Methylheptane	I	3MHP	239.5	2376.3	
3-Ethylhexane	I	3EHX	239.5	239.5	U
1,2-Dibromoethane (EDB)	ADD	EDB	119.8	119.8	U
1-Octene	O	1O	119.8	756.7	
Octane (nC8)	P	C8	119.8	7286.8	
2,4-Dimethylheptane (t)	I	24DMHP	119.8	1811.1	
2,5-Dimethylheptane (t)	I	25DMHP	119.8	3120.3	
Ethylbenzene	A	EB	1197.6	4842.5	D
2-Ethylthiophene	S	2ETHIO	179.6	179.6	U
2,3-Dimethylheptane (t)	I	23DMHP	119.8	8408.4	

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Lab ID: 29604-3
Collected: 2/26/2019
Received: 3/1/2019
Matrix: Product
Client ID: P.060866.022619.MW10

Project: Shell Woodland
Project #: 34033821
Collected by: D. Trudeau

Analyzed: 3/7/2019
Q Method: 030519.M

CONSTITUENTS	CLASS	ABBR.	ssRL mg/kg	RESULT mg/kg	QUALIFIER
m-Xylene	A	MX	1197.6	17059.2	D
p-Xylene	A	PX	1197.6	5764.5	D
4-Methyloctane (t)	I	4MO	119.8	5144.1	
2-Methyloctane (t)	I	2MO	119.8	6626.6	
3-Methyloctane (t)	I	3MO	1197.6	35142.6	D
Styrene	A	STRE	119.8	119.8	U
o-Xylene	A	OX	1197.6	9272.5	D
1-Nonene	O	1N	359.3	359.3	U
Nonane (nC9)	P	C9	2395.2	18210.8	D
Isopropylbenzene (cumene)	A	IPROPB	119.8	2076.9	
n-Propylbenzene	A	NPRPPB	2395.2	3722.5	D
1-Methyl-3-ethylbenzene	A	1M3EB	2395.2	16184.6	D
1-Methyl-4-ethylbenzene	A	1M4EB	2395.2	7215.8	D
1,3,5-Trimethylbenzene (mesitylene)	A	135TMB	2395.2	9129.4	D
1-Methyl-2-ethylbenzene	A	1M2EB	2395.2	5198.9	D
1,2,4-Trimethylbenzene	A	124TMB	1197.6	23202.9	D
1-Decene	O	1D	359.3	5146.7	
Decane (nC10)	P	C10	3592.8	23244.3	D
sec-Butylbenzene	A	SBUB	119.8	992.1	
1-Methyl-3-isopropylbenzene (m-cymene)	A	1M3IPROPB	119.8	1789.6	
1-Methyl-4-isopropylbenzene (p-cymene)	A	1M4IPROPB	119.8	844.2	
Indane	A	IA	119.8	2430.3	
Indene	A	IE	119.8	179.2	
1-Methyl-2-isopropybenzene (o-cymene)	A	1M2IPROPB	119.8	170.4	
1-Methyl-3-propylbenzene	A	1M3PROPB	2395.2	3449.2	D
1-Methyl-4-propylbenzene	A	1M4PROPB	119.8	2145.6	
n-Butylbenzene	A	NBB	119.8	1666.5	
1,3-Dimethyl-5-ethylbenzene	A	13DM5EB	1197.6	2804.3	D
1,2,diethylbenzene	A	12DEB	119.8	561.5	
1-Methyl-2-propylbenzene	A	1M2PROPB	119.8	2033.2	
1,4-Dimethyl-2-ethylbenzene	A	14DM2EB	239.5	2790.7	

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Lab ID: 29604-3
Collected: 2/26/2019
Received: 3/1/2019
Matrix: Product
Client ID: P.060866.022619.MW10

Project: Shell Woodland
Project #: 34033821
Collected by: D. Trudeau

Analyzed: 3/7/2019
Q Method: 030519.M

CONSTITUENTS	CLASS	ABBR.	ssRL mg/kg	RESULT mg/kg	QUALIFIER
1,3-Dimethyl-4-ethylbenzene	A	13DM4EB	239.5	2858.5	
1,2-Dimethyl-4-ethylbenzene	A	12DM4EB	2395.2	3351.1	D
1,2-Dimethyl-3-ethylbenzene	A	12DM3EB	239.5	978.4	
Undecane (nC11)	P	C11	7185.6	18130.3	D
1,2,4,5-Tetramethylbenzene	A	1245TMB	239.5	2257.4	
1,2,3,5-Tetramethylbenzene (t)	A	1235TMB	239.5	3496.2	
n-Pentylbenzene	A	NPYB	119.8	1176.3	
Naphthalene	A	N	1197.6	3064.3	D
Benzothiophene	S	BTHIO	89.8	118.2	
Dodecane (nC12)	P	C12	4790.4	11044.6	D
1,2,3,4-Tetramethylbenzene (t)	A	1234TMB	239.5	2449.0	
MMT	ADD	MMT	89.8	89.8	U
2-Methylnaphthalene	A	2MN	1197.6	4159.1	D
1-Methylnaphthalene	A	1MN	119.8	2101.0	

Benzene d-6 (RS)	105.58	%
Toluene-d8 (RS)	94.85	%
Ethylbenzene d10 (RS)	105.22	%

ssRL - Sample Specific Reporting Limit
Results listed as U would have been reported if present at or above the listed ssRL
J - Values greater than the ssRL but less than the PQL (3 x ssRL).
D - Secondary dilution perfomed
Q - Surrogate recovery limit exceedance
I - Matrix Interference
NC - Not calibrated
Note: Extracted by EPA 5030 (Purge and Trap).

US631

030619-PROD14.D & dilution 030619-PROD7.D

Submitted by,
Pace Energy Services, LLC

PAES ID	**29604-3**
Sample ID	**P.060866.022619.MW10**
Evaporation	
n-Pentane / (n-Pentane+n-Heptane)	NR
2-Methylpentane / (2-Methylpentane+2-Methylheptane)	NR
Waterwashing	
Benzene / (Benzene+Cyclohexane)	
Toluene / (Toluene+Methylcyclohexane)	0.81
Aromatics / Total Paraffins (n+iso+cyc)	1.03
Aromatics / Naphthenes	67.38
wt% < o-xylene	37.24
Biodegradation	
(C4-C8 Para +Isopara) / C4-C8 Olefins	106.80
3-Methylhexane / n-Heptane	0.41
Methylcyclohexane / n-Heptane	1.18
Isoparaffins + Naphthenes / Paraffins	0.94
Diagnostic Ratios (Refining Properties)	
2,2,4-Trimethylpentane / (2,2,4-Trimethylpentane+Methylcyclohexane)	0.4
2,2,4-Trimethylpentane / Total TMPs	0.41
nC9 / Isopropylbenzene	8.77
nC10 / 1-Methyl-2-ethylbenzene	4.47
nC11 / 1,4-Dimethyl-2-ethylbenzene	6.50
iC5 / (iC5+nC5)	NR
(2-methylhexane + 2,3dimethylpentane) / (3-methylhexane + 2,4 dimethylpentane)	1.12
Naphthalene / (Naphthalene+nC12)	0.22
Methylcyclohexane/(Methylcyclohexane+Toluene)	0.19
Toluene/n-Octane	0.94
Oxygenates & Other (mg/kg)	
Methyl-tert-butyl ether (MTBE)	U
Di-isopropyl ether (DIPE)	U
Ethyl-tert-butyl ether (ETBE)	U
Tert-amyl methyl ether (TAME)	U
MMT	U
Lead Scavengers (mg/kg)	
1,2-Dichloroethane (EDC)	U
1,2-Dibromoethane (EDB)	U
Sulfur containing HCs (mg/kg)	
Thiophene	U
2-Methylthiophene	U
3-Methylthiophene	U
2-Ethylthiophene	U
Benzothiophene	118.22
Relative Percentages	
% Paraffinic	24.9
% Isoparaffinic	22.7
% Aromatic	49.8
% Naphthenic	0.7
% Olefinic	1.9

SAMPLE HISTOGRAM