

PACIFIC PARK/DUMPSITE ENVIRONMENTAL INVESTIGATION

**600 3RD AVENUE SOUTHEAST,
PACIFIC, WASHINGTON**

**Prepared for
River and Floodplain Management Section
King County Water and Land Resources Division**

**Prepared by
Herrera Environmental Consultants, Inc.**



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KING COUNTY, WASHINGTON**

**Prepared for
River and Floodplain Management Section
King County Water and Land Resources Division
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September 18, 2017

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CERTIFICATE OF LICENSED HYDROGEOLOGIST

This document has been prepared under the supervision of a licensed hydrogeologist.



Bruce A. Carpenter
Signature

September 18, 2017
Date

INTRODUCTION

This report summarizes field activities, including soil and groundwater sampling results for the Pacific Park/Dumpsite (Site) located at 600 Third Avenue Southeast in Pacific, Washington (Figure 1). The Site consists of 21 acres located along the right bank of the White River. The Site is located on a 43-acre parcel owned by King County since 1921 and used as an informal dumpsite and as a city dump until it was closed in 1965 to refuse dumping. The Site remained abandoned until King County leased the 21-acre portion of the property to the City of Pacific in 1969 for use as a park that opened in 1972 (S&W, 2016). It remains closed for flood control purposes from approximately October through March. A site map is provided in Figure 2.

On February 14, 2017, Herrera Environmental Consultants, Inc., (Herrera) entered into an agreement with the King County River and Floodplain Management Section as part of King County Contract Number E00375E15, Work Order Number E00375-40. Herrera developed a Sampling and Analysis Plan (SAP) describing the field activities to be conducted for this investigation (Herrera 2017). This report focusses on soil and groundwater sampling at the park boundary, outside of the fill area, to evaluate potential offsite impacts.

SITE BACKGROUND CONDITIONS

In 2016, a Phase II Environmental Site Assessment (ESA) was conducted to evaluate conditions across the Site (S&W, 2016). Soil and groundwater samples were collected from 28 push-probes and six monitoring wells constructed from six of the probes. Additionally, four test pits were excavated. Sampling locations were selected based on historical records, including aerial photographs. The report presented the following conclusions for soil and groundwater:

- Contaminants revealed in soil in excess of the Model Toxics control Act (MTCA) regulatory cleanup criteria included the following:
 - o Lube oil-range petroleum hydrocarbons were detected in two soil samples at depths of 4.5 and 5.5 feet below ground surface (bgs), above the MTCA Method A cleanup criterion.
 - o Three samples, five samples, seven samples, and two samples were detected above the MTCA Method A cleanup criteria for arsenic, cadmium, lead, and mercury, respectively, at depths ranging from 4.5 to 12.5 feet bgs.
 - o No volatile organic compounds (VOCs) were detected above the MTCA Method A cleanup criteria.

- o Semi-volatile organic compounds (SVOCs), including carcinogenic polycyclic aromatic hydrocarbons (cPAHs), were detected above the MTCA Method A cleanup criterion at 18 soil sample locations. The MTCA Method A cleanup level for cPAHs is based on the total of cPAH compounds. The Toxics Equivalency Factor (TEF) for cPAHs is used to adjust cPAH concentrations to benzo(a)pyrene. If a particular cPAH compound is not detected, one half of the detection limit is used in the TEF calculation. At some locations, no cPAHs were reported detected, but due to a high detection limit, the TEF calculation triggered a MTCA exceedance. If detection limits are higher than normal, the cPAH total could exceed MTCA cleanup levels with no reported detections.
- o No polychlorinated biphenyls (PCBs) were detected above the MTCA cleanup criterion.
- Contaminants revealed in groundwater in excess of the MTCA regulatory cleanup criteria included the following:
 - o Total arsenic concentrations exceeded the MTCA Method A cleanup criterion at eight locations. Dissolved arsenic exceeded the MTCA Method A cleanup criterion at two locations.
 - o Total lead concentrations exceeded the MTCA Method A cleanup criterion at three locations. Dissolved lead was not detected above the MTCA Method A cleanup criterion.
 - o No other metals, VOCs or petroleum hydrocarbons were detected above the MTCA Method A cleanup criteria.
- Contaminants appear to be confined to the dumpsite and do not appear to pose a threat to the public, based on current land use. Additional soil and groundwater sampling was recommended around the perimeter of the Site to determine if contamination had migrated off site.
- An operations and maintenance plan should be implemented that would limit ground disturbance to less than 1 foot bgs.

In 2010 and 2011, King County (2015) collected stormwater samples from the ditch near the end of 4th Avenue SE and from two locations in the wetland located 300 feet and 1,000 feet south of 4th Avenue SE. Water was tested for 6020A metals, pesticides, herbicides, and EPA 8260C VOCs and EPA 8270D SVOCs. Results from all three locations found detectable concentrations of VOCs in surface waters. No conclusions regarding the source of the contaminants were made by King County (2015).

SITE CONDITIONS

PHYSICAL SETTING

The Site is located approximately 2,000 feet north of the King/Pierce County line. The property is relatively flat. Ground surface elevation for the Site ranges from 80 to 87 feet (NAVD88), based on 2016 King County Water and Land Resources Division lidar and orthoimagery acquisition completed by Tetra Tech.

The Site is located in an area that historically had been occupied by the White River prior to construction of levees in the 1910s and filling of the site from the 1920s through the 1960s. It is subject to flooding by the White River and seasonal inundation by ponded stormwater and shallow groundwater. According to historical photos and maps, flood-control measures were taken that included construction of a concrete revetment in 1919 as part of the channelization of the White River along the alignment of the former Stuck River (S&W 2016).

The 1936 and 1944 aerial photographs indicate an orchard occupied the area west of the Site. Fill was placed in the 1980s within the area underlain by the four apartments south of 4th Avenue SE, the southeastern half of the area underlain by the four apartments north of 4th Avenue SE, and the extreme southeastern corner of the Megan's Court Apartments.

A stormwater ditch drains south along the western edge of the Site. The ditch receives stormwater from residential properties located along 3rd Avenue SE, Spencer Court, and the apartments west of the ditch and also from the parking lot in the park. The water level in the ditch roughly corresponds to groundwater levels in adjacent wells, so the ditch presumably intercepts groundwater, which intermingles with surface stormwater conveyed by the ditch.

Access to the site is restricted from October through March by a continuous HESCO barrier system installed for flood control purposes along the northern and western property boundaries. A section of the barrier is removed from April to September to allow public access at two locations on the northern portion of the property, along 3rd Avenue SE.

Geology

Regional Geology

The Puget Lowland area has been subjected to six or more major glaciations during the past 2 million years. The last ice covering the Site to a thickness estimated to be 3,000 feet, receded about 13,500 years ago, leaving a series of north-trending ridges and valleys. These deep valleys

were partially or completely filled with recessional glacial deposits and recent Holocene deposits (S&W 2016).

Subsequent to the most recent glaciation, a series of lahars and mudflows associated with volcanism from Mt. Rainier occurred, which contributed to the deposition of sediments in the White River valley. The most significant of these volcanic events was the Osceola mudflow that occurred 5,600 years ago and diverted the White River and initiated the deposition of the White River alluvial fan. During the Sumerland age volcanism approximately 2,500 years ago, the White and Green rivers extended 20 miles north to Elliott Bay. During a large flood that occurred in 1906, the White River was re-diverted to the south and avulsed to the Stuck River.

Site Geology

The Geologic Map of Auburn 1:24,000 Quadrangle (Mullineaux, 1965) maps the Site as artificial fill (af) with the surrounding area as alluvium (Qaw). The map indicates that the alluvium consists of mostly gravel and sand deposits of the White River and boulder-cobble and pebble-cobble gravel and sand in the White River valley.

Shannon and Wilson 2016 Investigation

Fill material was encountered in each of the geoprobe explorations across the Site during the Phase II ESA (S&W 2016). Fill material was identified based on soil with a disturbed appearance and from the presence of unnatural debris such as glass shards and bottles, brick, cement, organics, wood, paper, rubber, and ceramic. Fill consisted of gravelly silt, silty sand, and sandy gravel to gravelly sand. Based on observations from the geoprobes and test pit explorations, fill is generally 2 to 12 feet thick across the Site, with fill being thicker in the central/south central portion of the Site.

The fill is overlain by sandy gravelly fill placed during the period after the dumpsite was closed in order to cover the waste and level out the site for development of a park. Based on the boring and test pit logs, the thickness of this fill ranges from 1.8 to 10 feet.

The fill is underlain by alluvial overbank deposits consisting mostly of poorly graded sand with gravel to sandy gravel interbedded with backwater lacustrine deposits consisting of silt with organics and interbeds of silty sand. Alluvium and lacustrine deposits were encountered from 2 to 12 feet bgs. Large cobbles to small boulders were not observed in the geoprobe explorations due to sampler size limitations, but were encountered in the test pit explorations. Fill material and alluvial deposits were loose, causing caving and collapse that limited excavation depths in some of the test pits. Loose soils and refuse debris limited the recovery of the geoprobe core samples at some locations (S&W 2016).

Site Hydrogeology

Shannon and Wilson 2016 Investigation

Groundwater was encountered in each of the geoprobe and test pit explorations, with the exception of the southernmost test pit and geoprobe that was advanced to characterize the soil mounds in the southern portion of the site. Groundwater depths ranged from 4 to 9 feet bgs at the time of the Phase II investigation, in September 2015. In general, groundwater was encountered between 4 to 6 feet bgs, with deeper groundwater depths encountered in areas of higher relief, such as explorations located on the existing levee and in terraced fill areas in the southern portion of the Site (S&W 2016).

Groundwater observed in test pits was rapid flowing, causing caving and collapse that limited the excavation with the exception of the southernmost test pit. Soils with generally high-permeability were observed in the test pits, which facilitated a rapid movement of groundwater into the excavation (S&W 2016).

A sketch of a water level contour map for the Site was completed by King County, based on October 2015 water level data. Groundwater flow was to the southwest and follows the gradient of the river (Brummer 2017a).

King County completed an animation of groundwater levels, based on measurements from October 2015 through October 2016. The direction of groundwater flow is typically to the southwest for most of the year. When water levels rise in winter with the river stage, the gradient increases, and flow is toward the west (Brummer 2017b).

FIELD INVESTIGATION

Herrera staff collected groundwater samples from the six monitoring wells located across the Site and soil and groundwater samples from nine push-probe borings completed around the perimeter of the Site as part of this investigation. Sampling was performed according to procedures described in the SAP. The locations of the borings were selected to determine whether contamination identified on site during the Phase II ESA has migrated off site.

UTILITY LOCATE

The toll-free underground utility location service (“one call”) was contacted prior to conducting probe drilling, and paint markings were made in the public right-of-way to designate water, sewer, gas, electric, and other communication lines. A private locating service (APS of North Bend, Washington) identified underground piping around the perimeter of the property on May 23, 2017.

SAMPLING ACTIVITIES

On May 15, 2017, two Herrera representatives collected water samples from the six existing monitoring wells, MW-1 through MW-6. The water samples were hand delivered to OnSite Environmental, Inc. (OnSite) of Redmond, Washington for the following analyses:

- Gasoline-range total petroleum hydrocarbons (TPH) by method Northwest TPH-Gx
- Diesel-range TPH by Method NWTPH-Dx) with silica gel cleanup
- VOCs by EPA Method 8260C
- PAHs by EPA Method 8270D/SIM
- Total and Dissolved Priority Pollutant Metals by EPA Methods 200.8/7470A

The samples were collected by the low-flow purge method described in the SAP. The dissolved metals samples were filtered in the field through a 0.45-micron filter.

On May 23 and 24, ESN Northwest provided a track mounted Bobcat push-probe rig to complete nine borings (PP1 to PP9) to 15 feet bgs at locations shown on Figure 3. Two soil samples were collected at each location, including one from the 0- to 5-foot depth interval or groundwater interface, and the second from the 10- to 15-foot interval. Groundwater samples also were collected from the borings. Samples were hand delivered to Onsite for analysis.

Soil and groundwater samples were analyzed for the same list of analyses provided above. Soil samples also were analyzed for the entire suite of SVOCs, which includes PAHs and total metals analyses (which includes the Resource Conservation, and Recovery Act (RCRA) metals arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver).

INVESTIGATION RESULTS

Field notes are provided in Appendix A, and probe boring logs are in Appendix B. GPS coordinates for each boring location were recorded and used to produce Figure 3. Photographic documentation of the field investigation is provided in Appendix C. Laboratory reports and chain-of-custody records are provided in Appendix D, and a Data Quality Assurance Review is provided in Appendix E.

SUBSURFACE CONDITIONS

Fill material was encountered at depths ranging from 2 feet bgs in boring PP7, consisting of sandy gravel to 7 feet bgs in borings PP3 and PP4. The fill material was identified by the presence of man-made material, characteristics of the soil core sample material such as layering, and findings from previous borings completed at the site. Concrete was found near ground surface and asphalt was found at 5 feet bgs in boring PP4, a piece of wire was found near ground surface in boring PP5, and a piece of a plastic ball was found at 2 feet bgs in boring PP6. Despite the presence of some man-made material, refuse was not found in any of the nine borings. Additionally, no sheens or petroleum odors were observed during sample collection.

Silt and sand with occasional gravel were encountered predominantly beneath the fill material in the six borings, PP1 through PP6, completed along the western perimeter of the property. A 6-inch zone of peat was observed at 9.5 feet bgs in boring PP1 and at 4.5 feet bgs in boring PP5. Thin layers of peat were found at depths of 9.5 and 14.5 feet bgs in boring PP1 and at 13 feet bgs in boring PP2. Occasional thin zones of organic material also were encountered in borings PP4, PP5, and PP6. Greenish gray silty clay was observed at 12 feet bgs in boring PP2, with some thin peat layers at 12 feet bgs.

Coarse alluvial material, including sand, gravel, and cobbles were observed beneath the levee fill in borings PP7, PP8, and PP9, completed on the levee along the eastern perimeter of the Site. No silt, clay, peat, other organic material, or any man made material was observed beneath the fill.

Groundwater was measured in the nine borings at depths ranging from 1.8 feet bgs in borings PP1, PP2, and PP7 to 4 feet bgs in boring PP9 and from 0.4 feet bgs in well MW-3 to 5.71 feet bgs in well MW-6. Water level contour maps were completed for the highest and lowest water levels observed during the data collection period, which ranged from the date of monitoring well installation in October 2015 to the date of the groundwater sampling event on May 12, 2017. Water level data loggers deployed in monitoring wells MW-2 through MW-6 in October 2015, provided data used to complete Figure 4, representing the lowest water levels measured during the data collection period, which occurred on October 6, 2016. Figure 5 depicts a contour map, based on the highest water level data over the monitoring period, which occurred on

March 19, 2017. Figure 6 depicts a contour map, based on water levels measured during recent groundwater sampling on May 12, 2017.

Water level data fluctuated by approximately 4.5 feet bgs during the data collection period. The groundwater flow direction is toward the southwest during periods of lower flow during the end of the summer and toward the west to southwest during periods of higher flow during the winter.

ANALYTICAL RESULTS

Soil Sampling

A summary of soil analytical results is presented in Table 1 and summarized as follows:

- Gasoline-range total petroleum hydrocarbons and diesel-range petroleum hydrocarbons were not detected in any of the 18 samples above reporting limits.
- Lube oil-range petroleum hydrocarbons were detected in shallow soil samples collected from borings PP3, PP4, PP5, PP6, and PP7 at concentrations ranging from 62 to 620 mg/kg, well below MTCA Method A cleanup level 2,000 mg/kg. Lube oil was detected in only one deep sample collected from boring PP4 at a concentration of 570 mg/kg. Fill material was observed in Boring PP4 10 to a depth of 7 feet bgs and a piece of asphalt was observed at 5 feet bgs.
- Six VOC compounds were detected, including acetone, carbon disulfide, 2-butanone, toluene, styrene, and 1,2,4-trimethylbenzene. All of the detections were below MTCA Method A or B cleanup levels. Acetone, carbon disulfide, 2-Butanone, and toluene are common laboratory contaminants and may have been introduced into the samples at the laboratory. Styrene and 1,2,4-trimethylbenzene were detected at one location. Trimethylbenzene was detected in the sample from boring PP4 that contained fill material, including a piece of asphalt.
- Two SVOCs, including benzyl alcohol and bis(2-ethylhexyl)phthalate were detected in fill material from borings PP1 and PP8, respectively, at low concentrations below MTCA Method A or B cleanup levels.
- PAHs were detected in three samples, including the shallow and deep samples from boring PP4 and the shallow sample from boring PP6 at concentrations below the MTCA Method A cleanup level, 0.1 mg/kg total cPAHs. Lube oil was reported at each of these three sample locations.
- Barium, chromium, and lead were the only total metals detected. Barium and chromium were detected in all of the soil samples at concentrations well below MTCA cleanup levels. Chromium concentrations were typical of background conditions reported for

Puget Sound ranging from a minimum of 12 to a maximum of 235 mg/kg and median of 22 mg/kg (Ecology 1994). Lead was detected in five samples all collected from shallow sample locations. With the exception of the shallow sample collected from boring PP4, all of the sample results are typical of background concentrations in Puget Sound ranging from 4.7 to 30 mg/kg and well below the MTCA Method A cleanup level of 250 mg/kg.

- Six samples with reported lube oil detections also were analyzed for PCBs to comply with MTCA sampling requirements. PCBs were often mixed with lube oil prior to the 1976 EPA Toxic Substance Control Act regulation. Only two of the soil samples had reported detections of PCBs, including the shallow samples collected from borings PP4 and PP6. None of the PCBs exceeded the MTCA Method A cleanup level.

Groundwater Sampling

A summary of groundwater sampling analytical results is presented in Table 2, and detected concentrations above MTCA are provided on Figure 7 for metals analyses. The groundwater sampling results are presented according to samples collected from the monitoring wells and from the probe borings.

Monitoring Wells

- Gasoline-range total petroleum hydrocarbons, diesel-range petroleum hydrocarbons, and lube oil-range petroleum hydrocarbons were not detected in any of the six samples above the reporting limits.
- Chlorobenzene was the only VOC detected at a concentration of 1.5 µg/L in well MW-4. It also was the only VOC detected during the previous sampling effort in October 2015.
- No PAHs were detected in any of the six samples.
- Three of the 13 priority pollutant metals sampled in the six monitoring wells were detected, including arsenic, lead, and zinc. In most cases there was correlation between the total and dissolved detected concentrations. Arsenic was the only metal that exceeded the MTCA Method A cleanup level of 5 µg/L with an identical reported detection of 8.3 µg/L for both the total and dissolved sample collected from well MW-4. Arsenic was reported at respective total and dissolved concentrations of 13 and 9.8 µg/L during the October 2015 sampling effort. Total and dissolved arsenic also was detected at respective concentrations of 5.7 and 5.1 µg/L during the October 2015 monitoring effort in well MW-2, but it was not detected in the May 2017.

Probe Borings

- Gasoline-range total petroleum hydrocarbons were detected in samples collected from one of the nine boring locations, PP5, at a concentration of 210 µg/L, less than the MTCA Method A cleanup level of 800 µg/L.
- Diesel-range petroleum hydrocarbons, and lube oil-range petroleum hydrocarbons were not detected in any of the nine probe boring samples.
- Acetone, a common laboratory contaminant was detected in all nine probe boring samples at concentrations well below the MTCA cleanup level. Benzene and other VOCs found in gasoline were detected in the sample collected from PP5, which had a reported gasoline concentration. The reported benzene concentration of 6.4 µg/L slightly exceeds the MTCA Method A cleanup level of 5 µg/L. No gasoline was detected in the six monitoring wells located on the Site or in the three probe water samples collected in 2015. Two other VOCs, toluene and carbon disulfide were detected in the water samples collected from boring PP7, and PP9, respectively, at concentrations well below MTCA cleanup levels.
- Two PAHs, including benzo(b)fluoranthene and dibenz(a,h)anthracene exceeded the MTCA Method B, cancer criteria. No Total PAHs exceeded the MTCA Method A cleanup criterion of 0.100 µg/L.
- Multiple MTCA exceedances occurred for total metals as shown in Table 2 and on Figure 7. Ten of the 13 priority pollutant metals analyzed in the sample collected from boring PP2 exceeded MTCA cleanup levels. The sample collected from PP2 was extremely turbid, the well yield was very slow (it took over 2.5 hours to collect the sample), and much of the sample was suspended sediment that was acidified from the sample preservatives when placed into the sample container most likely resulting in elevated metals concentrations. Only two metals, arsenic and lead were detected in the dissolved sample from PP2, and only arsenic exceeded the MTCA cleanup level. Arsenic was the only MTCA exceedance for the remaining dissolved metals analyses from water samples collected from PP1 and PP4. According to MTCA guidance, 173-340-720 (9) (b), "metals analyses shall be conducted on unfiltered ground water samples, unless it can be demonstrated that a filtered water sample provides a more representative measure of ground water quality." Typically probe samples are used for screening and to guide well installation locations for long-term monitoring. Based on this MTCA guidance, the dissolved sample results are considered more representative of the groundwater quality.
- Arsenic may become sequestered in peat and other organic material from emissions associated with coal burning and other anthropogenic activities (Mikutta and Rothwell 2016). As the peat decays it slowly releases arsenic into groundwater. This phenomenon may be occurring at Pacific Park, based on elevated levels of dissolved arsenic reported in the six probes along the western boundary of the Site, which contain peat and organic material. Dissolved arsenic was not reported in groundwater in the three probes

completed along the eastern boundary of the Site and screened in coarser material that did not contain peat.

- Historically, arsenic use has been associated with orchards. Borings PP2, PP4, PP5, and PP6 were located in an area that was used as an orchard in the 1930s and 1940s. The elevated arsenic concentrations detected in groundwater samples collected from borings PP2, PP4, PP5, and PP6 may be attributed to arsenic used in the orchards.
- A recent publication by Ecology (2016) suggests the MTCA Method A cleanup level for arsenic of 5 µg/L should be raised to 10 or 15 µg/L, based on natural background arsenic concentrations in Washington State. In Puget Sound lowlands, reported background arsenic concentrations ranged from 0.8 to 76 µg/L with an upper tolerance limit (UTL) of 8 µg/L. If the arsenic level is raised from 5 µg/L to 10 µg/L, which is the Federal (EPA) groundwater standard for arsenic, there would be only one dissolved arsenic exceedance.

CONCLUSIONS

The purpose of this Environmental Investigation is to determine if soil and/or groundwater contamination is present outside of the fill area to determine the potential for offsite impacts. Herrera sampled the six existing monitoring wells located on the Site on May 15, 2017, and collected soil and groundwater samples from nine push-probe borings completed at the perimeter of the Site on May 23 and 24. Six probes were completed along the western perimeter of the Site and three along the eastern perimeter.

Herrera's May 2017 Investigation complements the 2015 field effort reported in the 2016 Phase II ESA completed by Shannon and Wilson, which included soil samples collected from 28 push-probe borings and groundwater samples from six probe borings and six monitoring wells across the Site.

SUBSURFACE CONDITIONS

During the 2016 Phase II investigation, fill material was encountered in each of the 28 probe explorations generally 2 to 12 feet thick across the Site. It consisted of silt, sand, and gravel with debris such as glass shards and bottles, brick, cement, organics, wood, paper, rubber, and ceramics. This fill was overlain by sandy gravel ranging from 1.8 to 10 feet thick, placed after the dumpsite was closed to level out the site; this fill was thicker in the central/south central portion of the site.

During the perimeter investigation, fill material was encountered at depths ranging from 2 feet bgs to 7 feet bgs. Despite the presence of some man-made material such as pieces of concrete, asphalt, plastic wire, plastic ball, refuse was not found in any of the nine borings. Typically, the fill consisted of silt, sand, and gravel. Additionally, no sheens or petroleum odors were observed during sample collection.

Groundwater levels fluctuated by approximately 4.5 feet bgs during the data collection period between October 2015 and May 2016 across the Site. Groundwater was measured in the nine probe borings at depths ranging from 1.8 feet bgs to 5.7 feet bgs in May 2017.

The groundwater flow direction is toward the southwest during periods of low flow in the river during the end of the summer and shifts toward the west to southwest during periods of high flow in the river during the winter.

SOIL SAMPLING RESULTS

During the 2016 Phase II investigation, 28 soil samples were collected from the 0- to 10-foot interval and from the 10- to 15-foot interval. Lube oil-range petroleum hydrocarbons were detected above the MTCA Method A cleanup criterion in two soil samples at depths of 4.5 and 5.5 feet bgs,. Three samples, five samples, seven samples, and two samples were detected above the MTCA Method A cleanup criteria for arsenic, cadmium, lead, and mercury, respectively, at depths ranging from 4.5 to 12.5 feet bgs. SVOCs, including cPAHs were detected above MTCA Method A cleanup criterion at 18 sample locations.

During this May 2017 investigation, soil samples were collected at depth intervals of 0 to 5 feet and 10 to 15 feet in each of the nine borings. The samples were analyzed for gasoline and diesel-range total petroleum hydrocarbons, VOCs, SVOCs, and total and dissolved metals. Six soil samples also were analyzed for PCBs based on detection of lube oil. None of the soil sample analyses exceeded MTCA cleanup levels.

GROUNDWATER SAMPLING RESULTS

Groundwater samples were collected from six existing monitoring wells and each of the nine probe borings. The samples were analyzed for gasoline and diesel-range total petroleum hydrocarbons, VOCs, PAHs, and total and dissolved metals.

Benzene and other VOCs, which are components of gasoline, were detected in the sample collected from PP5, which also had a reported gasoline concentration. The reported benzene concentration of 6.4 µg/L slightly exceeds the MTCA Method A cleanup level of 5 µg/L. No gasoline was detected in the six monitoring wells located on the Site or in the three probe water samples collected in 2015. The presence of benzene and gasoline at this location is likely attributable to an isolated spill not associated with the dumpsite.

Two PAHs, including benzo(b)fluoranthene and dibenz(a,h)anthracene exceeded the MTCA Method B, cancer criteria in the sample collected from PP6. No Total PAHs exceeded the MTCA Method A cleanup criterion of 0.100 µg/L. The reported PAH detections may be attributable to the turbid groundwater sample.

Arsenic was the only metal detected in the groundwater monitoring wells (and only in MW-4) that exceeded the MTCA Method A cleanup level of 5 µg/L. Arsenic also was reported above the MTCA cleanup level during the October 2015 groundwater sampling event in two wells, MW-2 and MW-4.

Multiple MTCA exceedances for total metals occurred in groundwater samples collected from the probe borings due to extremely turbid samples. In addition to sample turbidity, elevated arsenic levels in groundwater may be due to the release of arsenic sequestered in peat (and other organic material) that was derived from emissions associated with historical coal burning and the former Asarco lead and copper smelter in Tacoma. The elevated levels of arsenic may also be attributed to the orchard that historically occupied this area.

RECOMMENDATIONS

Based on a review of previous work and the findings of this investigation, Herrera offers the following recommendations:

- Install two monitoring wells on the east side of the drainage ditch adjacent to PP-2 and PP-4, and one upgradient monitoring well on the north side of the property for purposes of collecting samples for metals analyses from permanent wells that produce less turbid water samples. The upgradient well would provide background water quality conditions.
- Resample monitoring wells during seasonal high and low water level periods, typically in March and October, respectively, to evaluate effects of seasonal changes in groundwater levels and flow directions on ground water quality.

LIMITATIONS

This report has been prepared for exclusive use by King County. The analyses and conclusions included in this report are based on conditions encountered at the time of the field investigation, as well as professional experience and judgment. Herrera cannot be responsible for interpretation by others of the data contained in this report.

Herrera's services were performed with due diligence in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the area. No other warranty, express or implied, is made.

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TABLES

Table 1. Summary of Soil Sample Results, Pacific Park/Dumpsite, Site Investigation, Pacific, Washington.																			
Analytical Parameter	Sample Location																	MTCA Method A Cleanup Level (mg/kg)	
	PP1		PP2		PP3		PP4		PP5		PP6		PP7		PP8		PP9		
Sample Date	5/23/2017		5/23/2017		5/24/2017		5/24/2017		5/23/2017		5/23/2017		5/24/2017		5/24/2017		5/24/2017		
Depth (feet)	2.0	10	2.5	10	2.5	10	3.0	10	2.5	10	2.0	10	0	10	0.5	10	0	10	
Gasoline Range Organics by NWTPH-Gx (mg/kg)																			
Gasoline	ND (6.9)	ND (8.0)	ND (7.8)	ND (9.0)	ND (6.6)	ND (7.0)	ND (7.4)	ND (7.1)	ND (7.0)	ND (8.1)	ND (5.7)	ND (9.7)	ND (6.6)	ND (7.8)	ND (6.1)	ND (9.6)	ND (5.6)	ND (7.0)	100
Diesel Range Organics by NWTPH-Dx (mg/kg)																			
Diesel Range Organics	ND (31)	ND (33)	ND (33)	ND (36)	ND (31)	ND (31)	ND (54)	ND (55)	ND (68)	ND (34)	ND (29)	ND (37)	ND (31)	ND (31)	ND (28)	ND (36)	ND (26)	ND (31)	2,000
Lube Oil Range Organics	ND (62)	ND (67)	ND (66)	ND (73)	140	ND (62)	500	570	620	ND (67)	62	ND (75)	63	ND (63)	ND (57)	ND (71)	ND (52)	ND (62)	2,000
Volatile Organic Compounds by EPA 8260C (mg/kg)																			
Acetone	ND (0.011)	0.051	0.071	0.088	0.058	0.028	ND (0.011)	0.051	ND (0.012)	0.046	0.011	0.10	ND (0.014)	0.019	0.027	0.016	ND (0.013)	0.015	72,000 ^a
Carbon Disulfide	ND (0.0016)	ND (0.0018)	ND (0.0012)	ND (0.0016)	ND (0.0017)	ND (0.0017)	ND (0.0016)	ND (0.0013)	ND (0.0058)	0.0024	ND (0.00090)	ND (0.0015)	ND (0.0014)	ND (0.0013)	ND (0.0013)	ND (0.0014)	ND (0.0013)	ND (0.0012)	8,000 ^a
2-Butanone	ND (0.0057)	0.012	0.019	0.023	0.013	ND (0.0061)	ND (0.0057)	0.0068	ND (0.0058)	0.013	ND (0.0045)	0.025	ND (0.0071)	ND (0.0065)	ND (0.0065)	ND (0.0070)	ND (0.0063)	ND (0.0062)	48,000 ^a
Toluene	0.019	0.020	0.025	0.019	ND (0.0060)	0.016	0.016	0.011	ND (0.0058)	0.016	0.0096	0.0083	ND (0.0071)	0.022	0.014	0.021	0.014	0.015	7.00
Styrene	ND (0.0011)	ND (0.0013)	ND (0.0012)	ND (0.0014)	ND (0.0012)	ND (0.0012)	ND (0.0011)	ND (0.0013)	ND (0.0012)	ND (0.0013)	ND (0.00090)	ND (0.0015)	0.012	ND (0.0013)	ND (0.0013)	ND (0.0014)	ND (0.0013)	ND (0.0012)	16,000 ^a
1,2,4-Trimethylbenzene	ND (0.0011)	ND (0.0013)	ND (0.0012)	ND (0.0014)	ND (0.069)	ND (0.0012)	ND (0.0011)	0.0024	ND (0.0012)	ND (0.0013)	ND (0.00090)	ND (0.0015)	ND (0.0014)	ND (0.0013)	ND (0.0013)	ND (0.0014)	ND (0.057)	ND (0.0012)	–
Semivolatile Organic Compounds by EPA8270D (mg/kg)																			
Benzyl Alcohol	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.24)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.19)	ND (0.25)	ND (0.20)	ND (0.21)	0.70	ND (0.24)	ND (0.17)	ND (0.21)	800 ^a
Bis(2-ethylhexyl)phthalate	0.052	ND (0.045)	ND (0.044)	ND (0.048)	ND (0.042)	ND (0.041)	ND (0.042)	ND (0.041)	ND (0.044)	ND (0.045)	ND (0.039)	ND (0.050)	ND (0.041)	ND (0.042)	ND (0.038)	ND (0.047)	ND (0.035)	ND (0.041)	1,600 ^a
Polycyclic Aromatic Hydrocarbons by EPA8270D/SIM (mg/kg)																			
2-Methylnaphthalene	ND (0.0082)	ND (0.0089)	ND (0.0088)	ND (0.0097)	ND (0.0084)	ND (0.0082)	0.017	0.010	ND (0.0087)	ND (0.0090)	ND (0.0077)	ND (0.0099)	ND (0.0082)	ND (0.0084)	ND (0.0076)	ND (0.0095)	ND (0.0070)	ND (0.0083)	320 ^a
Phenanthrene	ND (0.0082)	ND (0.0089)	ND (0.0088)	ND (0.0097)	ND (0.0084)	ND (0.0082)	0.028	0.011	ND (0.0087)	ND (0.0090)	ND (0.0077)	ND (0.0099)	ND (0.0082)	ND (0.0084)	ND (0.0076)	ND (0.0095)	ND (0.0070)	ND (0.0083)	–
Anthracene	ND (0.0082)	ND (0.0089)	ND (0.0088)	ND (0.0097)	ND (0.0084)	ND (0.0082)	0.0089	ND (0.0082)	ND (0.0087)	ND (0.0090)	ND (0.0077)	ND (0.0099)	ND (0.0082)	ND (0.0084)	ND (0.0076)	ND (0.0095)	ND (0.0070)	ND (0.0083)	24,000 ^a
Fluoranthene	ND (0.0082)	ND (0.0089)	ND (0.0088)	ND (0.0097)	ND (0.0084)	ND (0.0082)	0.042	ND (0.0082)	ND (0.0087)	ND (0.0090)	0.013	ND (0.0099)	ND (0.0082)	ND (0.0084)	ND (0.0076)	ND (0.0095)	ND (0.0070)	ND (0.0083)	3,200 ^a
Pyrene	ND (0.0082)	ND (0.0089)	ND (0.0088)	ND (0.0097)	ND (0.0084)	ND (0.0082)	0.046	ND (0.0082)	ND (0.0087)	ND (0.0090)	0.015	ND (0.0099)	ND (0.0082)	ND (0.0084)	ND (0.0076)	ND (0.0095)	ND (0.0070)	ND (0.0083)	2,400 ^a
Benzo(a)anthracene	ND (0.0082)	ND (0.0089)	ND (0.0088)	ND (0.0097)	ND (0.0084)	ND (0.0082)	0.029	ND (0.0082)	ND (0.0087)	ND (0.0090)	0.0084	ND (0.0099)	ND (0.0082)	ND (0.0084)	ND (0.0076)	ND (0.0095)	ND (0.0070)	ND (0.0083)	1.37 ^b
Chrysene	ND (0.0082)	ND (0.0089)	ND (0.0088)	ND (0.0097)	ND (0.0084)	ND (0.0082)	0.037	0.014	ND (0.0087)	ND (0.0090)	0.012	ND (0.0099)	ND (0.0082)	ND (0.0084)	ND (0.0076)	ND (0.0095)	ND (0.0070)	ND (0.0083)	137 ^b

Table 1 (continued). Summary of Soil Sample Results, Pacific Park/Dumpsite, Site Investigation, Pacific, Washington.																			
Analytical Parameter	Sample Location																		MTCA Method A Cleanup Level (mg/kg)
	PP1		PP2		PP3		PP4		PP5		PP6		PP7		PP8		PP9		
Sample Date	5/23/2017		5/23/2017		5/24/2017		5/24/2017		5/23/2017		5/23/2017		5/24/2017		5/24/2017		5/24/2017		
Depth (feet)	2.0	10	2.5	10	2.5	10	3.0	10	2.5	10	2.0	10	0	10	0.5	10	0	10	
Polycyclic Aromatic Hydrocarbons by EPA8270D/SIM (mg/kg) (continued)																			
Benzo(b)fluoranthene	ND (0.0082)	ND (0.0089)	ND (0.0088)	ND (0.0097)	ND (0.0084)	ND (0.0082)	0.042	ND (0.0082)	ND (0.0087)	ND (0.0090)	0.016	ND (0.0099)	ND (0.0082)	ND (0.0084)	ND (0.0076)	ND (0.0095)	ND (0.0070)	ND (0.0083)	1.37 ^b
Benzo(j,k)fluoranthene	ND (0.0082)	ND (0.0089)	ND (0.0088)	ND (0.0097)	ND (0.0084)	ND (0.0082)	0.014	ND (0.0082)	ND (0.0087)	ND (0.0090)	ND (0.0077)	ND (0.0099)	ND (0.0082)	ND (0.0084)	ND (0.0076)	ND (0.0095)	ND (0.0070)	ND (0.0083)	13.7 ^b
Benzo(a)pyrene	ND (0.0082)	ND (0.0089)	ND (0.0088)	ND (0.0097)	ND (0.0084)	ND (0.0082)	0.034	ND (0.0082)	ND (0.0087)	ND (0.0090)	0.012	ND (0.0099)	ND (0.0082)	ND (0.0084)	ND (0.0076)	ND (0.0095)	ND (0.0070)	ND (0.0083)	0.100
Indeno(1,2,3-cd)pyrene	ND (0.0082)	ND (0.0089)	ND (0.0088)	ND (0.0097)	ND (0.0084)	ND (0.0082)	0.027	ND (0.0082)	ND (0.0087)	ND (0.0090)	0.0092	ND (0.0099)	ND (0.0082)	ND (0.0084)	ND (0.0076)	ND (0.0095)	ND (0.0070)	ND (0.0083)	1.37 ^b
Benzo(g,h,i)perylene	ND (0.0082)	ND (0.0089)	ND (0.0088)	ND (0.0097)	ND (0.0084)	ND (0.0082)	0.032	ND (0.0082)	ND (0.0087)	ND (0.0090)	0.011	ND (0.0099)	ND (0.0082)	ND (0.0084)	ND (0.0076)	ND (0.0095)	ND (0.0070)	ND (0.0083)	–
Total cPAHs (TEF) ^c	0.0062	0.0067	0.0066	0.0073	0.0063	0.0062	0.046	0.0063	0.0066	0.0068	0.016	0.0075	0.0062	0.0063	0.0057	0.0072	0.0053	0.0063	0.100
Total Metals by EPA 6010C/7471B (mg/kg)																			
Arsenic	ND (12)	ND (13)	ND (13)	ND (15)	ND (13)	ND (12)	ND (13)	ND (12)	ND (13)	ND (13)	ND (12)	ND (15)	ND (12)	ND (13)	ND (11)	ND (14)	ND (10)	ND (12)	20
Barium	62	30	31	21	80	26	78	38	47	28	53	34	31	22	22	37	62	28	16,000 ^a
Cadmium	ND (0.62)	ND (0.67)	ND (0.66)	ND (0.73)	ND (0.63)	ND (0.62)	ND (0.63)	ND (0.62)	ND (0.65)	ND (0.67)	ND (0.58)	ND (0.74)	ND (0.61)	ND (0.63)	ND (0.57)	ND (0.71)	ND (0.52)	ND (0.62)	2.00
Chromium	20	13	11	11	27	9.5	29	13	23	13	29	14	12	11	13	13	25	14	2,000
Lead	8.9	ND (6.7)	ND (6.6)	ND (7.3)	25	ND (6.2)	84	ND (6.2)	27	ND (6.7)	9.7	ND (7.4)	ND (6.1)	ND (6.3)	ND (5.7)	ND (7.1)	ND (5.2)	ND (6.2)	250
Mercury	ND (0.31)	ND (0.33)	ND (0.33)	ND (0.36)	ND (0.31)	ND (0.31)	ND (0.32)	ND (0.31)	ND (0.33)	ND (0.34)	ND (0.29)	ND (0.37)	ND (0.31)	ND (0.31)	ND (0.28)	ND (0.36)	ND (0.26)	ND (0.31)	2.00
Selenium	ND (12)	ND (13)	ND (13)	ND (15)	ND (13)	ND (12)	ND (13)	ND (12)	ND (13)	ND (13)	ND (12)	ND (15)	ND (12)	ND (13)	ND (11)	ND (14)	ND (10)	ND (12)	400 ^a
Silver	ND (1.2)	ND (1.3)	ND (1.3)	ND (1.5)	ND (1.3)	ND (1.2)	ND (1.3)	ND (1.2)	ND (1.3)	ND (1.3)	ND (1.2)	ND (1.5)	ND (1.2)	ND (1.3)	ND (1.1)	ND (1.4)	ND (1.0)	ND (1.2)	400 ^a
Polychlorinated Biphenyls by EPA 8082A (mg/kg)																			
Aroclor 1254	–	–	–	–	ND (0.063)	–	ND (0.063)	ND (0.062)	ND (0.065)	–	0.12	–	ND (0.061)	–	–	–	–	–	–
Aroclor 1260	–	–	–	–	ND (0.063)	–	0.18	ND (0.062)	ND (0.065)	–	ND (0.058)	–	ND (0.061)	–	–	–	–	–	–
Total PCBs	–	–	–	–	ND (0.063)	–	0.18	ND (0.062)	ND (0.065)	–	0.12	–	ND (0.061)	–	–	–	–	–	1.00

BOLD values detected above the reporting limit.

^a MTCA Method B, non cancer

^b MTCA Method B, cancer

^c Total cPAHs (TEF) was calculated using ½ the reporting limit for compounds that were not detected above the reporting limit.

– = not analyzed or not applicable

cPAHs = carcinogenic polycyclic aromatic hydrocarbons

mg/kg = milligrams per kilogram

MTCA = Model Toxic s Control Act (Chapter 173-340 Washington Administrative Code [WAC]).

ND = not detected above laboratory reporting limits shown in parentheses

Table 2. Summary of Groundwater Sample Results, Pacific Park/Dumpsite, Site Investigation, Pacific, Washington.																	
Analytical Parameter	Sample Location															MTCA Method A Cleanup Level	
	Monitoring Well Samples						Push Probe Samples										
	MW1	MW2	MW3	MW4	MW5	MW6	PP1-W	PP2-W	PP3-W	PP4-W	PP5-W	PP6-W	PP7-W	PP8-W	PP9-W		
Sample Date	5/12/2017						5/23-24/2017										
NWTPH-Gx (µg/L)																	
Gasoline Range Organics	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	210	ND (100)	ND (100)	ND (100)	ND (100)	800
NWTPH-Dx (mg/L)																	
Diesel Range Organics	ND (0.26)	ND (0.27)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.27)	ND (0.37)	ND (0.26)	ND (0.26)	ND (0.27)	ND (0.26)	ND (0.28)	ND (0.26)	ND (0.28)	500	
Lube Oil	ND (0.42)	ND (0.44)	ND (0.42)	ND (0.42)	ND (0.41)	ND (0.41)	ND (0.43)	ND (0.60)	ND (0.42)	ND (0.41)	ND (0.43)	ND (0.42)	ND (0.44)	ND (0.41)	ND (0.45)	500	
Volatile Organic Compounds (µg/L)																	
Acetone	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	6.7	75	5.3	5.6	5.5	7.9	6.1	5.2	7.2	7,200 ^a	
Carbon disulfide	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	0.22	800 ^a	
Benzene	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	6.4	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	5.0	
Toluene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	5.2	ND (1.0)	ND (1.0)	1,000	
Chlorobenzene	ND (0.20)	ND (0.20)	ND (0.20)	1.5	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	0.43	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	160 ^a	
Xylenes ^c	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	32.57	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	1,000	
Isopropylbenzene	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	0.45	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	–	
n-Propylbenzene	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	0.95	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	800 ^a	
1,3,5-Trimethylbenzene	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	3.1	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	80 ^a	
1,2,4-Trimethylbenzene	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	12	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	–	
Total Metals (µg/L)																	
Antimony	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	47	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	6.4 ^a	
Arsenic	ND (3.3)	ND (3.3)	ND (3.3)	8.3	ND (3.3)	ND (3.3)	36	910	18	110	14	14	110	ND (3.3)	30	5.0	
Beryllium	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	34	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	32 ^a	
Cadmium	ND (4.4)	ND (4.4)	ND (4.4)	ND (4.4)	ND (4.4)	ND (4.4)	ND (4.4)	24	ND (4.4)	ND (4.4)	ND (4.4)	ND (4.4)	ND (4.4)	ND (4.4)	ND (4.4)	5.0	
Chromium	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	73	2,000	63	240	29	45	210	ND (11)	49	50	
Copper	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	80	4,200	120	460	50	54	570	ND (11)	110	640 ^a	
Lead	ND (1.1)	ND (1.1)	ND (1.1)	ND (1.1)	4.0	ND (1.1)	250	2,100	54	2,800	32	55	250	ND (1.1)	61	15	
Mercury	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	4.3	ND (0.50)	1.2	ND (0.50)	ND (0.50)	0.68	ND (0.50)	ND (0.50)	2.0	
Nickel	ND (22)	ND (22)	ND (22)	ND (22)	ND (22)	ND (22)	33	1,800	32	190	ND (22)	46	210	ND (22)	44	320 ^a	
Selenium	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	53	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	6.0	ND (5.6)	ND (5.6)	80 ^a	
Silver	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	80 ^a	
Thallium	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	9.6	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	0.16 ^a	
Zinc	160	42	170	80	37	ND (28)	700	5,500	130	1,000	49	100	520	71	210	4,800 ^a	

Table 2 (continued). Summary of Groundwater Sample Results, Pacific Park/Dumpsite, Site Investigation, Pacific, Washington.																
Analytical Parameter	Sample Location															MTCA Method A Cleanup Level
	Monitoring Well Samples						Push Probe Samples									
	MW1	MW2	MW3	MW4	MW5	MW6	PP1-W	PP2-W	PP3-W	PP4-W	PP5-W	PP6-W	PP7-W	PP8-W	PP9-W	
	5/12/2017						5/23-24/2017									
Sample Date	5/12/2017						5/23-24/2017									
Dissolved Metals (µg/L) (continued)																
Antimony	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	7.1	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	6.4 ^a
Arsenic	ND (3.0)	ND (3.0)	ND (3.0)	8.3	ND (3.0)	ND (3.0)	18	28	3.5	7.1	3.3	3.6	ND (3.0)	ND (3.0)	ND (3.0)	5.0
Beryllium	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	32 ^a
Cadmium	ND (4.0)	ND (4.0)	ND (4.0)	ND (4.0)	ND (4.0)	ND (4.0)	ND (4.0)	ND (4.0)	ND (4.0)	ND (4.0)	ND (4.0)	ND (4.0)	ND (4.0)	ND (4.0)	ND (4.0)	5.0
Chromium	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	50
Copper	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	640 ^a
Lead	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	3.0	ND (1.0)	ND (1.0)	1.2	ND (1.0)	3.1	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	15
Mercury	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	2.0
Nickel	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	320 ^a
Selenium	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	80 ^a
Silver	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	80 ^a
Thallium	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	0.16 ^a
Zinc	170	ND (25)	140	37	35	ND (25)	39	ND (25)	ND (25)	ND (25)	ND (25)	ND (25)	ND (25)	62	ND (25)	4,800 ^a
Polycyclic Aromatic Hydrocarbons (µg/L)																
Naphthalene	ND (0.095)	ND (0.099)	ND (0.095)	ND (0.096)	ND (0.10)	ND (0.10)	ND (0.096)	ND (0.12)	ND (0.096)	ND (0.10)	0.18	ND (0.097)	ND (0.097)	ND (0.095)	ND (0.096)	160
Benzo(a)anthracene	ND (0.0095)	ND (0.0099)	ND (0.0095)	ND (0.0096)	ND (0.010)	ND (0.010)	ND (0.0096)	ND (0.012)	ND (0.0096)	0.013	ND (0.0097)	0.052	ND (0.0097)	ND (0.0095)	ND (0.0096)	0.12 ^b
Chrysene	ND (0.0095)	ND (0.0099)	ND (0.0095)	ND (0.0096)	ND (0.010)	ND (0.010)	ND (0.0096)	0.012	ND (0.0096)	0.021	ND (0.0097)	0.080	ND (0.0097)	ND (0.0095)	ND (0.0096)	12 ^b
Benzo(b)fluoranthene	ND (0.0095)	ND (0.0099)	ND (0.0095)	ND (0.0096)	ND (0.010)	ND (0.010)	ND (0.0096)	0.020	ND (0.0096)	0.036	ND (0.0097)	0.14	ND (0.0097)	ND (0.0095)	0.019	0.12 ^b
Benzo(j,k)fluoranthene	ND (0.0095)	ND (0.0099)	ND (0.0095)	ND (0.0096)	ND (0.010)	ND (0.010)	ND (0.0096)	ND (0.012)	ND (0.0096)	0.011	ND (0.0097)	0.042	ND (0.0097)	ND (0.0095)	ND (0.0096)	1.2 ^b
Benzo(a)pyrene	ND (0.0095)	ND (0.0099)	ND (0.0095)	ND (0.0096)	ND (0.010)	ND (0.010)	ND (0.0096)	ND (0.012)	ND (0.0096)	0.024	ND (0.0097)	0.051	ND (0.0097)	ND (0.0095)	0.0098	0.100
Indeno(1,2,3-cd)pyrene	ND (0.0095)	ND (0.0099)	ND (0.0095)	ND (0.0096)	ND (0.010)	ND (0.010)	ND (0.0096)	0.014	ND (0.0096)	0.040	ND (0.0097)	0.066	ND (0.0097)	ND (0.0095)	0.011	0.12 ^b
Dibenz(a,h)anthracene	ND (0.0095)	ND (0.0099)	ND (0.0095)	ND (0.0096)	ND (0.010)	ND (0.010)	ND (0.0096)	ND (0.012)	ND (0.0096)	0.011	ND (0.0097)	0.018	ND (0.0097)	ND (0.0095)	ND (0.0096)	0.012 ^b
Benzo(g,h,i)perylene	ND (0.0095)	ND (0.0099)	ND (0.0095)	ND (0.0096)	ND (0.010)	ND (0.010)	ND (0.0096)	0.020	ND (0.0096)	0.046	ND (0.0097)	0.055	ND (0.0097)	ND (0.0095)	0.012	–
Total cPAHs (TEF) ^d	0.0072	0.0075	0.0072	0.0072	0.0076	0.0076	0.0072	0.011	0.0072	0.039	0.0073	0.084	0.0073	0.0072	0.014	0.100

BOLD values detected above the reporting limit.

Shaded values exceed MTCA criteria.

a MTCA Method B, non cancer

b MTCA Method B, cancer

c Xylenes is the sum of m-,p-, and o-xylene.

d Total cPAHs (TEF) was calculated using ½ the reporting limit for compounds that were not detected above the reporting limit.

– = not analyzed or not applicable

cPAHs = Carcinogenic polycyclic aromatic hydrocarbons

µg/L = micrograms per liter

mg/L = milligrams per kilogram

MTCA = Model Toxic s Control Act (Chapter 173-340 Washington Administrative Code [WAC]).

ND = not detected above laboratory reporting limits shown in parentheses

FIGURES

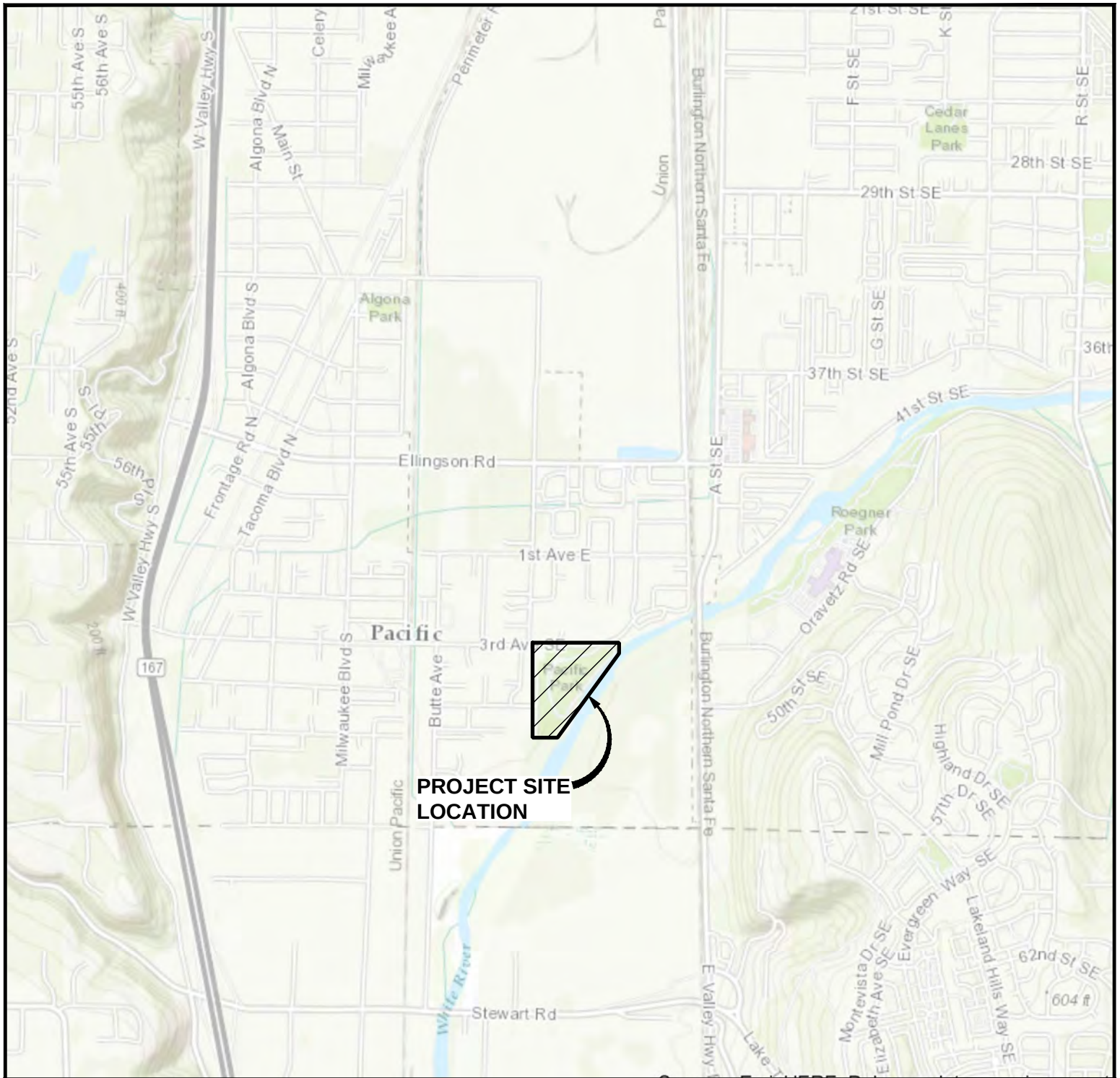
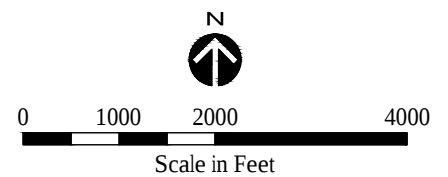


Figure 1.
Vicinity Map, Pacific Park,
Pacific, Washington.

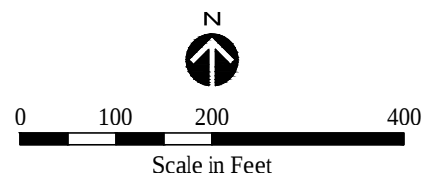




LEGEND:

— — — — — Parcel boundary

Figure 2.
Site Map, Pacific Park,
Pacific, Washington.

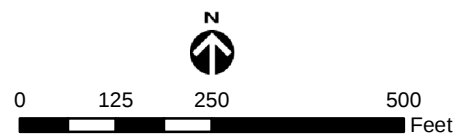




Legend

- ✕ Existing monitoring wells
- Push-probe sample locations
- ⬠ Barometric pressure sensor
- River mile (10th)
- ➔ River
- Park
- Parcels

Figure 3.
Sample Location Map, Pacific Park,
Pacific, Washington.

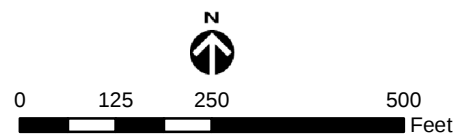




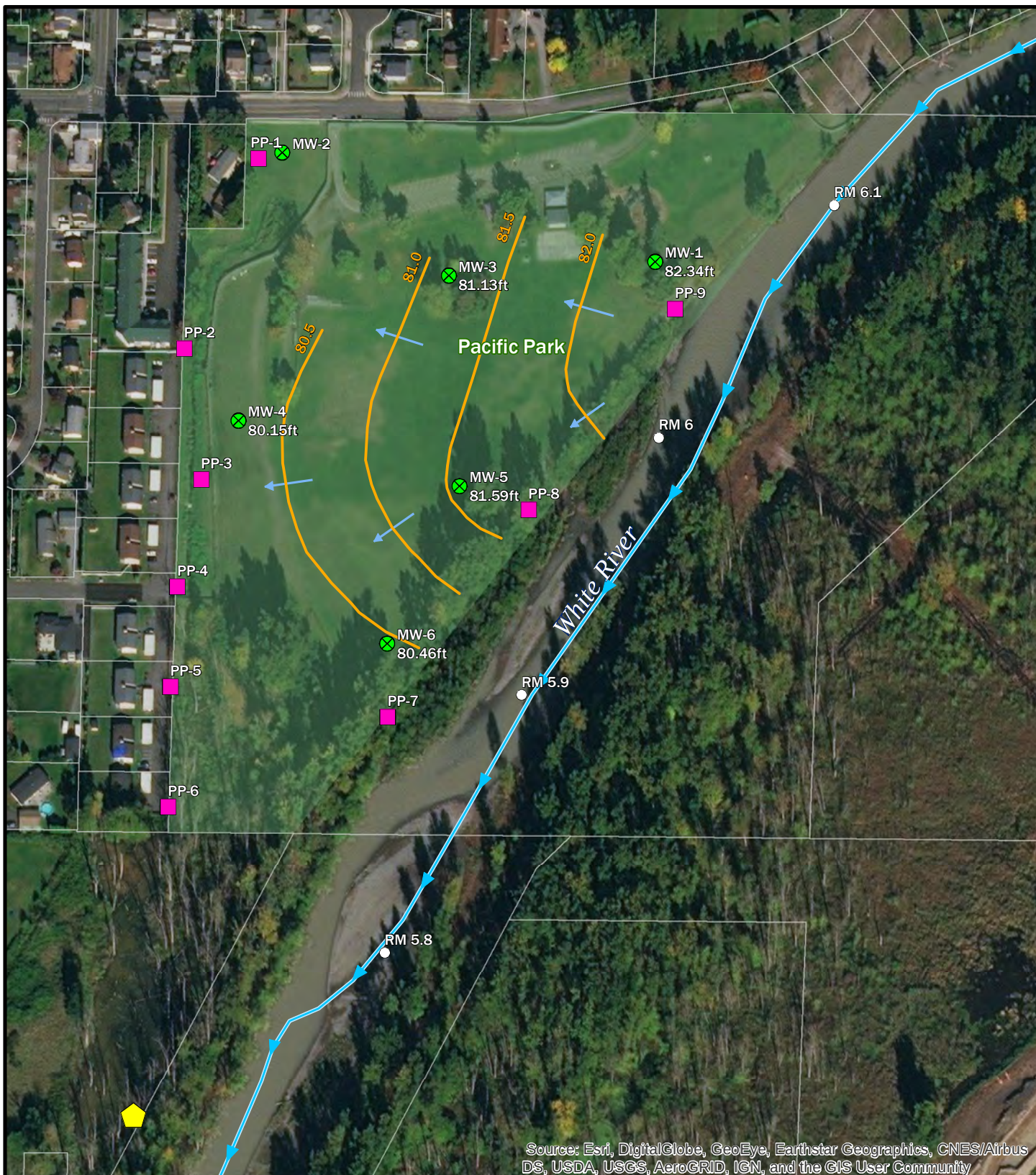
Legend

- Estimated direction of groundwater flow
- River
- Groundwater Contour
- Push-probe sample locations
- ⊗ Existing monitoring wells
- ⬠ Barometric pressure sensor
- River mile (10th)
- Park
- Parcels

Figure 4.
Water Level Contour Map, October 6, 2016,
Pacific Park, Pacific, Washington.



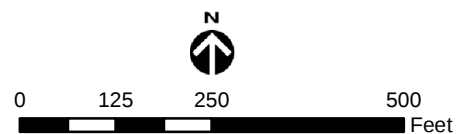
K:\Projects\Y2015\15-05986-040\Project\Report\water_level_contour_Oct6.mxd (8/15/2017)



Legend

- Estimated direction of groundwater flow
- Groundwater Contour
- Push-probe sample locations
- ⊗ Existing monitoring wells
- ⬠ Barometric pressure sensor
- River mile (10th)
- River
- Park
- Parcels

Figure 5.
Water Level Contour Map, March 19, 2016,
Pacific Park, Pacific, Washington.



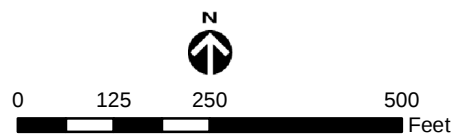
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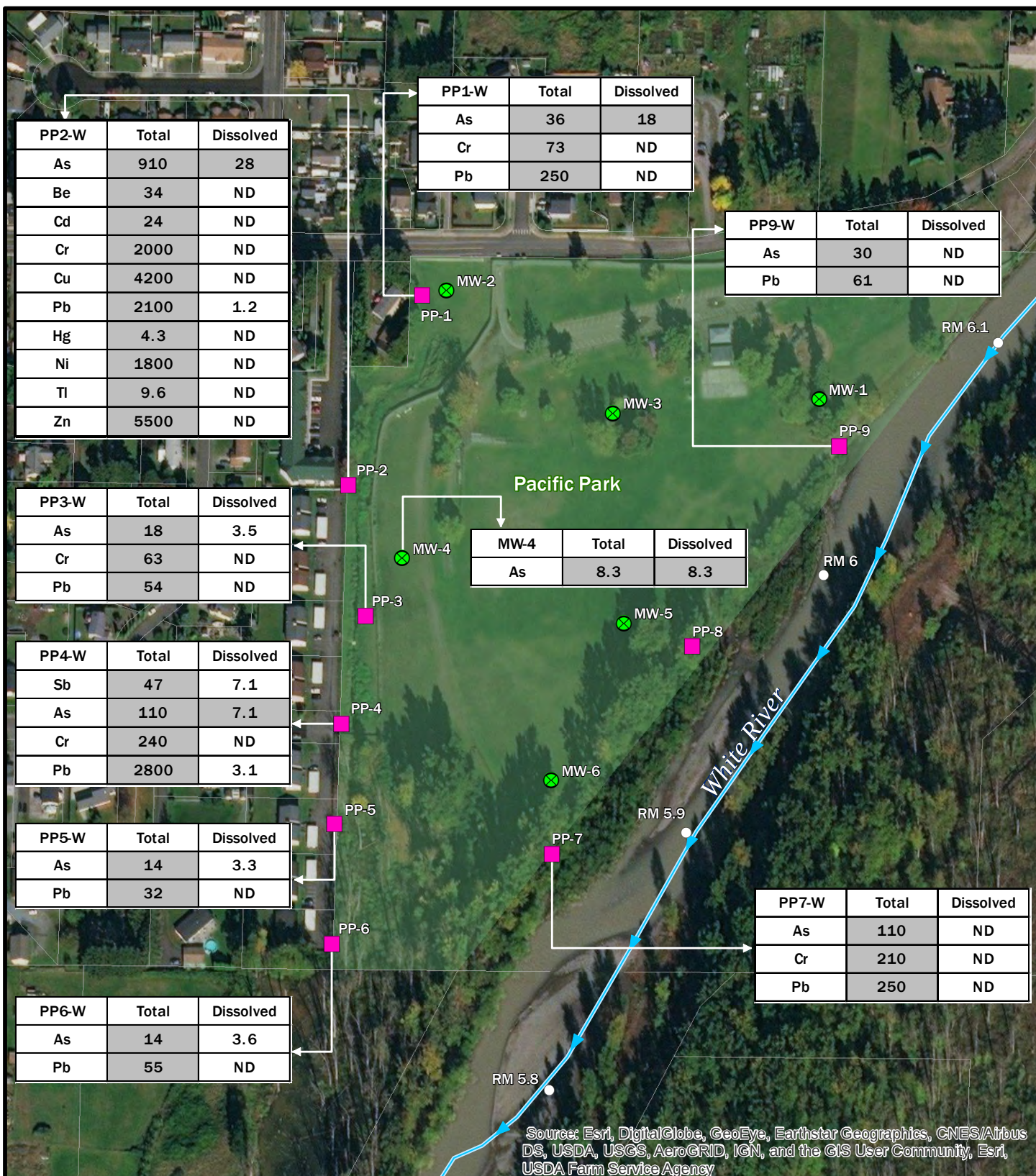
Legend

- Estimated direction of groundwater flow
- River
- Groundwater contour
- Park
- Push-probe sample locations
- ⊗ Existing monitoring wells
- ⬠ Parcels
- ⬠ Barometric pressure sensor
- River mile (10th)

Figure 6.
Water Level Contour Map, May 12, 2017,
Pacific Park, Pacific, Washington.



K:\Projects\Y2015\15-05986-040\Project\Report\water_level_contour_May12.mxd (8/15/2017)



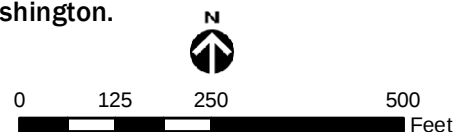
Legend

- Push-probe sample locations
- ⊗ Existing monitoring wells
- River mile (10th)
- River
- Park
- Parcels

Notes:

Groundwater values reported in micrograms per liter (µg/L).
Shaded values exceed MTCA cleanup level.

Figure 7.
MTCA Metals Exceedances in Groundwater Sampling Results, Pacific Park, Pacific, Washington.



APPENDIX A

Field Notes



Project No.: 15-0542 Site: Pacific Park Well No.: MW1 Date: 5/12/17
Well Depth: 15 Screen Length: 10 Well Diameter: 2" Casing Type: PVC
Sampling Device: peristaltic Tubing Type: polyethylene Water Level: 2.33
Measuring Point: top of well monument Other Info: flow 0.4 L/m 162
Sampling Personnel: BB gl

Type of Samples Collected for Laboratory Analysis:

Well Casing Volumes:

Gal/Ft $1\frac{1}{4}" = 0.077$ $1\frac{1}{2}" = 0.10$ $2" = 0.16$ $2\frac{1}{2}" = 0.24$ $3" = 0.37$ $3\frac{1}{2}" = 0.50$ $4" = 0.65$ $6" = 1.46$



Project No.: 15-05986 Site: -040 Pacific Park MW 2 Well No.: MW 2 Date: 5/12/17
Well Depth: 15.0 Screen Length: 10.0 Well Diameter: 2.0 Casing Type: PVC
Sampling Device: Peristaltic Tubing Type: polyethylene Water Level: 1.37
Measuring Point: from top of well monument Other Info: Flow 0.4 L/min local
Sampling Personnel: George I. Brianna

Type of Samples Collected for Laboratory Analysis:

5 VOA's for Gx/VOCs, 2x 500 ml Amber Dx, 2x 1L Amber PAHs, 2x 500 ml poly
Well Casing Volumes: T + D App Metals

Gal/Ft $1\frac{1}{4}" = 0.077$ $1\frac{1}{2}" = 0.10$ $2" = 0.16$ $2\frac{1}{2}" = 0.24$ $3" = 0.37$ $3\frac{1}{2}" = 0.50$ $4" = 0.65$ $6" = 1.46$



Project No.: 15-05980 Site: Pacific Park Well No.: MW3 Date: 5-12-17
Well Depth: 15 Screen Length: 10 Well Diameter: 2" Casing Type: PVC
Sampling Device: peristaltic Tubing Type: polyethylene Water Level: 0.40'
Measuring Point: top of well Other Info: flow 0.4 L/min Bred
Sampling Personnel: BB GI

Type of Samples Collected for Laboratory Analysis:

Gal/Ft $1\frac{1}{4}" = 0.077$ $1\frac{1}{2}" = 0.10$ $2" = 0.16$ $2\frac{1}{2}" = 0.24$ $3" = 0.37$ $3\frac{1}{2}" = 0.50$ $4" = 0.65$ $6" = 1.46$



Project No.: 15-05786
-040 Site: Pacific Park Well No.: MW-4 Date: 5/12/17
Well Depth: 15 Screen Length: 10 Well Diameter: 2" Casing Type: PVC
Sampling Device: peristaltic Tubing Type: polyethylene Water Level: 2.73'
Measuring Point: top of well monument Other Info: drill ~~4.5 l/min~~ purge rate
Sampling Personnel: BB GJ 0.4 L/min

Type of Samples Collected for Laboratory Analysis:

S VOAs for Gx/VOCs, 2x 500 mL Amber DX, 2x 1L Amber PAHs, 2x 500 mL poly
Well Casing Volumes: TBD PPMetal

Well Casing Volumes:

Gal/Ft 1¼" = 0.077 1½" = 0.10 2" = 0.16 2½" = 0.24 3" = 0.37 3½" = 0.50 4" = 0.65 6" = 1.46



Project No.: 15-059786
-040 Site: Pacific Park Well No.: MWS Date: 5/12/17
Well Depth: 15 Screen Length: 10 Well Diameter: 2 Casing Type: PVC
Sampling Device: Peristaltic Tubing Type: polyethylene Water Level: 1.60'
Measuring Point: top of well Other Info: purging at 0.4 L/m rate
monument
Sampling Personnel: BB GI

Time	pH	Temp.	Cond.	Dis.O ₂	Turb.	[] Conc.	Notes
12:15	5.11	0.2	165 ^{ug} /L	0.87	1.3		Start purging
12:17	7.53	9.5	157	0.78	1.0	WL = 1.65'	
12:20	7.20	9.5	156	0.98	1.2		
12:25	7.12	9.6	155	1.03	1.2	WL = 1.65'	
12:30	7.09	9.6	156	1.06	1.1	readings stable	
12:35	7.08	9.5	Collected sample.				clear, colorless, odorless.
12:40							
Water level dropped slightly, but stable as well was purged.							

5 VOAs for Gx/VOCs, 2 x 500 mL Amber Dx, 2 x 1L Amber PAHs, 2 x 500 mL poly T & D PP metals

Well Casing Volumes:

Gal/Ft $1\frac{1}{4}" = 0.077$ $1\frac{1}{2}" = 0.10$ $2" = 0.16$ $2\frac{1}{2}" = 0.24$ $3" = 0.37$ $3\frac{1}{2}" = 0.50$ $4" = 0.65$ $6" = 1.46$



GROUNDWATER SAMPLING LOG

Project No.: 15-05986 -oto Site: Pacific Park Well No.: MW-6 Date: 5/12/17

Well Depth: 15' Screen Length: 10' Well Diameter: 2" Casing Type: PVC

Sampling Device: pistonatic Tubing Type: polyethylene Water Level: 5.71

Measuring Point: Top of monument Other Info: water levels have risen w/in

Sampling Personnel: BBCI and [unclear] purged at

Water level stable as well was purged.

5 VOA's for 4x/VOC's, 2x 500 mL Amber Dx, 2x 1L Amber PTH's, 2x 500 mL poly T & D metals

Gal/Ft $1\frac{1}{4}" = 0.077$ $1\frac{1}{2}" = 0.10$ $2" = 0.16$ $2\frac{1}{2}" = 0.24$ $3" = 0.37$ $3\frac{1}{2}" = 0.50$ $4" = 0.65$ $6" = 1.46$

2 5-12-17 PACIFIC PARK

George Effer + Brianna Bland

8:00 Am onsite

Weather 55° Sunny - rain earlier this morning, occasional showers and periods of heavy rain.

✓ Health + Safety Briefing ✓

✓ label sample containers

✓ Calibrated multi meters.

• Pro DSS #1: 758.0 mmHg

DI : 0.2 μ S/cm pH 7: 7.10

1000 : 1003 μ S/cm pH 10: 10.11

DO : 104.8 % pH 4: 4.42

• Pro DSS #2: 759.4 mmHg

DI : 0.3 μ S/cm pH 7: 6.99

1000 : 1004 μ S/cm pH 10: 9.93

DO : 101.4 % pH 4: 3.89

9:05 Collected water levels at all 6 wells.

Having trouble calibrating pH

10:45 Started purging MW2

11:10 : Sample Time MW2

10:00 : Sample time MW DUP 10:00 AM

5-12-17 PACIFIC PARK.

11:55 MW1 start purge

12:22 Collected Sample

12:15 MW5 Start purge

12:40 Collected sample.

13:15 MW3 start purge

13:43 Collected sample.

13:25 MW6 Start purge

13:50 Collected sample

14:27 Start purge MW-4

14:48 Collected sample.

Purge water put in 55-gallon ~~drum~~ drum by dumpsters. Labeled top of drum w/ the contents and secured the lid.

15:40 offsite.

5/23/17 Sunny 60° Bruce Carpenter

7:20 Arrived at Pacific Park

Calibrated PID

7:30 Met w/ Richard - Diller
and Ryan - APS utility locator.
Walked site and cleared boreholes
for drilling.

8:00 Chris B. and Brianna arrive
at site. Meet w/ Sean KC re. Vac/HESCO.

8:40 Set up drill rig @ AP1.

9:00 APS locator - Ryan left site.

9:20 Soil sample PP1-2 @ 2' depth.

9:45 Soil sample PP1-10 @ 10' depth.

10:00 Collected water samples.

10:05 SWL @ 1.8' Screen set 5'-15'

Backfilled borehole w/ bentonite "pvc w/ 105 lot

10:20 Moved to PP2 location in Megan's
Court

10:35 Collected soil sample PP2-2.5 @ 2.5'

10:50 Collected soil sample PP2-10 @ 10'

11:00 Began collecting water sample.

screen set 5'-15' initially, moved screen up
from 3' to 13'. Ap1. mg stopped by doing sampling.

13:30 Very slow to recharge. Completed
collecting water sample @ PP2.

Decanned drill rod, and moved to PP6

14:10 Begin drilling at PP-6

Refusal at 2.5'. Moved N several feet and redrilled.

14:35 Collected soil sample PP6-2.

14:45 Collected soil sample PP6-10

15:00 Collected water sample PP6-W

Backfilled boreholes.

Cleaned downhole equipment.

15:10 Moved North to PP5

15:20 Begin Drilling PP5.

15:40 Collected soil sample PP5-2.5 @ 15:40.

15:50 Collected soil sample PP5-10 @ 16:50

16:00 Collected water sample PP5-W.

Cleaned up site

There are two drums, 1 (20 gal) w/ soil cuttings and 1 (55 gal) w/ Purge water + Recirc water by the dumpsters in park.

16:35 Richard left site

16:45 Brianna and I left site

BH

5/24/17 Pacific Park

7:25 Arrive at site

Cloudy, 50's light breeze

7:30 Calibrate PID

7:45 Drive to PP-4.

8:00 Meet Brianna + Richard. ESN Diller.

8:10 Conduct H+S intg

8:15 Begin drilling @ PP4.

Drilled to 5' - concrete chunks Moved over 5' and redrilled core.

8:30 Soil Sample PP4-3

8:40 Soil sample PP4-10

9:00 Began collecting water sample.

9:20 Backfilled borehole

9:25 Moved to location PP-3.

9:35 Begin drilling @ PP3.

Poor recovery @ 0-5'

Poor recovery @ 10-15'

Set screen from 5' - 15'. Began collecting water sample @ 10:00.

Moved over 2' and redrilled to 15' to get additional sample for soil.

10:05 Soil Sample PP3-2.5

10:15 Soil Sample PP3-10

10:30 Moved drilling off site

Decanned drill rods, sampler.
loaded rig onto trailer and
moved to PP9 location

11:15 Began drilling at PP-9.

Port recovery due to coarse gravel
Collected two 0-5' core samples and
combined sample into containers

11:50 Soil Sample PP9-0 (Composite from
(2) 0-5' core samples w/ <20% recovery

12:00 Soil Sample PP9-10

12:10 Began collecting water sample.

12:30 Backfilled borehole, moved to
Location PP-8.

12:45 Begin drilling @ PP8.

0-5', 20% recovery drilled second location
and had 30% recovery. Combined
sample. 13:10 Water sample begin collection.

13:10 Soil Sample PP8-0.5

13:30 Soil Sample PP8-10.

13:45 Duplicate water sample PP10-W collected
from PP8.

14:10 Moved to next location PP7.

14:15 Began drilling @ PP7

14:30 Collected soil sample PP7-0

Composite sample from three sleeves
from 0-5' @ PP7.

Duplicate sample from PP7-0 labeled
as PP10-0 @ 15:10

14:40 Soil sample PP7-10

Screen set from 0-10'.

14:50 Water sample.

15:10 Backfilled borehole, left site to
return to parking lot.

15:20 Began left site.

15:40 Driller and I left site

APPENDIX B

Probe Logs



SOIL PROBE BORING LOG

Boring ID PP1
 Total depth 15 feet
 Sheet 1 of 1

Project name Pacific Park Drilling Contractor ESN Drilling method Push-probe rig
 Project number 15-05986-040 Location NW corner of park Sampling method 5 ft core with plastic liner
 Client King County ~ 50 feet west of MW-2 Air monitoring (Y/N) Yes
 HEC rep. Bruce Carpenter Date May 23, 2017 Instrument(s) Photoionization detector

PID (ppm)	Sample type, interval	% recovery	Water level (feet)	Depth (feet, BGS)	Soil group	Soil description
0	5-foot core with liner	20/50	▼ 1.8		ML	Grass/Brown sandy SILT, trace of gravel, FILL, damp
				1		
				2		Brown SILT, trace of sand, FILL, damp Static water level measured at 1.8 feet. Soil sample PP1-2 collected at 9:20
				3	SM	Brown silty SAND, trace of gravel, FILL,wet
				4		
5						
0	5-foot core with liner	100			ML	Dark Brown-gray sandy SILT, wet
				6		
				7		
				8	SM	Dark Brown-black silty SAND, wet
				9		
10	PT	Dark Brown-gray PEAT, damp				
0	5-foot core with liner	100			SM	Soil sample PP1-10 collected at 9:45 Dark Brown-black silty SAND, wet
				11		
				12		
					ML	8” Dark Brown SILT, trace of sand, wet
				13	SM	Dark Brown-black, silty SAND, wet
				14	ML	Brown-gray SILT, damp
				ML/PT	Brown SILT, and PEAT, damp	
			15	ML	Brown-gray SILT, damp	
						Set temporary screen from 5 feet to 15 feet. Purged approximately 1-gallon prior to sample collection. Collected water sample PP1-W at 10:00. Backfilled borehole with bentonite chips.

Photoionization detector (PID)



SOIL PROBE BORING LOG

Boring ID PP2
 Total depth 15 feet
 Sheet 1 of 1

Project name Pacific Park Drilling Contractor ESN Drilling method Push-probe rig
 Project number 15-05986-040 Location SE corner of Megan's Court Sampling method 5 ft core with plastic liner
 Client King County Air monitoring (Y/N) Yes
 HEC rep. Bruce Carpenter Date May 23, 2017 Instrument(s) Photoionization detector

PID (ppm)	Sample type, interval	% recovery	Water level (feet)	Depth (feet, BGS)	Soil group	Soil description	
0.1	5-foot core with liner	60	▽ 2.5		ML	Grass/Brown gravelly sandy SILT, FILL, damp	
				1		Brown sandy SILT, FILL, damp	
				2			
				3			Soil sample PP2-2.5 collected at 10:35 Groundwater encountered during drilling Dark Brown sandy SILT, wet
				4			
5							
0	5-foot core with liner	50		6			
				7			
				8	SM	Dark Brown silty SAND, wet	
				9			
10	ML	Dark Brown sandy SILT, trace of gravel, wet					
0	5-foot core with liner	100		11	SM	Soil sample PP2-10 collected at 10:50 Dark Brown-black silty SAND, wet	
				12			
				13	MH MH/PT	Greenish-gray silty CLAY, with red-brown mottling, damp	
				14		Occasional 1-inch peat lenses	
			15				
						Initially set temporary screen from 5 feet to 15 feet, raised screen to 2 feet to 12 feet. Very slow yielding, took 2.5 hours to collect water Sample. Purged approximately 1-quart prior to sample collection. Began water sample PP2-W collection at 11:00. Backfilled borehole with bentonite chips.	

Photoionization detector (PID)



SOIL PROBE BORING LOG

Boring ID PP3
 Total depth 15 feet
 Sheet 1 of 1

Project name Pacific Park Drilling Contractor ESN Drilling method Push-probe rig
 Project number 15-05986-040 Location East side of ditch Sampling method 5 ft core with plastic liner
 Client King County ~ 190 feet north of PP4 Air monitoring (Y/N) Yes
 HEC rep. Bruce Carpenter Date May 24, 2017 Instrument(s) Photoionization detector

PID (ppm)	Sample type, interval	% recovery	Water level (feet)	Depth (feet, BGS)	Soil group	Soil description
0	5-foot core with liner	40/35	▼ 3.1		ML	Grass/Brown gravelly sandy SILT, FILL, damp
				1		ML
				2	Brown gravelly SILT, FILL, wet. Soil sample PP3-2.5 collected at 10:05 Static water level measured at 3.1 feet.	
				3		
				4		
5	ML	Brown sandy SILT, FILL, wet				
6						
7						
0	5-foot core with liner	50/55			SP	Dark Brown-black fine to medium SAND, trace of gravel, wet Soil sample PP3-10 collected at 10:15
				8		
				9		
				10		
				11		
0	5-foot core with liner	0/100				Greenish-gray sandy SILT, wet
				12		
			13			
			14			
			15			
						Set temporary screen from 5 feet to 15 feet. Purged approximately 1-gallon prior to sample collection. Collected water sample PP3-W at 10:00 Backfilled borehole with bentonite chips.

Photoionization detector (PID)



SOIL PROBE BORING LOG

Boring ID PP4
 Total depth 15 feet
 Sheet 1 of 1

Project name Pacific Park Drilling Contractor ESN Drilling method Push-probe rig
 Project number 15-05986-040 Location East end of 4th Avenue SE in Sampling method 5 ft core with plastic liner
 Client King County grass Air monitoring (Y/N) Yes
 HEC rep. Bruce Carpenter Date May 24, 2017 Instrument(s) Photoionization detector

PID (ppm)	Sample type, interval	% recovery	Water level (feet)	Depth (feet, BGS)	Soil group	Soil description
0	5-foot core with liner	50	▼ 3.2		SM	Grass/Dark Brown gravelly silty SAND, some concrete, FILL, damp
				1	SW	4” zone of medium silty SAND, FILL, damp
				2		
				3	ML	Brown gravelly sandy SILT, red-brown mottling, FILL, damp. Soil sample PP4-3 collected at 8:30
4	SW	Static water level measured at 3.2 feet. Dark Brown-black gravelly SAND, FILL, wet				
5						
0	5-foot core with liner	55			SM	Gray-black gravelly silty SAND, piece of asphalt, FILL, wet
				6	ML	Dark Brown-black sandy SILT, wet
				7		
				8	SP	Dark Brown-black fine to medium SAND, wet Soil sample PP4-10 collected at 8:40
9						
0	5-foot core with liner	100				
			10	ML	Dark Brown SILT, wet	
			11			
			12			
				SM	Dark Brown silty SAND, wet	
	ML	Dark Brown SILT, organic material, damp				
						Set temporary screen from 5 feet to 15 feet. Purged approximately 1-gallon prior to sample collection. Collected water sample PP4-W at 9:00 Backfilled borehole with bentonite chips.

Photoionization detector (PID)



SOIL PROBE BORING LOG

Boring ID PP5
 Total depth 15 feet
 Sheet 1 of 1

Project name Pacific Park Drilling Contractor ESN Drilling method Push-probe rig
 Project number 15-05986-040 Location ~ 215 feet north of PP6, Sampling method 5 ft core with plastic liner
 Client King County east side of HESCOs Air monitoring (Y/N) Yes
 HEC rep. Bruce Carpenter Date May 23, 2017 Instrument(s) Photoionization detector

PID (ppm)	Sample type, interval	% recovery	Water level (feet)	Depth (feet, BGS)	Soil group	Soil description
0	5-foot core with liner	50	▼ 3.0		SM	Grass/Topsoil, Dark Brown gravelly silty SAND, piece of wire, FILL, damp
				1		
				2		
				3	SW	Soil sample PP5-2.5 collected at 15:40 Dark Brown-gray gravelly SAND, FILL, damp Static water level measured at 3.0 feet.
				4		
5	PT	Brown PEAT, wet				
0.3	5-foot core with liner	60			ML	Dark Brown-black sandy SILT, wet
				6		
				7		
				8	SW	Dark Brown-black fine to medium SAND, trace of silt, organic material, wet
				9		
10	Dark Brown-black gravelly fine to coarse SAND, trace of silt, wet					
0	5-foot core with liner	40			SW	Soil sample PP5-10 collected at 15:50 Dark Brown-black fine to medium SAND, trace of gravel, wet
				11		
				12		
			13			
			14			
			15		Dark Brown-black, fine to coarse gravelly SAND, wet	
						Set temporary screen from 5 feet to 15 feet. Purged approximately 1-gallon prior to sample collection. Collected water sample PP5-W at 16:00 Backfilled borehole with bentonite chips.

Photoionization detector (PID)



SOIL PROBE BORING LOG

Boring ID PP6
 Total depth 15 feet
 Sheet 1 of 1

Project name Pacific Park Drilling Contractor ESN Drilling method Push-probe rig
 Project number 15-05986-040 Location SW corner of park, east side Sampling method 5 ft core with plastic liner
 Client King County of HESCOs Air monitoring (Y/N) Yes
 HEC rep. Bruce Carpenter Date May 23, 2017 Instrument(s) Photoionization detector

PID (ppm)	Sample type, interval	% recovery	Water level (feet)	Depth (feet, BGS)	Soil group	Soil description
0.1	5-foot core with liner	40	▼ 3.3		GW	Grass/Brown sandy GRAVEL, FILL, damp
				1		
				2		
				3	SM	Soil sample PP6-2 collected at 14:35 Brown gravelly silty SAND, piece of a ball, FILL, damp Static water level measured at 3.3 feet .
				4		
5						
0	5-foot core with liner	60		6	SM	Dark Brown-black silty SAND, organic material, wet
				7		
				8		
				9		
				10		
0	5-foot core with liner	100		11	ML	Soil sample PP6-10 collected at 14:45 Dark Brown sandy SILT, organic material, wet
				12		
				13		
				14		
					15	ML
						Set temporary screen from 2 feet to 12 feet. Purged approximately 1-gallon prior to sample collection. Collected water sample PP6-W at 15:00 Backfilled borehole with bentonite chips.

Photoionization detector (PID)



SOIL PROBE BORING LOG

Boring ID PP7
 Total depth 15 feet
 Sheet 1 of 1

Project name Pacific Park Drilling Contractor ESN Drilling method Push-probe rig
 Project number 15-05986-040 Location SE corner of park, ~ 125 feet Sampling method 5 ft core with plastic liner
 Client King County south of MW-6 Air monitoring (Y/N) Yes
 HEC rep. Bruce Carpenter Date May 24, 2017 Instrument(s) Photoionization detector

PID (ppm)	Sample type, interval	% recovery	Water level (feet)	Depth (feet, BGS)	Soil group	Soil description
0	5-foot core with liner	40/30/30	▼ 1.8		SM	Dark Brown silty SAND, organic material, FILL, damp
				1		Soil sample PP7-0 collected at 14:30
						Soil sample PP10-0 (duplicate sample, false time-14:35)
				2		Static water level measured at 1.8 feet
					GW	Dark Brown sandy GRAVEL, trace of silt, cobbles, wet
				3		
				4		.
				5		
0	5-foot core with liner	75			SM	Dark Brown silty gravelly SAND, wet
				6		
				7		
				8		
				9		
				10		
				11		Soil sample PP7-10 collected at 14:40
				12		
0	5-foot core with liner	60		13		
				14		
				15		
						Set temporary screen from 0 feet to 10 feet. Purged approximately 1-gallon prior to sample collection. Collected water sample PP7-W at 14:50 Backfilled borehole with bentonite chips.

Photoionization detector (PID)



SOIL PROBE BORING LOG

Boring ID PP8
 Total depth 15 feet
 Sheet 1 of 1

Project name Pacific Park Drilling Contractor ESN Drilling method Push-probe rig
 Project number 15-05986-040 Location ~125 feet east-southeast of Sampling method 5 ft core with plastic liner
 Client King County MW-5 Air monitoring (Y/N) Yes
 HEC rep. Bruce Carpenter Date May 24, 2017 Instrument(s) Photoionization detector

PID (ppm)	Sample type, interval	% recovery	Water level (feet)	Depth (feet, BGS)	Soil group	Soil description
0	5-foot core with liner	20/30			ML	Dark Brown sandy gravelly SILT, some wood, FILL, damp
				1		Soil sample PP8-0.5 collected at 13:20
				2	SM	Brown silty gravelly SAND, FILL, damp
				3	▼	wet
					3.1	Static water level measured at 3.1 feet
				4		.
5						
0	5-foot core with liner	30			GW	Dark Gray-black, fine to coarse sandy GRAVEL, wet
				6		
				7		
				8		
				9		
10						
0	5-foot core with liner	40			Soil sample PP8-10 collected at 13:30	
			11		cobbles	
			12			
			13			
			14			
15						
						Set temporary screen from 0 feet to 10 feet. Purged approximately 1-gallon prior to sample collection. Collected water sample PP8-W at 13:10 Collected duplicate water sample PP10-W (false time 13:45) Backfilled borehole with bentonite chips.

Photoionization detector (PID)



SOIL PROBE BORING LOG

Boring ID PP9
 Total depth 15 feet
 Sheet 1 of 1

Project name Pacific Park Drilling Contractor ESN Drilling method Push-probe rig
 Project number 15-05986-040 Location ~100 feet south-southeast of Sampling method 5 ft core with plastic liner
 Client King County MW-1 Air monitoring (Y/N) Yes
 HEC rep. Bruce Carpenter Date May 24, 2017 Instrument(s) Photoionization detector

PID (ppm)	Sample type, interval	% recovery	Water level (feet)	Depth (feet, BGS)	Soil group	Soil description
0	5-foot core with liner	20			GW	Gravel at surface Soil sample PP9-0 collected at 11:50 Brown-dark brown sandy GRAVEL, FILL, damp wet Static water level measured at 4.0 feet
				1		
				2		
				3		
				4		
				▼ 4.0		
				5		
0	5-foot core with liner	20			GW	Dark Brown fine to coarse sandy GRAVEL, small cobbles, wet
				6		
				7		
				8		
				9		
				10		
0	5-foot core with liner	80				Soil sample PP9-10 collected at 12:00
				11	SW	Dark Red-brown fine to medium SAND, wet
			12	GW	Dark Red-brown fine to coarse sandy GRAVEL, wet	
			13			
			14			
				SW	Dark Brown-black fine to medium SAND, wet	
			15	GW	Dark Brown-black sandy GRAVEL, wet	
					Set temporary screen from 3 feet to 13 feet. Purged approximately 1-gallon prior to sample collection. Collected water sample PP9-W at 12:10 Backfilled borehole with bentonite chips.	

Photoionization detector (PID)

APPENDIX C

Photographic Log

PACIFIC PARK/DUMPSITE ENVIRONMENTAL INVESTIGATION— PHOTOGRAPHIC LOG

Photo Number	Photo Description
1	PP1, looking northwest
2	PP2, looking south
3	PP3, looking north
4	PP4, looking south
5	PP5, looking east
6	PP5, looking east
7	PP6, looking east
8	PP6, looking east
9	PP7, looking south
10	PP8, looking south
11	PP9, looking south



1 PP1, looking northwest



2 PP2, looking south



3 PP3, looking north



4 PP4, looking south



5 PP5, looking east



6 PP5, looking east



7 PP6, looking east



8 PP6, looking east



9 PP7, looking south



10 PP8, looking south



11 PP9, looking south

APPENDIX D

Laboratory Analytical Reports



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

May 23, 2017

Bruce Carpenter
Herrera Environmental Consultants, Inc.
2200 6th Avenue, Suite 1100
Seattle, WA 98121

Re: Analytical Data for Project 15-05986-040
Laboratory Reference No. 1705-184

Dear Bruce:

Enclosed are the analytical results and associated quality control data for samples submitted on May 12, 2017.

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

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

Sincerely,

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

David Baumeister
Project Manager

Enclosures



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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 23, 2017
Samples Submitted: May 12, 2017
Laboratory Reference: 1705-184
Project: 15-05986-040

Case Narrative

Samples were collected on May 12, 2017 and received by the laboratory on May 12, 2017. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

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



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW1						
Laboratory ID:	05-184-01					
Gasoline	ND	100	NWTPH-Gx	5-19-17	5-19-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	92	61-118				
Client ID: MW2						
Laboratory ID:	05-184-02					
Gasoline	ND	100	NWTPH-Gx	5-19-17	5-19-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	84	61-118				
Client ID: MW3						
Laboratory ID:	05-184-03					
Gasoline	ND	100	NWTPH-Gx	5-19-17	5-19-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	85	61-118				
Client ID: MW4						
Laboratory ID:	05-184-04					
Gasoline	ND	100	NWTPH-Gx	5-19-17	5-19-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	86	61-118				
Client ID: MW5						
Laboratory ID:	05-184-05					
Gasoline	ND	100	NWTPH-Gx	5-19-17	5-19-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	91	61-118				
Client ID: MW6						
Laboratory ID:	05-184-06					
Gasoline	ND	100	NWTPH-Gx	5-19-17	5-19-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	82	61-118				



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
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 Project: 15-05986-040

NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW DUP					
Laboratory ID:	05-184-07					
Gasoline	ND	100	NWTPH-Gx	5-19-17	5-19-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	84	61-118				
Client ID:	Trip Blank					
Laboratory ID:	05-184-09					
Gasoline	ND	100	NWTPH-Gx	5-19-17	5-19-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	84	61-118				



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

**NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0519W1					
Gasoline	ND	100	NWTPH-Gx	5-19-17	5-19-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	85	61-118				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	05-184-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
Surrogate:								
Fluorobenzene				92	85	61-118		



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

NWTPH-Dx

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: MW1						
Laboratory ID:	05-184-01					
Diesel Range Organics	ND	0.26	NWTPH-Dx	5-15-17	5-15-17	X1
Lube Oil Range Organics	ND	0.42	NWTPH-Dx	5-15-17	5-15-17	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	109	50-150				
Client ID: MW2						
Laboratory ID:	05-184-02					
Diesel Range Organics	ND	0.27	NWTPH-Dx	5-15-17	5-15-17	X1
Lube Oil Range Organics	ND	0.44	NWTPH-Dx	5-15-17	5-15-17	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	107	50-150				
Client ID: MW3						
Laboratory ID:	05-184-03					
Diesel Range Organics	ND	0.26	NWTPH-Dx	5-15-17	5-18-17	X1
Lube Oil Range Organics	ND	0.42	NWTPH-Dx	5-15-17	5-18-17	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	91	50-150				
Client ID: MW4						
Laboratory ID:	05-184-04					
Diesel Range Organics	ND	0.26	NWTPH-Dx	5-15-17	5-15-17	X1
Lube Oil Range Organics	ND	0.42	NWTPH-Dx	5-15-17	5-15-17	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	86	50-150				
Client ID: MW5						
Laboratory ID:	05-184-05					
Diesel Range Organics	ND	0.26	NWTPH-Dx	5-15-17	5-15-17	X1
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	5-15-17	5-15-17	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	80	50-150				
Client ID: MW6						
Laboratory ID:	05-184-06					
Diesel Range Organics	ND	0.26	NWTPH-Dx	5-15-17	5-15-17	X1
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	5-15-17	5-15-17	X1
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	91	50-150				



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

NWTPH-Dx

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW DUP					
Laboratory ID:	05-184-07					
Diesel Range Organics	ND	0.27	NWTPH-Dx	5-15-17	5-15-17	X1
Lube Oil Range Organics	ND	0.43	NWTPH-Dx	5-15-17	5-15-17	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	93	50-150				



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

**NWTPH-Dx
QUALITY CONTROL**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0515W2					
Diesel Range Organics	ND	0.25	NWTPH-Dx	5-15-17	5-15-17	X1
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	5-15-17	5-15-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	123	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	05-197-01							
	ORIG	DUP						
Diesel Fuel #2	18.9	7.28	NA	NA	NA	NA	89	NA X1
Lube Oil	1.31	0.688	NA	NA	NA	NA	62	NA X1
Surrogate:								
<i>o</i> -Terphenyl				149	94	50-150		



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW1					
Laboratory ID:	05-184-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloromethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromomethane	ND	0.40	EPA 8260C	5-16-17	5-16-17	
Chloroethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Acetone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Iodomethane	ND	2.1	EPA 8260C	5-16-17	5-16-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-16-17	5-16-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Butanone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloroform	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Benzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Trichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Dibromomethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chloroethyl Vinyl Ether	ND	11	EPA 8260C	5-16-17	5-16-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Toluene	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW1					
Laboratory ID:	05-184-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Hexanone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-16-17	5-16-17	
o-Xylene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Styrene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromoform	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,2,2-Tetrachloroethane	ND	0.27	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Naphthalene	ND	1.3	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	115	77-129				
Toluene-d8	105	80-127				
4-Bromofluorobenzene	93	80-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW2					
Laboratory ID:	05-184-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloromethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromomethane	ND	0.40	EPA 8260C	5-16-17	5-16-17	
Chloroethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Acetone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Iodomethane	ND	2.1	EPA 8260C	5-16-17	5-16-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-16-17	5-16-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Butanone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloroform	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Benzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Trichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Dibromomethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chloroethyl Vinyl Ether	ND	11	EPA 8260C	5-16-17	5-16-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Toluene	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW2					
Laboratory ID:	05-184-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Hexanone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-16-17	5-16-17	
o-Xylene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Styrene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromoform	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,2,2-Tetrachloroethane	ND	0.27	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Naphthalene	ND	1.3	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	110	77-129				
Toluene-d8	107	80-127				
4-Bromofluorobenzene	91	80-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW3					
Laboratory ID:	05-184-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloromethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromomethane	ND	0.40	EPA 8260C	5-16-17	5-16-17	
Chloroethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Acetone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Iodomethane	ND	2.1	EPA 8260C	5-16-17	5-16-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-16-17	5-16-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Butanone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloroform	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Benzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Trichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Dibromomethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chloroethyl Vinyl Ether	ND	11	EPA 8260C	5-16-17	5-16-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Toluene	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW3					
Laboratory ID:	05-184-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Hexanone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-16-17	5-16-17	
o-Xylene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Styrene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromoform	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,2,2-Tetrachloroethane	ND	0.27	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Naphthalene	ND	1.3	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	108	77-129				
Toluene-d8	105	80-127				
4-Bromofluorobenzene	91	80-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW4					
Laboratory ID:	05-184-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloromethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromomethane	ND	0.40	EPA 8260C	5-16-17	5-16-17	
Chloroethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Acetone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Iodomethane	ND	2.1	EPA 8260C	5-16-17	5-16-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-16-17	5-16-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Butanone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloroform	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Benzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Trichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Dibromomethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chloroethyl Vinyl Ether	ND	11	EPA 8260C	5-16-17	5-16-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Toluene	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW4					
Laboratory ID:	05-184-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Hexanone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chlorobenzene	1.5	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-16-17	5-16-17	
o-Xylene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Styrene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromoform	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,2,2-Tetrachloroethane	ND	0.27	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Naphthalene	ND	1.3	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>110</i>	<i>77-129</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>91</i>	<i>80-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW5					
Laboratory ID:	05-184-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloromethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromomethane	ND	0.40	EPA 8260C	5-16-17	5-16-17	
Chloroethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Acetone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Iodomethane	ND	2.1	EPA 8260C	5-16-17	5-16-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-16-17	5-16-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Butanone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloroform	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Benzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Trichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Dibromomethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chloroethyl Vinyl Ether	ND	11	EPA 8260C	5-16-17	5-16-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Toluene	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW5					
Laboratory ID:	05-184-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Hexanone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-16-17	5-16-17	
o-Xylene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Styrene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromoform	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,2,2-Tetrachloroethane	ND	0.27	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Naphthalene	ND	1.3	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	115	77-129				
Toluene-d8	102	80-127				
4-Bromofluorobenzene	97	80-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW6					
Laboratory ID:	05-184-06					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloromethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromomethane	ND	0.40	EPA 8260C	5-16-17	5-16-17	
Chloroethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Acetone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Iodomethane	ND	2.1	EPA 8260C	5-16-17	5-16-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-16-17	5-16-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Butanone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloroform	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Benzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Trichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Dibromomethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chloroethyl Vinyl Ether	ND	11	EPA 8260C	5-16-17	5-16-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Toluene	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW6					
Laboratory ID:	05-184-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Hexanone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-16-17	5-16-17	
o-Xylene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Styrene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromoform	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,2,2-Tetrachloroethane	ND	0.27	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Naphthalene	ND	1.3	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>110</i>	<i>77-129</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>80-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW DUP					
Laboratory ID:	05-184-07					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloromethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromomethane	ND	0.40	EPA 8260C	5-16-17	5-16-17	
Chloroethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Acetone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Iodomethane	ND	2.1	EPA 8260C	5-16-17	5-16-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-16-17	5-16-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Butanone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloroform	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Benzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Trichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Dibromomethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chloroethyl Vinyl Ether	ND	11	EPA 8260C	5-16-17	5-16-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Toluene	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW DUP					
Laboratory ID:	05-184-07					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Hexanone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-16-17	5-16-17	
o-Xylene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Styrene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromoform	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,2,2-Tetrachloroethane	ND	0.27	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Naphthalene	ND	1.3	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>112</i>	<i>77-129</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>80-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	Trip Blank					
Laboratory ID:	05-184-09					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloromethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromomethane	ND	0.40	EPA 8260C	5-16-17	5-16-17	
Chloroethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Acetone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Iodomethane	ND	2.1	EPA 8260C	5-16-17	5-16-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-16-17	5-16-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Butanone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloroform	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Benzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Trichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Dibromomethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chloroethyl Vinyl Ether	ND	11	EPA 8260C	5-16-17	5-16-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Toluene	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	Trip Blank					
Laboratory ID:	05-184-09					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Hexanone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-16-17	5-16-17	
o-Xylene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Styrene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromoform	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,2,2-Tetrachloroethane	ND	0.27	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Naphthalene	ND	1.3	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	114	77-129				
Toluene-d8	104	80-127				
4-Bromofluorobenzene	95	80-125				



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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0516W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloromethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromomethane	ND	0.40	EPA 8260C	5-16-17	5-16-17	
Chloroethane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Acetone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Iodomethane	ND	2.1	EPA 8260C	5-16-17	5-16-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-16-17	5-16-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Butanone	ND	5.0	EPA 8260C	5-16-17	5-16-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chloroform	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Benzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Trichloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Dibromomethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chloroethyl Vinyl Ether	ND	11	EPA 8260C	5-16-17	5-16-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Toluene	ND	1.0	EPA 8260C	5-16-17	5-16-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-16-17	5-16-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0516W1						
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Hexanone	ND	2.0	EPA 8260C	5-16-17	5-16-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-16-17	5-16-17	
o-Xylene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Styrene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromoform	ND	1.0	EPA 8260C	5-16-17	5-16-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Bromobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,1,2,2-Tetrachloroethane	ND	0.27	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-16-17	5-16-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Naphthalene	ND	1.3	EPA 8260C	5-16-17	5-16-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-16-17	5-16-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	116	77-129				
Toluene-d8	105	80-127				
4-Bromofluorobenzene	89	80-125				



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VOLATILES by EPA 8260C
MS/MSD QUALITY CONTROL

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Source	Percent	Recovery	RPD		Flags
					Result	Recovery	Limits			
MATRIX SPIKES										
Laboratory ID:	05-176-01									
	MS	MSD	MS	MSD		MS	MSD			
1,1-Dichloroethene	9.76	9.54	10.0	10.0	ND	98	95	65-119	2	15
Benzene	10.1	10.4	10.0	10.0	ND	101	104	75-117	3	15
Trichloroethene	8.95	9.04	10.0	10.0	ND	90	90	66-120	1	15
Toluene	10.2	10.5	10.0	10.0	ND	102	105	79-120	3	15
Chlorobenzene	9.48	9.47	10.0	10.0	ND	95	95	76-120	0	15
Surrogate:										
Dibromofluoromethane						121	121	77-129		
Toluene-d8						102	106	80-127		
4-Bromofluorobenzene						96	92	80-125		



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 Project: 15-05986-040

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW1					
Laboratory ID:	05-184-01					
Naphthalene	ND	0.095	EPA 8270D/SIM	5-16-17	5-17-17	
2-Methylnaphthalene	ND	0.095	EPA 8270D/SIM	5-16-17	5-17-17	
1-Methylnaphthalene	ND	0.095	EPA 8270D/SIM	5-16-17	5-17-17	
Acenaphthylene	ND	0.095	EPA 8270D/SIM	5-16-17	5-17-17	
Acenaphthene	ND	0.095	EPA 8270D/SIM	5-16-17	5-17-17	
Fluorene	ND	0.095	EPA 8270D/SIM	5-16-17	5-17-17	
Phenanthrene	ND	0.095	EPA 8270D/SIM	5-16-17	5-17-17	
Anthracene	ND	0.095	EPA 8270D/SIM	5-16-17	5-17-17	
Fluoranthene	ND	0.095	EPA 8270D/SIM	5-16-17	5-17-17	
Pyrene	ND	0.095	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[a]anthracene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-17-17	
Chrysene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[b]fluoranthene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[j,k]fluoranthene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[a]pyrene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-17-17	
Indeno(1,2,3-c,d)pyrene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-17-17	
Dibenz[a,h]anthracene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[g,h,i]perylene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-17-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>46</i>	<i>30 - 124</i>				
<i>Pyrene-d10</i>	<i>45</i>	<i>40 - 143</i>				
<i>Terphenyl-d14</i>	<i>47</i>	<i>27 - 127</i>				



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PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW2					
Laboratory ID:	05-184-02					
Naphthalene	ND	0.099	EPA 8270D/SIM	5-16-17	5-17-17	
2-Methylnaphthalene	ND	0.099	EPA 8270D/SIM	5-16-17	5-17-17	
1-Methylnaphthalene	ND	0.099	EPA 8270D/SIM	5-16-17	5-17-17	
Acenaphthylene	ND	0.099	EPA 8270D/SIM	5-16-17	5-17-17	
Acenaphthene	ND	0.099	EPA 8270D/SIM	5-16-17	5-17-17	
Fluorene	ND	0.099	EPA 8270D/SIM	5-16-17	5-17-17	
Phenanthrene	ND	0.099	EPA 8270D/SIM	5-16-17	5-17-17	
Anthracene	ND	0.099	EPA 8270D/SIM	5-16-17	5-17-17	
Fluoranthene	ND	0.099	EPA 8270D/SIM	5-16-17	5-17-17	
Pyrene	ND	0.099	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[a]anthracene	ND	0.0099	EPA 8270D/SIM	5-16-17	5-17-17	
Chrysene	ND	0.0099	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[b]fluoranthene	ND	0.0099	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[j,k]fluoranthene	ND	0.0099	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[a]pyrene	ND	0.0099	EPA 8270D/SIM	5-16-17	5-17-17	
Indeno(1,2,3-c,d)pyrene	ND	0.0099	EPA 8270D/SIM	5-16-17	5-17-17	
Dibenz[a,h]anthracene	ND	0.0099	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[g,h,i]perylene	ND	0.0099	EPA 8270D/SIM	5-16-17	5-17-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	88	30 - 124				
Pyrene-d10	87	40 - 143				
Terphenyl-d14	105	27 - 127				



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PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW3					
Laboratory ID:	05-184-03					
Naphthalene	ND	0.095	EPA 8270D/SIM	5-16-17	5-18-17	
2-Methylnaphthalene	ND	0.095	EPA 8270D/SIM	5-16-17	5-18-17	
1-Methylnaphthalene	ND	0.095	EPA 8270D/SIM	5-16-17	5-18-17	
Acenaphthylene	ND	0.095	EPA 8270D/SIM	5-16-17	5-18-17	
Acenaphthene	ND	0.095	EPA 8270D/SIM	5-16-17	5-18-17	
Fluorene	ND	0.095	EPA 8270D/SIM	5-16-17	5-18-17	
Phenanthrene	ND	0.095	EPA 8270D/SIM	5-16-17	5-18-17	
Anthracene	ND	0.095	EPA 8270D/SIM	5-16-17	5-18-17	
Fluoranthene	ND	0.095	EPA 8270D/SIM	5-16-17	5-18-17	
Pyrene	ND	0.095	EPA 8270D/SIM	5-16-17	5-18-17	
Benzo[a]anthracene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-18-17	
Chrysene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-18-17	
Benzo[b]fluoranthene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-18-17	
Benzo[j,k]fluoranthene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-18-17	
Benzo[a]pyrene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-18-17	
Indeno(1,2,3-c,d)pyrene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-18-17	
Dibenz[a,h]anthracene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-18-17	
Benzo[g,h,i]perylene	ND	0.0095	EPA 8270D/SIM	5-16-17	5-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>78</i>	<i>30 - 124</i>				
<i>Pyrene-d10</i>	<i>77</i>	<i>40 - 143</i>				
<i>Terphenyl-d14</i>	<i>93</i>	<i>27 - 127</i>				



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PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW4					
Laboratory ID:	05-184-04					
Naphthalene	ND	0.096	EPA 8270D/SIM	5-16-17	5-18-17	
2-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	5-16-17	5-18-17	
1-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	5-16-17	5-18-17	
Acenaphthylene	ND	0.096	EPA 8270D/SIM	5-16-17	5-18-17	
Acenaphthene	ND	0.096	EPA 8270D/SIM	5-16-17	5-18-17	
Fluorene	ND	0.096	EPA 8270D/SIM	5-16-17	5-18-17	
Phenanthrene	ND	0.096	EPA 8270D/SIM	5-16-17	5-18-17	
Anthracene	ND	0.096	EPA 8270D/SIM	5-16-17	5-18-17	
Fluoranthene	ND	0.096	EPA 8270D/SIM	5-16-17	5-18-17	
Pyrene	ND	0.096	EPA 8270D/SIM	5-16-17	5-18-17	
Benzo[a]anthracene	ND	0.0096	EPA 8270D/SIM	5-16-17	5-18-17	
Chrysene	ND	0.0096	EPA 8270D/SIM	5-16-17	5-18-17	
Benzo[b]fluoranthene	ND	0.0096	EPA 8270D/SIM	5-16-17	5-18-17	
Benzo[j,k]fluoranthene	ND	0.0096	EPA 8270D/SIM	5-16-17	5-18-17	
Benzo[a]pyrene	ND	0.0096	EPA 8270D/SIM	5-16-17	5-18-17	
Indeno(1,2,3-c,d)pyrene	ND	0.0096	EPA 8270D/SIM	5-16-17	5-18-17	
Dibenz[a,h]anthracene	ND	0.0096	EPA 8270D/SIM	5-16-17	5-18-17	
Benzo[g,h,i]perylene	ND	0.0096	EPA 8270D/SIM	5-16-17	5-18-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	104	30 - 124				
Pyrene-d10	84	40 - 143				
Terphenyl-d14	111	27 - 127				



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PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW5					
Laboratory ID:	05-184-05					
Naphthalene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Acenaphthene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Fluorene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Phenanthrene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Anthracene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Fluoranthene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Pyrene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Chrysene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	58	30 - 124				
Pyrene-d10	60	40 - 143				
Terphenyl-d14	69	27 - 127				



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PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW6					
Laboratory ID:	05-184-06					
Naphthalene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Acenaphthene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Fluorene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Phenanthrene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Anthracene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Fluoranthene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Pyrene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Chrysene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[j,k]fluoranthene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	80	30 - 124				
Pyrene-d10	79	40 - 143				
Terphenyl-d14	94	27 - 127				



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PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	MW DUP					
Laboratory ID:	05-184-07					
Naphthalene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Acenaphthene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Fluorene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Phenanthrene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Anthracene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Fluoranthene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Pyrene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Chrysene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>94</i>	<i>30 - 124</i>				
<i>Pyrene-d10</i>	<i>90</i>	<i>40 - 143</i>				
<i>Terphenyl-d14</i>	<i>111</i>	<i>27 - 127</i>				



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**PAHs EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0516W2						
Naphthalene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Acenaphthene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Fluorene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Phenanthrene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Anthracene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Fluoranthene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Pyrene	ND	0.10	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Chrysene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[j,k]fluoranthene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	5-16-17	5-17-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	64	30 - 124				
Pyrene-d10	84	40 - 143				
Terphenyl-d14	99	27 - 127				



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**PAHs EPA 8270D/SIM
 SB/SBD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0516W2									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.402	0.392	0.500	0.500	80	78	29 - 101	3	47	
Acenaphthylene	0.435	0.454	0.500	0.500	87	91	20 - 117	4	50	
Acenaphthene	0.479	0.461	0.500	0.500	96	92	37 - 109	4	43	
Fluorene	0.453	0.486	0.500	0.500	91	97	47 - 108	7	34	
Phenanthrene	0.451	0.476	0.500	0.500	90	95	49 - 109	5	28	
Anthracene	0.436	0.458	0.500	0.500	87	92	34 - 140	5	32	
Fluoranthene	0.477	0.488	0.500	0.500	95	98	45 - 120	2	39	
Pyrene	0.575	0.493	0.500	0.500	115	99	42 - 133	15	39	
Benzo[a]anthracene	0.521	0.523	0.500	0.500	104	105	71 - 117	0	28	
Chrysene	0.495	0.493	0.500	0.500	99	99	53 - 110	0	25	
Benzo[b]fluoranthene	0.504	0.500	0.500	0.500	101	100	53 - 123	1	37	
Benzo(j,k)fluoranthene	0.504	0.509	0.500	0.500	101	102	52 - 119	1	41	
Benzo[a]pyrene	0.462	0.466	0.500	0.500	92	93	37 - 129	1	33	
Indeno(1,2,3-c,d)pyrene	0.507	0.500	0.500	0.500	101	100	45 - 128	1	31	
Dibenz[a,h]anthracene	0.511	0.498	0.500	0.500	102	100	54 - 120	3	30	
Benzo[g,h,i]perylene	0.498	0.494	0.500	0.500	100	99	49 - 117	1	29	
Surrogate:										
2-Fluorobiphenyl					86	81	30 - 124			
Pyrene-d10					91	91	40 - 143			
Terphenyl-d14					113	100	27 - 127			



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**TOTAL METALS
 EPA 200.8/7470A**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-01					
Client ID:	MW1					
Antimony	ND	5.6	200.8	5-17-17	5-17-17	
Arsenic	ND	3.3	200.8	5-17-17	5-17-17	
Beryllium	ND	11	200.8	5-17-17	5-17-17	
Cadmium	ND	4.4	200.8	5-17-17	5-17-17	
Chromium	ND	11	200.8	5-17-17	5-17-17	
Copper	ND	11	200.8	5-17-17	5-17-17	
Lead	ND	1.1	200.8	5-17-17	5-17-17	
Mercury	ND	0.50	7470A	5-16-17	5-16-17	
Nickel	ND	22	200.8	5-17-17	5-17-17	
Selenium	ND	5.6	200.8	5-17-17	5-17-17	
Silver	ND	11	200.8	5-17-17	5-17-17	
Thallium	ND	5.6	200.8	5-17-17	5-17-17	
Zinc	160	28	200.8	5-17-17	5-17-17	



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**TOTAL METALS
 EPA 200.8/7470A**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-02					
Client ID:	MW2					
Antimony	ND	5.6	200.8	5-17-17	5-17-17	
Arsenic	ND	3.3	200.8	5-17-17	5-17-17	
Beryllium	ND	11	200.8	5-17-17	5-17-17	
Cadmium	ND	4.4	200.8	5-17-17	5-17-17	
Chromium	ND	11	200.8	5-17-17	5-17-17	
Copper	ND	11	200.8	5-17-17	5-17-17	
Lead	ND	1.1	200.8	5-17-17	5-17-17	
Mercury	ND	0.50	7470A	5-16-17	5-16-17	
Nickel	ND	22	200.8	5-17-17	5-17-17	
Selenium	ND	5.6	200.8	5-17-17	5-17-17	
Silver	ND	11	200.8	5-17-17	5-17-17	
Thallium	ND	5.6	200.8	5-17-17	5-17-17	
Zinc	42	28	200.8	5-17-17	5-17-17	



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TOTAL METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-03					
Client ID:	MW3					
Antimony	ND	5.6	200.8	5-17-17	5-17-17	
Arsenic	ND	3.3	200.8	5-17-17	5-17-17	
Beryllium	ND	11	200.8	5-17-17	5-17-17	
Cadmium	ND	4.4	200.8	5-17-17	5-17-17	
Chromium	ND	11	200.8	5-17-17	5-17-17	
Copper	ND	11	200.8	5-17-17	5-17-17	
Lead	ND	1.1	200.8	5-17-17	5-17-17	
Mercury	ND	0.50	7470A	5-16-17	5-16-17	
Nickel	ND	22	200.8	5-17-17	5-17-17	
Selenium	ND	5.6	200.8	5-17-17	5-17-17	
Silver	ND	11	200.8	5-17-17	5-17-17	
Thallium	ND	5.6	200.8	5-17-17	5-17-17	
Zinc	170	28	200.8	5-17-17	5-17-17	



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TOTAL METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-04					
Client ID:	MW4					
Antimony	ND	5.6	200.8	5-17-17	5-17-17	
Arsenic	8.3	3.3	200.8	5-17-17	5-17-17	
Beryllium	ND	11	200.8	5-17-17	5-17-17	
Cadmium	ND	4.4	200.8	5-17-17	5-17-17	
Chromium	ND	11	200.8	5-17-17	5-17-17	
Copper	ND	11	200.8	5-17-17	5-17-17	
Lead	ND	1.1	200.8	5-17-17	5-17-17	
Mercury	ND	0.50	7470A	5-16-17	5-16-17	
Nickel	ND	22	200.8	5-17-17	5-17-17	
Selenium	ND	5.6	200.8	5-17-17	5-17-17	
Silver	ND	11	200.8	5-17-17	5-17-17	
Thallium	ND	5.6	200.8	5-17-17	5-17-17	
Zinc	80	28	200.8	5-17-17	5-17-17	



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**TOTAL METALS
 EPA 200.8/7470A**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-05					
Client ID:	MW5					
Antimony	ND	5.6	200.8	5-17-17	5-17-17	
Arsenic	ND	3.3	200.8	5-17-17	5-17-17	
Beryllium	ND	11	200.8	5-17-17	5-17-17	
Cadmium	ND	4.4	200.8	5-17-17	5-17-17	
Chromium	ND	11	200.8	5-17-17	5-17-17	
Copper	ND	11	200.8	5-17-17	5-17-17	
Lead	4.0	1.1	200.8	5-17-17	5-17-17	
Mercury	ND	0.50	7470A	5-16-17	5-16-17	
Nickel	ND	22	200.8	5-17-17	5-17-17	
Selenium	ND	5.6	200.8	5-17-17	5-17-17	
Silver	ND	11	200.8	5-17-17	5-17-17	
Thallium	ND	5.6	200.8	5-17-17	5-17-17	
Zinc	37	28	200.8	5-17-17	5-17-17	



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**TOTAL METALS
 EPA 200.8/7470A**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-06					
Client ID:	MW6					
Antimony	ND	5.6	200.8	5-17-17	5-17-17	
Arsenic	ND	3.3	200.8	5-17-17	5-17-17	
Beryllium	ND	11	200.8	5-17-17	5-17-17	
Cadmium	ND	4.4	200.8	5-17-17	5-17-17	
Chromium	ND	11	200.8	5-17-17	5-17-17	
Copper	ND	11	200.8	5-17-17	5-17-17	
Lead	ND	1.1	200.8	5-17-17	5-17-17	
Mercury	ND	0.50	7470A	5-16-17	5-16-17	
Nickel	ND	22	200.8	5-17-17	5-17-17	
Selenium	ND	5.6	200.8	5-17-17	5-17-17	
Silver	ND	11	200.8	5-17-17	5-17-17	
Thallium	ND	5.6	200.8	5-17-17	5-17-17	
Zinc	ND	28	200.8	5-17-17	5-17-17	



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-07					
Client ID:	MW DUP					
Antimony	ND	5.6	200.8	5-17-17	5-17-17	
Arsenic	ND	3.3	200.8	5-17-17	5-17-17	
Beryllium	ND	11	200.8	5-17-17	5-17-17	
Cadmium	ND	4.4	200.8	5-17-17	5-17-17	
Chromium	ND	11	200.8	5-17-17	5-17-17	
Copper	ND	11	200.8	5-17-17	5-17-17	
Lead	ND	1.1	200.8	5-17-17	5-17-17	
Mercury	ND	0.50	7470A	5-16-17	5-16-17	
Nickel	ND	22	200.8	5-17-17	5-17-17	
Selenium	ND	5.6	200.8	5-17-17	5-17-17	
Silver	ND	11	200.8	5-17-17	5-17-17	
Thallium	ND	5.6	200.8	5-17-17	5-17-17	
Zinc	35	28	200.8	5-17-17	5-17-17	



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

**TOTAL METALS
 EPA 200.8/7470A
 METHOD BLANK QUALITY CONTROL**

Date Extracted: 5-16&17-17

Date Analyzed: 5-16&17-17

Matrix: Water

Units: ug/L (ppb)

Lab ID: MB0516W1&MB0517WM1

Analyte	Method	Result	PQL
Antimony	200.8	ND	5.6
Arsenic	200.8	ND	3.3
Beryllium	200.8	ND	11
Cadmium	200.8	ND	4.4
Chromium	200.8	ND	11
Copper	200.8	ND	11
Lead	200.8	ND	1.1
Mercury	7470A	ND	0.50
Nickel	200.8	ND	22
Selenium	200.8	ND	5.6
Silver	200.8	ND	11
Thallium	200.8	ND	5.6
Zinc	200.8	ND	28



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

**TOTAL METALS
 EPA 200.8/7470A
 DUPLICATE QUALITY CONTROL**

Date Extracted: 5-16&17-17
 Date Analyzed: 5-16&17-17

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 05-184-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Antimony	ND	ND	NA	5.6	
Arsenic	ND	ND	NA	3.3	
Beryllium	ND	ND	NA	11	
Cadmium	ND	ND	NA	4.4	
Chromium	ND	ND	NA	11	
Copper	ND	ND	NA	11	
Lead	ND	ND	NA	1.1	
Mercury	ND	ND	NA	0.50	
Nickel	ND	ND	NA	22	
Selenium	ND	ND	NA	5.6	
Silver	ND	ND	NA	11	
Thallium	ND	ND	NA	5.6	
Zinc	159	155	3	28	



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

**TOTAL METALS
 EPA 200.8/7470A
 MS/MSD QUALITY CONTROL**

Date Extracted: 5-16&17-17
 Date Analyzed: 5-16&17-17

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 05-184-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Antimony	222	225	101	222	100	1	
Arsenic	222	215	97	216	97	0	
Beryllium	222	227	102	223	100	2	
Cadmium	222	223	100	214	97	4	
Chromium	222	208	94	207	93	0	
Copper	222	216	97	216	97	0	
Lead	222	213	96	213	96	0	
Mercury	12.5	12.5	100	11.4	91	9	
Nickel	222	209	94	204	92	2	
Selenium	222	216	97	215	97	1	
Silver	222	211	95	208	94	2	
Thallium	222	207	93	206	93	1	
Zinc	222	367	94	371	95	1	



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-01					
Client ID:	MW1					
Antimony	ND	5.0	200.8		5-16-17	
Arsenic	ND	3.0	200.8		5-16-17	
Beryllium	ND	10	200.8		5-16-17	
Cadmium	ND	4.0	200.8		5-16-17	
Chromium	ND	10	200.8		5-16-17	
Copper	ND	10	200.8		5-16-17	
Lead	ND	1.0	200.8		5-16-17	
Mercury	ND	0.50	7470A		5-16-17	
Nickel	ND	20	200.8		5-16-17	
Selenium	ND	5.0	200.8		5-16-17	
Silver	ND	10	200.8		5-16-17	
Thallium	ND	5.0	200.8		5-16-17	
Zinc	170	25	200.8		5-16-17	



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-02					
Client ID:	MW2					
Antimony	ND	5.0	200.8		5-16-17	
Arsenic	ND	3.0	200.8		5-16-17	
Beryllium	ND	10	200.8		5-16-17	
Cadmium	ND	4.0	200.8		5-16-17	
Chromium	ND	10	200.8		5-16-17	
Copper	ND	10	200.8		5-16-17	
Lead	ND	1.0	200.8		5-16-17	
Mercury	ND	0.50	7470A		5-16-17	
Nickel	ND	20	200.8		5-16-17	
Selenium	ND	5.0	200.8		5-16-17	
Silver	ND	10	200.8		5-16-17	
Thallium	ND	5.0	200.8		5-16-17	
Zinc	ND	25	200.8		5-16-17	



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-03					
Client ID:	MW3					
Antimony	ND	5.0	200.8		5-16-17	
Arsenic	ND	3.0	200.8		5-16-17	
Beryllium	ND	10	200.8		5-16-17	
Cadmium	ND	4.0	200.8		5-16-17	
Chromium	ND	10	200.8		5-16-17	
Copper	ND	10	200.8		5-16-17	
Lead	ND	1.0	200.8		5-16-17	
Mercury	ND	0.50	7470A		5-16-17	
Nickel	ND	20	200.8		5-16-17	
Selenium	ND	5.0	200.8		5-16-17	
Silver	ND	10	200.8		5-16-17	
Thallium	ND	5.0	200.8		5-16-17	
Zinc	140	25	200.8		5-16-17	



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-04					
Client ID:	MW4					
Antimony	ND	5.0	200.8		5-16-17	
Arsenic	8.3	3.0	200.8		5-16-17	
Beryllium	ND	10	200.8		5-16-17	
Cadmium	ND	4.0	200.8		5-16-17	
Chromium	ND	10	200.8		5-16-17	
Copper	ND	10	200.8		5-16-17	
Lead	ND	1.0	200.8		5-16-17	
Mercury	ND	0.50	7470A		5-16-17	
Nickel	ND	20	200.8		5-16-17	
Selenium	ND	5.0	200.8		5-16-17	
Silver	ND	10	200.8		5-16-17	
Thallium	ND	5.0	200.8		5-16-17	
Zinc	37	25	200.8		5-16-17	



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-05					
Client ID:	MW5					
Antimony	ND	5.0	200.8		5-16-17	
Arsenic	ND	3.0	200.8		5-16-17	
Beryllium	ND	10	200.8		5-16-17	
Cadmium	ND	4.0	200.8		5-16-17	
Chromium	ND	10	200.8		5-16-17	
Copper	ND	10	200.8		5-16-17	
Lead	3.0	1.0	200.8		5-16-17	
Mercury	ND	0.50	7470A		5-16-17	
Nickel	ND	20	200.8		5-16-17	
Selenium	ND	5.0	200.8		5-16-17	
Silver	ND	10	200.8		5-16-17	
Thallium	ND	5.0	200.8		5-16-17	
Zinc	35	25	200.8		5-16-17	



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-06					
Client ID:	MW6					
Antimony	ND	5.0	200.8		5-16-17	
Arsenic	ND	3.0	200.8		5-16-17	
Beryllium	ND	10	200.8		5-16-17	
Cadmium	ND	4.0	200.8		5-16-17	
Chromium	ND	10	200.8		5-16-17	
Copper	ND	10	200.8		5-16-17	
Lead	ND	1.0	200.8		5-16-17	
Mercury	ND	0.50	7470A		5-16-17	
Nickel	ND	20	200.8		5-16-17	
Selenium	ND	5.0	200.8		5-16-17	
Silver	ND	10	200.8		5-16-17	
Thallium	ND	5.0	200.8		5-16-17	
Zinc	ND	25	200.8		5-16-17	



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-07					
Client ID:	MW DUP					
Antimony	ND	5.0	200.8		5-16-17	
Arsenic	ND	3.0	200.8		5-16-17	
Beryllium	ND	10	200.8		5-16-17	
Cadmium	ND	4.0	200.8		5-16-17	
Chromium	ND	10	200.8		5-16-17	
Copper	ND	10	200.8		5-16-17	
Lead	ND	1.0	200.8		5-16-17	
Mercury	ND	0.50	7470A		5-16-17	
Nickel	ND	20	200.8		5-16-17	
Selenium	ND	5.0	200.8		5-16-17	
Silver	ND	10	200.8		5-16-17	
Thallium	ND	5.0	200.8		5-16-17	
Zinc	ND	25	200.8		5-16-17	



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-184-08					
Client ID:	Filter Blank					
Antimony	ND	5.0	200.8		5-16-17	
Arsenic	ND	3.0	200.8		5-16-17	
Beryllium	ND	10	200.8		5-16-17	
Cadmium	ND	4.0	200.8		5-16-17	
Chromium	ND	10	200.8		5-16-17	
Copper	ND	10	200.8		5-16-17	
Lead	ND	1.0	200.8		5-16-17	
Mercury	ND	0.50	7470A		5-16-17	
Nickel	ND	20	200.8		5-16-17	
Selenium	ND	5.0	200.8		5-16-17	
Silver	ND	10	200.8		5-16-17	
Thallium	ND	5.0	200.8		5-16-17	
Zinc	ND	25	200.8		5-16-17	



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

**DISSOLVED METALS
 EPA 200.8/7470A
 METHOD BLANK QUALITY CONTROL**

Date Analyzed: 5-16-17

Matrix: Water

Units: ug/L (ppb)

Lab ID: MB0516D1&MB0516D2

Analyte	Method	Result	PQL
Antimony	200.8	ND	5.0
Arsenic	200.8	ND	3.0
Beryllium	200.8	ND	10
Cadmium	200.8	ND	4.0
Chromium	200.8	ND	10
Copper	200.8	ND	10
Lead	200.8	ND	1.0
Mercury	7470A	ND	0.50
Nickel	200.8	ND	20
Selenium	200.8	ND	5.0
Silver	200.8	ND	10
Thallium	200.8	ND	5.0
Zinc	200.8	ND	25



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

**DISSOLVED METALS
 EPA 200.8/7470A
 DUPLICATE QUALITY CONTROL**

Date Analyzed: 5-16-17

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 05-184-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Antimony	ND	ND	NA	5.0	
Arsenic	ND	ND	NA	3.0	
Beryllium	ND	ND	NA	10	
Cadmium	ND	ND	NA	4.0	
Chromium	ND	ND	NA	10	
Copper	ND	ND	NA	10	
Lead	ND	ND	NA	1.0	
Mercury	ND	ND	NA	0.5	
Nickel	ND	ND	NA	20	
Selenium	ND	ND	NA	5.0	
Silver	ND	ND	NA	10	
Thallium	ND	ND	NA	5.0	
Zinc	172	167	3	25	



Date of Report: May 23, 2017
 Samples Submitted: May 12, 2017
 Laboratory Reference: 1705-184
 Project: 15-05986-040

**DISSOLVED METALS
 EPA 200.8/7470A
 MS/MSD QUALITY CONTROL**

Date Analyzed: 5-16-17

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 05-184-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Antimony	200	197	99	209	105	6	
Arsenic	200	195	98	203	101	4	
Beryllium	200	193	96	207	103	7	
Cadmium	200	198	99	208	104	5	
Chromium	200	180	90	191	95	6	
Copper	200	197	99	205	102	4	
Lead	200	186	93	199	100	7	
Mercury	12.5	10.9	87	10.8	86	1	
Nickel	200	184	92	195	97	6	
Selenium	200	204	102	217	109	6	
Silver	200	185	92	196	98	6	
Thallium	200	191	95	205	103	7	
Zinc	200	365	97	376	102	3	





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- X1 - Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



Chain of Custody

Company: Herrera
Project Number: 206-44-9080 15-05986-040
Project Name: Pacific Park
Project Manager: Bruce Carpenter
Sampled by: George I Aner Brianna Bland

**Turnaround Request
(in working days)**

(Check One)

- ☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days

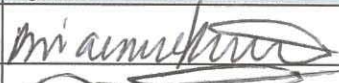
☒ Standard (7 Days)
(TPH analysis 5 Days)

☐ _____ (other)

Number of Containers

Laboratory Number: **05-184**

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HClD	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Total PP Metals	Dissolved PP Metals	% Moisture
1	MW1	5/12/17	12:22	water	11			X	X	X				X									X	X	
2	MW2	5/12/17	11:10	water	11			X	X	X				X									X	X	
3	MW3	5/12/17	13:43	water	11			X	X	X				X									X	X	
4	MW4	5/12/17	14:48	water	11			X	X	X				X									X	X	
5	MW5	5/12/17	12:40	water	11			X	X	X				X									X	X	
6	MW6	5/12/17	13:50	water	11			X	X	X				X									X	X	
7	MW DUP	5/12/17	10:00	water	11			X	X	X				X									X	X	
8	Filter Blank	5/12/17	16:25	water	1																		X		
9	Tri.p Blank	5/12/17	-	water	3			X		X															

Signature	Company	Date	Time	Comments/Special Instructions
	Herrera	5/12/17	10:30	All dissolved metals were field filtered w/ 45um filters
	CODE	5/12/17	1630	
				Data Package: Standard ☐ Level III ☐ Level IV ☐
				Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐



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

June 13, 2017

Bruce Carpenter
Herrera Environmental Consultants, Inc.
2200 6th Avenue, Suite 1100
Seattle, WA 98121

Re: Analytical Data for Project 15-05986-040
Laboratory Reference No. 1705-299

Dear Bruce:

Enclosed are the analytical results and associated quality control data for samples submitted on May 24, 2017.

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

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

Sincerely,

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

David Baumeister
Project Manager

Enclosures



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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: June 13, 2017
Samples Submitted: May 24, 2017
Laboratory Reference: 1705-299
Project: 15-05986-040

Case Narrative

Samples were collected on May 23 and 24, 2017 and received by the laboratory on May 24, 2017. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

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

NWTPH Gx and Volatiles EPA 8260C (soil) Analysis

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

PAHs EPA 8270D/SIM Analysis

The Spike Blank had one recovery slightly above control limits. Samples PP5-W and PP7-W each had one surrogate recovery out of control limits. This is within allowance of our standard operating procedure as long as the recovery is above 10%.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-2					
Laboratory ID:	05-299-01					
Gasoline	ND	6.9	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	94	63-124				
Client ID:	PP1-10					
Laboratory ID:	05-299-03					
Gasoline	ND	8.0	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	99	63-124				
Client ID:	PP2-2.5					
Laboratory ID:	05-299-04					
Gasoline	ND	7.8	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	96	63-124				
Client ID:	PP2-10					
Laboratory ID:	05-299-05					
Gasoline	ND	9.0	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	102	63-124				
Client ID:	PP3-2.5					
Laboratory ID:	05-299-07					
Gasoline	ND	6.6	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	97	63-124				
Client ID:	PP3-10					
Laboratory ID:	05-299-08					
Gasoline	ND	7.0	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	92	63-124				



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NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: PP4-3						
Laboratory ID:	05-299-10					
Gasoline	ND	7.4	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	97	63-124				
Client ID: PP4-10						
Laboratory ID:	05-299-11					
Gasoline	ND	7.1	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	92	63-124				
Client ID: PP5-2.5						
Laboratory ID:	05-299-13					
Gasoline	ND	7.0	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	100	63-124				
Client ID: PP5-10						
Laboratory ID:	05-299-14					
Gasoline	ND	8.1	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	101	63-124				
Client ID: PP6-2						
Laboratory ID:	05-299-16					
Gasoline	ND	5.7	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	93	63-124				
Client ID: PP6-10						
Laboratory ID:	05-299-17					
Gasoline	ND	9.7	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	111	63-124				
Client ID: PP7-0						
Laboratory ID:	05-299-19					
Gasoline	ND	6.6	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	86	63-124				



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NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP7-10					
Laboratory ID:	05-299-20					
Gasoline	ND	7.8	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	104	63-124				
Client ID:	PP8-0.5					
Laboratory ID:	05-299-22					
Gasoline	ND	6.1	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	107	63-124				
Client ID:	PP8-10					
Laboratory ID:	05-299-23					
Gasoline	ND	9.6	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	113	63-124				
Client ID:	PP9-0					
Laboratory ID:	05-299-25					
Gasoline	ND	5.6	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	100	63-124				
Client ID:	PP9-10					
Laboratory ID:	05-299-26					
Gasoline	ND	7.0	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	102	63-124				
Client ID:	PP10-0					
Laboratory ID:	05-299-28					
Gasoline	ND	6.8	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	87	63-124				



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**NWTPH-Gx
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0531S1					
Gasoline	ND	5.0	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	96	63-124				
Laboratory ID:	MB0531S2					
Gasoline	ND	5.0	NWTPH-Gx	5-31-17	5-31-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	96	63-124				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	05-299-01									
	ORIG	DUP								
Gasoline	ND	ND	NA	NA		NA	NA	NA	30	
Surrogate:										
Fluorobenzene						94	92	63-124		
Laboratory ID:	05-299-08									
	ORIG	DUP								
Gasoline	ND	ND	NA	NA		NA	NA	NA	30	
Surrogate:										
Fluorobenzene						92	92	63-124		



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NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-W					
Laboratory ID:	05-299-02					
Gasoline	ND	100	NWTPH-Gx	5-26-17	5-26-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	95	61-118				
Client ID:	PP2-W					
Laboratory ID:	05-299-06					
Gasoline	ND	100	NWTPH-Gx	5-26-17	5-26-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	94	61-118				
Client ID:	PP3-W					
Laboratory ID:	05-299-09					
Gasoline	ND	100	NWTPH-Gx	5-26-17	5-26-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	96	61-118				
Client ID:	PP4-W					
Laboratory ID:	05-299-12					
Gasoline	ND	100	NWTPH-Gx	5-26-17	5-26-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	96	61-118				
Client ID:	PP5-W					
Laboratory ID:	05-299-15					
Gasoline	210	100	NWTPH-Gx	5-26-17	5-26-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	95	61-118				
Client ID:	PP6-W					
Laboratory ID:	05-299-18					
Gasoline	ND	100	NWTPH-Gx	5-26-17	5-26-17	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	97	61-118				



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NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP7-W					
Laboratory ID:	05-299-21					
Gasoline	ND	100	NWTPH-Gx	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	107	61-118				
Client ID:	PP8-W					
Laboratory ID:	05-299-24					
Gasoline	ND	100	NWTPH-Gx	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	104	61-118				
Client ID:	PP9-W					
Laboratory ID:	05-299-27					
Gasoline	ND	100	NWTPH-Gx	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	97	61-118				
Client ID:	PP10-W					
Laboratory ID:	05-299-29					
Gasoline	ND	100	NWTPH-Gx	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	98	61-118				



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**NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0526W2					
Gasoline	ND	100	NWTPH-Gx	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	91	61-118				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	05-292-02							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
Surrogate:								
Fluorobenzene				105	95	61-118		



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NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-2					
Laboratory ID:	05-299-01					
Diesel Range Organics	ND	31	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil Range Organics	ND	62	NWTPH-Dx	5-30-17	5-31-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	88	50-150				

Client ID:	PP1-10					
Laboratory ID:	05-299-03					
Diesel Range Organics	ND	33	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil Range Organics	ND	67	NWTPH-Dx	5-30-17	5-31-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	105	50-150				

Client ID:	PP2-2.5					
Laboratory ID:	05-299-04					
Diesel Range Organics	ND	33	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil Range Organics	ND	66	NWTPH-Dx	5-30-17	5-31-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	95	50-150				

Client ID:	PP2-10					
Laboratory ID:	05-299-05					
Diesel Range Organics	ND	36	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil Range Organics	ND	73	NWTPH-Dx	5-30-17	5-31-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	81	50-150				

Client ID:	PP3-2.5					
Laboratory ID:	05-299-07					
Diesel Range Organics	ND	31	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil	140	63	NWTPH-Dx	5-30-17	5-31-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	97	50-150				

Client ID:	PP3-10					
Laboratory ID:	05-299-08					
Diesel Range Organics	ND	31	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil Range Organics	ND	62	NWTPH-Dx	5-30-17	5-31-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	71	50-150				



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NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP4-3					
Laboratory ID:	05-299-10					
Diesel Range Organics	ND	54	NWTPH-Dx	5-30-17	5-31-17	U1,X1
Lube Oil	500	63	NWTPH-Dx	5-30-17	5-31-17	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	105	50-150				

Client ID:	PP4-10					
Laboratory ID:	05-299-11					
Diesel Range Organics	ND	55	NWTPH-Dx	5-30-17	5-31-17	U1,X1
Lube Oil	570	62	NWTPH-Dx	5-30-17	5-31-17	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	104	50-150				

Client ID:	PP5-2.5					
Laboratory ID:	05-299-13					
Diesel Range Organics	ND	68	NWTPH-Dx	5-30-17	5-31-17	U1,X1
Lube Oil	620	66	NWTPH-Dx	5-30-17	5-31-17	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	112	50-150				

Client ID:	PP5-10					
Laboratory ID:	05-299-14					
Diesel Range Organics	ND	34	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil Range Organics	ND	67	NWTPH-Dx	5-30-17	5-31-17	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	100	50-150				

Client ID:	PP6-2					
Laboratory ID:	05-299-16					
Diesel Range Organics	ND	29	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil	62	58	NWTPH-Dx	5-30-17	5-31-17	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	110	50-150				

Client ID:	PP6-10					
Laboratory ID:	05-299-17					
Diesel Range Organics	ND	37	NWTPH-Dx	6-2-17	6-2-17	X1
Lube Oil Range Organics	ND	75	NWTPH-Dx	6-2-17	6-2-17	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	98	50-150				



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NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP7-0					
Laboratory ID:	05-299-19					
Diesel Range Organics	ND	31	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil	63	61	NWTPH-Dx	5-30-17	5-31-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	101	50-150				

Client ID:	PP7-10					
Laboratory ID:	05-299-20					
Diesel Range Organics	ND	31	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil Range Organics	ND	63	NWTPH-Dx	5-30-17	5-31-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	86	50-150				

Client ID:	PP8-0.5					
Laboratory ID:	05-299-22					
Diesel Range Organics	ND	28	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil Range Organics	ND	57	NWTPH-Dx	5-30-17	5-31-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	120	50-150				

Client ID:	PP8-10					
Laboratory ID:	05-299-23					
Diesel Range Organics	ND	36	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil Range Organics	ND	71	NWTPH-Dx	5-30-17	5-31-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	81	50-150				

Client ID:	PP9-0					
Laboratory ID:	05-299-25					
Diesel Range Organics	ND	26	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil Range Organics	ND	52	NWTPH-Dx	5-30-17	5-31-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	102	50-150				

Client ID:	PP9-10					
Laboratory ID:	05-299-26					
Diesel Range Organics	ND	31	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil Range Organics	ND	62	NWTPH-Dx	5-30-17	5-31-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	92	50-150				



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NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP10-0					
Laboratory ID:	05-299-28					
Diesel Range Organics	ND	31	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil Range Organics	ND	61	NWTPH-Dx	5-30-17	5-31-17	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	85	50-150				



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NWTPH-Dx QUALITY CONTROL

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0530S3					
Diesel Range Organics	ND	25	NWTPH-Dx	5-30-17	5-31-17	X1
Lube Oil Range Organics	ND	50	NWTPH-Dx	5-30-17	5-31-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	70	50-150				
Laboratory ID:	MB0602S1					
Diesel Range Organics	ND	25	NWTPH-Dx	6-2-17	6-2-17	X1
Lube Oil Range Organics	ND	50	NWTPH-Dx	6-2-17	6-2-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	93	50-150				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	Limit	Flags
DUPLICATE										
Laboratory ID:	05-299-03									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	X1
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	X1
Surrogate:										
o-Terphenyl						105	89	50-150		
Laboratory ID:	05-299-17									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	X1
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	X1
Surrogate:										
o-Terphenyl						98	92	50-150		
Laboratory ID:	05-299-19									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	X1
Lube Oil	51.5	ND	NA	NA		NA	NA	NA	NA	X1
Surrogate:										
o-Terphenyl						101	98	50-150		



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NWTPH-Dx

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-W					
Laboratory ID:	05-299-02					
Diesel Range Organics	ND	0.27	NWTPH-Dx	5-26-17	5-26-17	X1
Lube Oil Range Organics	ND	0.43	NWTPH-Dx	5-26-17	5-26-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	83	50-150				

Client ID:	PP2-W					
Laboratory ID:	05-299-06					
Diesel Range Organics	ND	0.37	NWTPH-Dx	5-26-17	5-26-17	X1
Lube Oil Range Organics	ND	0.60	NWTPH-Dx	5-26-17	5-26-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	81	50-150				

Client ID:	PP3-W					
Laboratory ID:	05-299-09					
Diesel Range Organics	ND	0.26	NWTPH-Dx	5-26-17	5-30-17	X1
Lube Oil Range Organics	ND	0.42	NWTPH-Dx	5-26-17	5-30-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	105	50-150				

Client ID:	PP4-W					
Laboratory ID:	05-299-12					
Diesel Range Organics	ND	0.26	NWTPH-Dx	5-26-17	5-26-17	X1
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	5-26-17	5-26-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	96	50-150				

Client ID:	PP5-W					
Laboratory ID:	05-299-15					
Diesel Range Organics	ND	0.27	NWTPH-Dx	5-26-17	5-30-17	X1
Lube Oil Range Organics	ND	0.43	NWTPH-Dx	5-26-17	5-30-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	100	50-150				

Client ID:	PP6-W					
Laboratory ID:	05-299-18					
Diesel Range Organics	ND	0.26	NWTPH-Dx	5-26-17	5-26-17	X1
Lube Oil Range Organics	ND	0.42	NWTPH-Dx	5-26-17	5-26-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	113	50-150				



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NWTPH-Dx

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP7-W					
Laboratory ID:	05-299-21					
Diesel Range Organics	ND	0.28	NWTPH-Dx	5-26-17	5-26-17	X1
Lube Oil Range Organics	ND	0.44	NWTPH-Dx	5-26-17	5-26-17	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	90	50-150				

Client ID:	PP8-W					
Laboratory ID:	05-299-24					
Diesel Range Organics	ND	0.26	NWTPH-Dx	5-26-17	5-26-17	X1
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	5-26-17	5-26-17	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	113	50-150				

Client ID:	PP9-W					
Laboratory ID:	05-299-27					
Diesel Range Organics	ND	0.28	NWTPH-Dx	5-26-17	5-26-17	X1
Lube Oil Range Organics	ND	0.45	NWTPH-Dx	5-26-17	5-26-17	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	104	50-150				

Client ID:	PP10-W					
Laboratory ID:	05-299-29					
Diesel Range Organics	ND	0.27	NWTPH-Dx	5-26-17	5-26-17	X1
Lube Oil Range Organics	ND	0.43	NWTPH-Dx	5-26-17	5-26-17	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	92	50-150				



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**NWTPH-Dx
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0526W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	5-26-17	5-26-17	X1
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	5-26-17	5-26-17	X1
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	92	50-150				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	05-299-02									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	X1
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	X1
Surrogate:										
o-Terphenyl						83	96	50-150		
Laboratory ID:	05-299-27									
	ORIG	DUP								
Diesel Range	ND	ND	NA	NA		NA	NA	NA	NA	X1
Lube Oil Range	ND	ND	NA	NA		NA	NA	NA	NA	X1
Surrogate:										
o-Terphenyl						104	88	50-150		



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-2					
Laboratory ID:	05-299-01					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Chloromethane	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
Vinyl Chloride	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Bromomethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Chloroethane	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Acetone	ND	0.011	EPA 8260C	5-25-17	5-25-17	
Iodomethane	ND	0.0072	EPA 8260C	5-25-17	5-25-17	
Carbon Disulfide	ND	0.0016	EPA 8260C	5-25-17	5-25-17	
Methylene Chloride	ND	0.011	EPA 8260C	5-25-17	5-25-17	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Vinyl Acetate	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
2-Butanone	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
Bromochloromethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Chloroform	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Benzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Trichloroethene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Dibromomethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Bromodichloromethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
2-Chloroethyl Vinyl Ether	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Methyl Isobutyl Ketone	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
Toluene	0.019	0.0057	EPA 8260C	5-25-17	5-25-17	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-2					
Laboratory ID:	05-299-01					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Tetrachloroethene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
2-Hexanone	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
Dibromochloromethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Chlorobenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Ethylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
m,p-Xylene	ND	0.0023	EPA 8260C	5-25-17	5-25-17	
o-Xylene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Styrene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Bromoform	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
Isopropylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Bromobenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
n-Propylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
2-Chlorotoluene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
4-Chlorotoluene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
tert-Butylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
sec-Butylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
n-Butylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2-Dibromo-3-chloropropane	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Hexachlorobutadiene	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
Naphthalene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	119	73-134				
Toluene-d8	109	81-124				
4-Bromofluorobenzene	95	80-131				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-10					
Laboratory ID:	05-299-03					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Chloromethane	ND	0.0064	EPA 8260C	5-25-17	5-25-17	
Vinyl Chloride	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Bromomethane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Chloroethane	ND	0.0064	EPA 8260C	5-25-17	5-25-17	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Acetone	0.051	0.013	EPA 8260C	5-25-17	5-25-17	
Iodomethane	ND	0.0081	EPA 8260C	5-25-17	5-25-17	
Carbon Disulfide	ND	0.0018	EPA 8260C	5-25-17	5-25-17	
Methylene Chloride	ND	0.013	EPA 8260C	5-25-17	5-25-17	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Methyl t-Butyl Ether	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Vinyl Acetate	ND	0.0064	EPA 8260C	5-25-17	5-25-17	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
2-Butanone	0.012	0.0064	EPA 8260C	5-25-17	5-25-17	
Bromochloromethane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Chloroform	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Benzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Trichloroethene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Dibromomethane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Bromodichloromethane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
2-Chloroethyl Vinyl Ether	ND	0.0064	EPA 8260C	5-25-17	5-25-17	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Methyl Isobutyl Ketone	ND	0.0064	EPA 8260C	5-25-17	5-25-17	
Toluene	0.020	0.0064	EPA 8260C	5-25-17	5-25-17	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-10					
Laboratory ID:	05-299-03					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Tetrachloroethene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
2-Hexanone	ND	0.0064	EPA 8260C	5-25-17	5-25-17	
Dibromochloromethane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Chlorobenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Ethylbenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
m,p-Xylene	ND	0.0026	EPA 8260C	5-25-17	5-25-17	
o-Xylene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Styrene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Bromoform	ND	0.0064	EPA 8260C	5-25-17	5-25-17	
Isopropylbenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Bromobenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
n-Propylbenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
2-Chlorotoluene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
4-Chlorotoluene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,3,5-Trimethylbenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
tert-Butylbenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,2,4-Trimethylbenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
sec-Butylbenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
p-Isopropyltoluene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
n-Butylbenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,2-Dibromo-3-chloropropane	ND	0.0064	EPA 8260C	5-25-17	5-25-17	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
Hexachlorobutadiene	ND	0.0064	EPA 8260C	5-25-17	5-25-17	
Naphthalene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	5-25-17	5-25-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>116</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>109</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>104</i>	<i>80-131</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP2-2.5					
Laboratory ID:	05-299-04					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Acetone	0.071	0.012	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	0.012	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
2-Butanone	0.019	0.0062	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	0.0079	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Toluene	0.025	0.0062	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP2-2.5					
Laboratory ID:	05-299-04					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.0025	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>111</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>80-131</i>				



Date of Report: June 13, 2017
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 Laboratory Reference: 1705-299
 Project: 15-05986-040

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP2-10					
Laboratory ID:	05-299-05					
Dichlorodifluoromethane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Chloromethane	ND	0.0069	EPA 8260C	5-25-17	5-25-17	
Vinyl Chloride	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Bromomethane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Chloroethane	ND	0.0069	EPA 8260C	5-25-17	5-25-17	
Trichlorofluoromethane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloroethene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Acetone	0.088	0.014	EPA 8260C	5-25-17	5-25-17	
Iodomethane	ND	0.0087	EPA 8260C	5-25-17	5-25-17	
Carbon Disulfide	ND	0.0019	EPA 8260C	5-25-17	5-25-17	
Methylene Chloride	ND	0.014	EPA 8260C	5-25-17	5-25-17	
(trans) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Methyl t-Butyl Ether	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloroethane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Vinyl Acetate	ND	0.0069	EPA 8260C	5-25-17	5-25-17	
2,2-Dichloropropane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
(cis) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
2-Butanone	0.023	0.0069	EPA 8260C	5-25-17	5-25-17	
Bromochloromethane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Chloroform	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,1,1-Trichloroethane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Carbon Tetrachloride	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloropropene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Benzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,2-Dichloroethane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Trichloroethene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,2-Dichloropropane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Dibromomethane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Bromodichloromethane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
2-Chloroethyl Vinyl Ether	ND	0.0069	EPA 8260C	5-25-17	5-25-17	
(cis) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Methyl Isobutyl Ketone	ND	0.0069	EPA 8260C	5-25-17	5-25-17	
Toluene	0.019	0.0069	EPA 8260C	5-25-17	5-25-17	
(trans) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP2-10					
Laboratory ID:	05-299-05					
1,1,2-Trichloroethane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Tetrachloroethene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,3-Dichloropropane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
2-Hexanone	ND	0.0069	EPA 8260C	5-25-17	5-25-17	
Dibromochloromethane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,2-Dibromoethane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Chlorobenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,1,1,2-Tetrachloroethane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Ethylbenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
m,p-Xylene	ND	0.0028	EPA 8260C	5-25-17	5-25-17	
o-Xylene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Styrene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Bromoform	ND	0.0069	EPA 8260C	5-25-17	5-25-17	
Isopropylbenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Bromobenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,1,2,2-Tetrachloroethane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,2,3-Trichloropropane	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
n-Propylbenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
2-Chlorotoluene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
4-Chlorotoluene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,3,5-Trimethylbenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
tert-Butylbenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,2,4-Trimethylbenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
sec-Butylbenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,3-Dichlorobenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
p-Isopropyltoluene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,4-Dichlorobenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,2-Dichlorobenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
n-Butylbenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,2-Dibromo-3-chloropropane	ND	0.0069	EPA 8260C	5-25-17	5-25-17	
1,2,4-Trichlorobenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Hexachlorobutadiene	ND	0.0069	EPA 8260C	5-25-17	5-25-17	
Naphthalene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
1,2,3-Trichlorobenzene	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>121</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>114</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>108</i>	<i>80-131</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP3-2.5					
Laboratory ID:	05-299-07					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Chloromethane	ND	0.0060	EPA 8260C	5-25-17	5-25-17	
Vinyl Chloride	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Bromomethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Chloroethane	ND	0.0060	EPA 8260C	5-25-17	5-25-17	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Acetone	0.058	0.012	EPA 8260C	5-25-17	5-25-17	
Iodomethane	ND	0.0076	EPA 8260C	5-25-17	5-25-17	
Carbon Disulfide	ND	0.0017	EPA 8260C	5-25-17	5-25-17	
Methylene Chloride	ND	0.012	EPA 8260C	5-25-17	5-25-17	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Vinyl Acetate	ND	0.0060	EPA 8260C	5-25-17	5-25-17	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
2-Butanone	0.013	0.0060	EPA 8260C	5-25-17	5-25-17	
Bromochloromethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Chloroform	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Benzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Trichloroethene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Dibromomethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Bromodichloromethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
2-Chloroethyl Vinyl Ether	ND	0.0060	EPA 8260C	5-25-17	5-25-17	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Methyl Isobutyl Ketone	ND	0.0060	EPA 8260C	5-25-17	5-25-17	
Toluene	ND	0.0060	EPA 8260C	5-25-17	5-25-17	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP3-2.5					
Laboratory ID:	05-299-07					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Tetrachloroethene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
2-Hexanone	ND	0.0060	EPA 8260C	5-25-17	5-25-17	
Dibromochloromethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Chlorobenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Ethylbenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
m,p-Xylene	ND	0.0024	EPA 8260C	5-25-17	5-25-17	
o-Xylene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Styrene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Bromoform	ND	0.0060	EPA 8260C	5-25-17	5-25-17	
Isopropylbenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Bromobenzene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.069	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.069	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	0.34	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.34	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.069	EPA 8260C	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	105	73-134				
Toluene-d8	96	81-124				
4-Bromofluorobenzene	80	80-131				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP3-10					
Laboratory ID:	05-299-08					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Chloromethane	ND	0.0061	EPA 8260C	5-25-17	5-25-17	
Vinyl Chloride	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Bromomethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Chloroethane	ND	0.0061	EPA 8260C	5-25-17	5-25-17	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Acetone	0.028	0.012	EPA 8260C	5-25-17	5-25-17	
Iodomethane	ND	0.0077	EPA 8260C	5-25-17	5-25-17	
Carbon Disulfide	ND	0.0017	EPA 8260C	5-25-17	5-25-17	
Methylene Chloride	ND	0.012	EPA 8260C	5-25-17	5-25-17	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Vinyl Acetate	ND	0.0061	EPA 8260C	5-25-17	5-25-17	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
2-Butanone	ND	0.0061	EPA 8260C	5-25-17	5-25-17	
Bromochloromethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Chloroform	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Benzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Trichloroethene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Dibromomethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Bromodichloromethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
2-Chloroethyl Vinyl Ether	ND	0.0061	EPA 8260C	5-25-17	5-25-17	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Methyl Isobutyl Ketone	ND	0.0061	EPA 8260C	5-25-17	5-25-17	
Toluene	0.016	0.0061	EPA 8260C	5-25-17	5-25-17	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	



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 Project: 15-05986-040

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP3-10					
Laboratory ID:	05-299-08					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Tetrachloroethene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
2-Hexanone	ND	0.0061	EPA 8260C	5-25-17	5-25-17	
Dibromochloromethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Chlorobenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Ethylbenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
m,p-Xylene	ND	0.0025	EPA 8260C	5-25-17	5-25-17	
o-Xylene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Styrene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Bromoform	ND	0.0061	EPA 8260C	5-25-17	5-25-17	
Isopropylbenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Bromobenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
n-Propylbenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
2-Chlorotoluene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
4-Chlorotoluene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,3,5-Trimethylbenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
tert-Butylbenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,2,4-Trimethylbenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
sec-Butylbenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
p-Isopropyltoluene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
n-Butylbenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,2-Dibromo-3-chloropropane	ND	0.0061	EPA 8260C	5-25-17	5-25-17	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
Hexachlorobutadiene	ND	0.0061	EPA 8260C	5-25-17	5-25-17	
Naphthalene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	5-25-17	5-25-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>106</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>80-131</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP4-3					
Laboratory ID:	05-299-10					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Chloromethane	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
Vinyl Chloride	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Bromomethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Chloroethane	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Acetone	ND	0.011	EPA 8260C	5-25-17	5-25-17	
Iodomethane	ND	0.0071	EPA 8260C	5-25-17	5-25-17	
Carbon Disulfide	ND	0.0016	EPA 8260C	5-25-17	5-25-17	
Methylene Chloride	ND	0.011	EPA 8260C	5-25-17	5-25-17	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Vinyl Acetate	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
2-Butanone	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
Bromochloromethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Chloroform	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Benzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Trichloroethene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Dibromomethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Bromodichloromethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
2-Chloroethyl Vinyl Ether	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Methyl Isobutyl Ketone	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
Toluene	0.016	0.0057	EPA 8260C	5-25-17	5-25-17	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP4-3					
Laboratory ID:	05-299-10					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Tetrachloroethene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
2-Hexanone	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
Dibromochloromethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Chlorobenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Ethylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
m,p-Xylene	ND	0.0023	EPA 8260C	5-25-17	5-25-17	
o-Xylene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Styrene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Bromoform	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
Isopropylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Bromobenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
n-Propylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
2-Chlorotoluene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
4-Chlorotoluene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
tert-Butylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
sec-Butylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
n-Butylbenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2-Dibromo-3-chloropropane	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Hexachlorobutadiene	ND	0.0057	EPA 8260C	5-25-17	5-25-17	
Naphthalene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	5-25-17	5-25-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	107	73-134				
Toluene-d8	105	81-124				
4-Bromofluorobenzene	94	80-131				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP4-10					
Laboratory ID:	05-299-11					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	0.0064	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	0.0064	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Acetone	0.051	0.013	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	0.0064	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	0.013	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	0.0064	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Butanone	0.0068	0.0064	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	0.0083	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	0.0064	EPA 8260C	5-26-17	5-26-17	
Toluene	0.011	0.0064	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP4-10					
Laboratory ID:	05-299-11					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	0.0064	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.0026	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	0.0064	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	0.0024	0.0013	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	0.0064	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.0064	EPA 8260C	5-26-17	5-26-17	
Naphthalene	0.0019	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>80-131</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP5-2.5					
Laboratory ID:	05-299-13					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	0.0058	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	0.0058	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Acetone	ND	0.012	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	0.0058	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.0058	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	0.012	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	0.0058	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	0.0058	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	0.0074	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	0.0058	EPA 8260C	5-26-17	5-26-17	
Toluene	ND	0.0058	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP5-2.5					
Laboratory ID:	05-299-13					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	0.0058	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.0023	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	0.0058	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	0.0058	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.0058	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>80-131</i>				



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 Project: 15-05986-040

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP5-10					
Laboratory ID:	05-299-14					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Acetone	0.046	0.013	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	0.0024	0.0013	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	0.013	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Butanone	0.013	0.0065	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	0.0083	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Toluene	0.016	0.0065	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP5-10					
Laboratory ID:	05-299-14					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.0026	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>92</i>	<i>80-131</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP6-2					
Laboratory ID:	05-299-16					
Dichlorodifluoromethane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	0.0045	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	0.0045	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Acetone	0.011	0.0090	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	0.0045	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	0.0090	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	0.0045	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	0.0045	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	0.0058	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	0.0045	EPA 8260C	5-26-17	5-26-17	
Toluene	0.0096	0.0045	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP6-2					
Laboratory ID:	05-299-16					
1,1,2-Trichloroethane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	0.0045	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.0018	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	0.0045	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	0.0045	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.0045	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.00090	EPA 8260C	5-26-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>91</i>	<i>80-131</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP6-10					
Laboratory ID:	05-299-17					
Dichlorodifluoromethane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	0.0076	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	0.0076	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Acetone	0.10	0.015	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	0.0076	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	0.015	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	0.0076	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
2-Butanone	0.025	0.0076	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	0.0097	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	0.0076	EPA 8260C	5-26-17	5-26-17	
Toluene	0.0083	0.0076	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP6-10					
Laboratory ID:	05-299-17					
1,1,2-Trichloroethane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	0.0076	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.0030	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	0.0076	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	0.0076	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.0076	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.0015	EPA 8260C	5-26-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>111</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>93</i>	<i>80-131</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP7-0					
Laboratory ID:	05-299-19					
Dichlorodifluoromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	0.0071	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	0.0071	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Acetone	ND	0.014	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	0.0071	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	0.014	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	0.0071	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	0.0071	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	0.0091	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	0.0071	EPA 8260C	5-26-17	5-26-17	
Toluene	ND	0.0071	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP7-0					
Laboratory ID:	05-299-19					
1,1,2-Trichloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	0.0071	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.0028	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Styrene	0.012	0.0014	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	0.0071	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	0.0071	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.0071	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	73-134				
Toluene-d8	100	81-124				
4-Bromofluorobenzene	90	80-131				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP7-10					
Laboratory ID:	05-299-20					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Acetone	0.019	0.013	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	0.013	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	0.0083	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Toluene	0.022	0.0065	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP7-10					
Laboratory ID:	05-299-20					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.0026	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>80-131</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP8-0.5					
Laboratory ID:	05-299-22					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Acetone	0.027	0.013	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	0.013	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	0.0083	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Toluene	0.014	0.0065	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP8-0.5					
Laboratory ID:	05-299-22					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.0026	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.0065	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>115</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>80-131</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP8-10					
Laboratory ID:	05-299-23					
Dichlorodifluoromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Acetone	0.016	0.014	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	0.014	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	0.0089	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Toluene	0.021	0.0070	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP8-10					
Laboratory ID:	05-299-23					
1,1,2-Trichloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.0028	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>80-131</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP9-0					
Laboratory ID:	05-299-25					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	0.0063	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	0.0063	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Acetone	ND	0.013	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	0.0063	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	0.013	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	0.0063	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	0.0063	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	0.0080	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	0.0063	EPA 8260C	5-26-17	5-26-17	
Toluene	0.014	0.0063	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP9-0					
Laboratory ID:	05-299-25					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	0.0063	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.0025	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	0.0063	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.0013	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
1,1,2,2-Tetrachloroethane	ND	0.057	EPA 8260C	5-30-17	5-30-17	
1,2,3-Trichloropropane	ND	0.057	EPA 8260C	5-30-17	5-30-17	
n-Propylbenzene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
2-Chlorotoluene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
4-Chlorotoluene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
1,3,5-Trimethylbenzene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
tert-Butylbenzene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
1,2,4-Trimethylbenzene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
sec-Butylbenzene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
1,3-Dichlorobenzene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
p-Isopropyltoluene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
1,4-Dichlorobenzene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
1,2-Dichlorobenzene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
n-Butylbenzene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
1,2-Dibromo-3-chloropropane	ND	0.29	EPA 8260C	5-30-17	5-30-17	
1,2,4-Trichlorobenzene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
Hexachlorobutadiene	ND	0.29	EPA 8260C	5-30-17	5-30-17	
Naphthalene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
1,2,3-Trichlorobenzene	ND	0.057	EPA 8260C	5-30-17	5-30-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	105	73-134				
Toluene-d8	97	81-124				
4-Bromofluorobenzene	98	80-131				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP9-10					
Laboratory ID:	05-299-26					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Acetone	0.015	0.012	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	0.012	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	0.0079	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Toluene	0.015	0.0062	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP9-10					
Laboratory ID:	05-299-26					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.0025	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.0062	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	5-26-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>80-131</i>				



Date of Report: June 13, 2017
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 Laboratory Reference: 1705-299
 Project: 15-05986-040

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP10-0					
Laboratory ID:	05-299-28					
Dichlorodifluoromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Acetone	ND	0.014	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	0.014	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	0.0090	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Toluene	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP10-0					
Laboratory ID:	05-299-28					
1,1,2-Trichloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.0028	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.0070	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.0014	EPA 8260C	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	73-134				
Toluene-d8	98	81-124				
4-Bromofluorobenzene	90	80-131				



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VOLATILES by EPA 8260C
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Matrix: Soil
 Units: ug/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0525S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Chloromethane	ND	0.0050	EPA 8260C	5-25-17	5-25-17	
Vinyl Chloride	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Bromomethane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Chloroethane	ND	0.0050	EPA 8260C	5-25-17	5-25-17	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Acetone	ND	0.010	EPA 8260C	5-25-17	5-25-17	
Iodomethane	ND	0.0063	EPA 8260C	5-25-17	5-25-17	
Carbon Disulfide	ND	0.0014	EPA 8260C	5-25-17	5-25-17	
Methylene Chloride	ND	0.010	EPA 8260C	5-25-17	5-25-17	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Vinyl Acetate	ND	0.0050	EPA 8260C	5-25-17	5-25-17	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
2-Butanone	ND	0.0050	EPA 8260C	5-25-17	5-25-17	
Bromochloromethane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Chloroform	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Benzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Trichloroethene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Dibromomethane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Bromodichloromethane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	5-25-17	5-25-17	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	5-25-17	5-25-17	
Toluene	ND	0.0050	EPA 8260C	5-25-17	5-25-17	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0525S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Tetrachloroethene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
2-Hexanone	ND	0.0050	EPA 8260C	5-25-17	5-25-17	
Dibromochloromethane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Chlorobenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Ethylbenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
m,p-Xylene	ND	0.0020	EPA 8260C	5-25-17	5-25-17	
o-Xylene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Styrene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Bromoform	ND	0.0050	EPA 8260C	5-25-17	5-25-17	
Isopropylbenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Bromobenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
n-Propylbenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
2-Chlorotoluene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
4-Chlorotoluene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
tert-Butylbenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
sec-Butylbenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
n-Butylbenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	5-25-17	5-25-17	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	5-25-17	5-25-17	
Naphthalene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	5-25-17	5-25-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	109	73-134				
Toluene-d8	108	81-124				
4-Bromofluorobenzene	100	80-131				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0526S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	0.0050	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	0.0050	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Acetone	ND	0.010	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	0.0050	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	0.010	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	0.0050	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	0.0050	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	0.0064	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	5-26-17	5-26-17	
Toluene	ND	0.0050	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0526S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	0.0050	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.0020	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	0.0050	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	113	73-134				
Toluene-d8	111	81-124				
4-Bromofluorobenzene	109	80-131				



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 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0530S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Chloromethane	ND	0.0050	EPA 8260C	5-30-17	5-30-17	
Vinyl Chloride	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Bromomethane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Chloroethane	ND	0.0050	EPA 8260C	5-30-17	5-30-17	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Acetone	ND	0.010	EPA 8260C	5-30-17	5-30-17	
Iodomethane	ND	0.0050	EPA 8260C	5-30-17	5-30-17	
Carbon Disulfide	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Methylene Chloride	ND	0.010	EPA 8260C	5-30-17	5-30-17	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Vinyl Acetate	ND	0.0050	EPA 8260C	5-30-17	5-30-17	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
2-Butanone	ND	0.0050	EPA 8260C	5-30-17	5-30-17	
Bromochloromethane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Chloroform	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Benzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Trichloroethene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Dibromomethane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Bromodichloromethane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	5-30-17	5-30-17	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	5-30-17	5-30-17	
Toluene	ND	0.0050	EPA 8260C	5-30-17	5-30-17	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	



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 Laboratory Reference: 1705-299
 Project: 15-05986-040

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0530S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Tetrachloroethene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
2-Hexanone	ND	0.0050	EPA 8260C	5-30-17	5-30-17	
Dibromochloromethane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Chlorobenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Ethylbenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
m,p-Xylene	ND	0.0020	EPA 8260C	5-30-17	5-30-17	
o-Xylene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Styrene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Bromoform	ND	0.0050	EPA 8260C	5-30-17	5-30-17	
Isopropylbenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Bromobenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
n-Propylbenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
2-Chlorotoluene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
4-Chlorotoluene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
tert-Butylbenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
sec-Butylbenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
n-Butylbenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	5-30-17	5-30-17	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	5-30-17	5-30-17	
Naphthalene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	5-30-17	5-30-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	107	73-134				
Toluene-d8	110	81-124				
4-Bromofluorobenzene	104	80-131				



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VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent		Recovery		RPD	
					Recovery		Limits		RPD	Limit
SPIKE BLANKS										
Laboratory ID:	SB0525S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0613	0.0591	0.0500	0.0500	123	118	66-127	4	15	
Benzene	0.0547	0.0554	0.0500	0.0500	109	111	76-122	1	15	
Trichloroethene	0.0542	0.0536	0.0500	0.0500	108	107	78-120	1	15	
Toluene	0.0544	0.0552	0.0500	0.0500	109	110	83-120	1	15	
Chlorobenzene	0.0509	0.0511	0.0500	0.0500	102	102	81-120	0	15	
Surrogate:										
Dibromofluoromethane					100	102	73-134			
Toluene-d8					101	103	81-124			
4-Bromofluorobenzene					97	99	80-131			



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 Project: 15-05986-040

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0526S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0554	0.0593	0.0500	0.0500	111	119	66-127	7	15	
Benzene	0.0527	0.0554	0.0500	0.0500	105	111	76-122	5	15	
Trichloroethene	0.0482	0.0511	0.0500	0.0500	96	102	78-120	6	15	
Toluene	0.0498	0.0534	0.0500	0.0500	100	107	83-120	7	15	
Chlorobenzene	0.0478	0.0483	0.0500	0.0500	96	97	81-120	1	15	
Surrogate:										
Dibromofluoromethane					103	104	73-134			
Toluene-d8					99	99	81-124			
4-Bromofluorobenzene					97	97	80-131			



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

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0530S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0613	0.0542	0.0500	0.0500	123	108	66-127	12	15	
Benzene	0.0567	0.0513	0.0500	0.0500	113	103	76-122	10	15	
Trichloroethene	0.0551	0.0498	0.0500	0.0500	110	100	78-120	10	15	
Toluene	0.0560	0.0511	0.0500	0.0500	112	102	83-120	9	15	
Chlorobenzene	0.0510	0.0466	0.0500	0.0500	102	93	81-120	9	15	
Surrogate:										
Dibromofluoromethane					98	94	73-134			
Toluene-d8					100	98	81-124			
4-Bromofluorobenzene					94	85	80-131			



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 Project: 15-05986-040

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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-W					
Laboratory ID:	05-299-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chloromethane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromomethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chloroethane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Acetone	6.7	5.0	EPA 8260C	5-30-17	5-30-17	
Iodomethane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-30-17	5-30-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-30-17	5-30-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Butanone	ND	5.0	EPA 8260C	5-30-17	5-30-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chloroform	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Benzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Trichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Dibromomethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	5-30-17	5-30-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-30-17	5-30-17	
Toluene	ND	1.0	EPA 8260C	5-30-17	5-30-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-30-17	5-30-17	



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 Project: 15-05986-040

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-W					
Laboratory ID:	05-299-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Hexanone	ND	2.0	EPA 8260C	5-30-17	5-30-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-30-17	5-30-17	
o-Xylene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Styrene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromoform	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Naphthalene	ND	1.0	EPA 8260C	5-30-17	5-30-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>113</i>	<i>77-129</i>				
<i>Toluene-d8</i>	<i>113</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>84</i>	<i>80-125</i>				



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 Project: 15-05986-040

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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP2-W					
Laboratory ID:	05-299-06					
Dichlorodifluoromethane	ND	0.26	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	1.4	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.33	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Acetone	75	5.0	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	1.7	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	5.0	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	6.6	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Toluene	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP2-W					
Laboratory ID:	05-299-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	1.4	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	102	77-129				
Toluene-d8	84	80-127				
4-Bromofluorobenzene	123	80-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP3-W					
Laboratory ID:	05-299-09					
Dichlorodifluoromethane	ND	0.26	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	1.4	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.33	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Acetone	5.3	5.0	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	1.7	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	5.0	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	6.6	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Toluene	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP3-W					
Laboratory ID:	05-299-09					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	1.4	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	101	77-129				
Toluene-d8	83	80-127				
4-Bromofluorobenzene	92	80-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP4-W					
Laboratory ID:	05-299-12					
Dichlorodifluoromethane	ND	0.26	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	1.4	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.33	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Acetone	5.6	5.0	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	1.7	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	5.0	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	6.6	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Toluene	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP4-W					
Laboratory ID:	05-299-12					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	1.4	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	99	77-129				
Toluene-d8	81	80-127				
4-Bromofluorobenzene	113	80-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP5-W					
Laboratory ID:	05-299-15					
Dichlorodifluoromethane	ND	0.26	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	1.4	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.33	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Acetone	5.5	5.0	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	1.7	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	5.0	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Benzene	6.4	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	6.6	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Toluene	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP5-W					
Laboratory ID:	05-299-15					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	0.43	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	32	0.40	EPA 8260C	5-26-17	5-26-17	
o-Xylene	0.57	0.20	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	0.45	0.20	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	0.95	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	3.1	0.20	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	12	0.20	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	1.4	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>77-129</i>				
<i>Toluene-d8</i>	<i>90</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>80-125</i>				



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

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

VOLATILES EPA 8260C
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP6-W					
Laboratory ID:	05-299-18					
Dichlorodifluoromethane	ND	0.26	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	1.4	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.33	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Acetone	7.9	5.0	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	1.7	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	5.0	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	6.6	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Toluene	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	



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 Project: 15-05986-040

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP6-W					
Laboratory ID:	05-299-18					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	1.4	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>77-129</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>117</i>	<i>80-125</i>				



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 Project: 15-05986-040

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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		PP7-W				
Laboratory ID:		05-299-21				
Dichlorodifluoromethane	ND	0.26	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	1.4	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.33	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Acetone	6.1	5.0	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	1.7	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	5.0	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	6.6	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Toluene	5.2	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP7-W					
Laboratory ID:	05-299-21					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	1.4	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	77-129				
Toluene-d8	83	80-127				
4-Bromofluorobenzene	94	80-125				



Date of Report: June 13, 2017
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP8-W					
Laboratory ID:	05-299-24					
Dichlorodifluoromethane	ND	0.26	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	1.4	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.33	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Acetone	5.2	5.0	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	1.7	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	5.0	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	6.6	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Toluene	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP8-W					
Laboratory ID:	05-299-24					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	1.4	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>77-129</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>80-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP9-W					
Laboratory ID:	05-299-27					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chloromethane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromomethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chloroethane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Acetone	7.2	5.0	EPA 8260C	5-30-17	5-30-17	
Iodomethane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Carbon Disulfide	0.22	0.20	EPA 8260C	5-30-17	5-30-17	Y
Methylene Chloride	ND	1.0	EPA 8260C	5-30-17	5-30-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-30-17	5-30-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Butanone	ND	5.0	EPA 8260C	5-30-17	5-30-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chloroform	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Benzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Trichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Dibromomethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	5-30-17	5-30-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-30-17	5-30-17	
Toluene	ND	1.0	EPA 8260C	5-30-17	5-30-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-30-17	5-30-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP9-W					
Laboratory ID:	05-299-27					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Hexanone	ND	2.0	EPA 8260C	5-30-17	5-30-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-30-17	5-30-17	
o-Xylene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Styrene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromoform	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Naphthalene	ND	1.0	EPA 8260C	5-30-17	5-30-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>119</i>	<i>77-129</i>				
<i>Toluene-d8</i>	<i>116</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>80-125</i>				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP10-W					
Laboratory ID:	05-299-29					
Dichlorodifluoromethane	ND	0.26	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	1.4	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.33	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Acetone	ND	5.0	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	1.7	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	5.0	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	6.6	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Toluene	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP10-W					
Laboratory ID:	05-299-29					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	1.4	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	104	77-129				
Toluene-d8	98	80-127				
4-Bromofluorobenzene	105	80-125				



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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	Trip Blank					
Laboratory ID:	05-299-30					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chloromethane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromomethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chloroethane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Acetone	ND	5.0	EPA 8260C	5-30-17	5-30-17	
Iodomethane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-30-17	5-30-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-30-17	5-30-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Butanone	ND	5.0	EPA 8260C	5-30-17	5-30-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chloroform	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Benzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Trichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Dibromomethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	5-30-17	5-30-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-30-17	5-30-17	
Toluene	ND	1.0	EPA 8260C	5-30-17	5-30-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-30-17	5-30-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	Trip Blank					
Laboratory ID:	05-299-30					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Hexanone	ND	2.0	EPA 8260C	5-30-17	5-30-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-30-17	5-30-17	
o-Xylene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Styrene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromoform	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Naphthalene	ND	1.0	EPA 8260C	5-30-17	5-30-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>126</i>	<i>77-129</i>				
<i>Toluene-d8</i>	<i>118</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>80-125</i>				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0526W1					
Dichlorodifluoromethane	ND	0.26	EPA 8260C	5-26-17	5-26-17	
Chloromethane	ND	1.4	EPA 8260C	5-26-17	5-26-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromomethane	ND	0.33	EPA 8260C	5-26-17	5-26-17	
Chloroethane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Acetone	ND	5.0	EPA 8260C	5-26-17	5-26-17	
Iodomethane	ND	1.7	EPA 8260C	5-26-17	5-26-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-26-17	5-26-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Butanone	ND	5.0	EPA 8260C	5-26-17	5-26-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chloroform	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Benzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Trichloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Dibromomethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chloroethyl Vinyl Ether	ND	6.6	EPA 8260C	5-26-17	5-26-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Toluene	ND	1.0	EPA 8260C	5-26-17	5-26-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-26-17	5-26-17	



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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0526W1						
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Hexanone	ND	2.0	EPA 8260C	5-26-17	5-26-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-26-17	5-26-17	
o-Xylene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Styrene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromoform	ND	1.0	EPA 8260C	5-26-17	5-26-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Bromobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-26-17	5-26-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Naphthalene	ND	1.4	EPA 8260C	5-26-17	5-26-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-26-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	77-129				
Toluene-d8	90	80-127				
4-Bromofluorobenzene	102	80-125				



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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0530W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chloromethane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Vinyl Chloride	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromomethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chloroethane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Acetone	ND	5.0	EPA 8260C	5-30-17	5-30-17	
Iodomethane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Carbon Disulfide	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Methylene Chloride	ND	1.0	EPA 8260C	5-30-17	5-30-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Vinyl Acetate	ND	1.0	EPA 8260C	5-30-17	5-30-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Butanone	ND	5.0	EPA 8260C	5-30-17	5-30-17	
Bromochloromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chloroform	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Benzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Trichloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Dibromomethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromodichloromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	5-30-17	5-30-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	5-30-17	5-30-17	
Toluene	ND	1.0	EPA 8260C	5-30-17	5-30-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-30-17	5-30-17	



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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0530W1						
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Tetrachloroethene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Hexanone	ND	2.0	EPA 8260C	5-30-17	5-30-17	
Dibromochloromethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Chlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Ethylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
m,p-Xylene	ND	0.40	EPA 8260C	5-30-17	5-30-17	
o-Xylene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Styrene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromoform	ND	1.0	EPA 8260C	5-30-17	5-30-17	
Isopropylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Bromobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-30-17	5-30-17	
n-Propylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
n-Butylbenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-30-17	5-30-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Naphthalene	ND	1.0	EPA 8260C	5-30-17	5-30-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-30-17	5-30-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	120	77-129				
Toluene-d8	121	80-127				
4-Bromofluorobenzene	89	80-125				



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 Project: 15-05986-040

VOLATILES by EPA 8260C
MS/MSD QUALITY CONTROL

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Source	Percent	Recovery	RPD		Flags
					Result	Recovery	Limits			
MATRIX SPIKES										
Laboratory ID:	05-274-07									
	MS	MSD	MS	MSD		MS	MSD			
1,1-Dichloroethene	10.7	10.5	10.0	10.0	ND	107	105	65-119	2	15
Benzene	10.6	10.7	10.0	10.0	ND	106	107	75-117	1	15
Trichloroethene	9.44	9.58	10.0	10.0	ND	94	96	66-120	1	15
Toluene	10.7	10.5	10.0	10.0	ND	107	105	79-120	2	15
Chlorobenzene	9.15	9.48	10.0	10.0	ND	92	95	76-120	4	15
Surrogate:										
Dibromofluoromethane						96	97	77-129		
Toluene-d8						93	91	80-127		
4-Bromofluorobenzene						105	106	80-125		



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 Project: 15-05986-040

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	Flags
					Recovery				RPD	
SPIKE BLANKS										
Laboratory ID:	SB0530W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.80	9.93	10.0	10.0	98	99	63-127	1	17	
Benzene	10.7	11.0	10.0	10.0	107	110	76-121	3	12	
Trichloroethene	9.13	9.38	10.0	10.0	91	94	64-120	3	15	
Toluene	10.1	10.6	10.0	10.0	101	106	82-120	5	13	
Chlorobenzene	10.1	10.7	10.0	10.0	101	107	80-120	6	14	
Surrogate:										
Dibromofluoromethane					118	124	77-129			
Toluene-d8					112	113	80-127			
4-Bromofluorobenzene					89	88	80-125			



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 Project: 15-05986-040

SEMIVOLATILES EPA 8270D/SIM
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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-2					
Laboratory ID:	05-299-01					
n-Nitrosodimethylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.41	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.21	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.041	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	



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SEMIVOLATILES EPA 8270D/SIM
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-2					
Laboratory ID:	05-299-01					
2,4-Dinitrophenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.21	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.41	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	0.052	0.041	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	63	18 - 109				
Phenol-d6	66	25 - 111				
Nitrobenzene-d5	66	22 - 113				
2-Fluorobiphenyl	56	30 - 114				
2,4,6-Tribromophenol	59	22 - 116				
Terphenyl-d14	57	33 - 114				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-10					
Laboratory ID:	05-299-03					
n-Nitrosodimethylamine	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Pyridine	ND	0.45	EPA 8270D	5-31-17	5-31-17	
Phenol	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Aniline	ND	0.22	EPA 8270D	5-31-17	5-31-17	
bis(2-Chloroethyl)ether	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2-Chlorophenol	ND	0.045	EPA 8270D	5-31-17	5-31-17	
1,3-Dichlorobenzene	ND	0.045	EPA 8270D	5-31-17	5-31-17	
1,4-Dichlorobenzene	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Benzyl alcohol	ND	0.22	EPA 8270D	5-31-17	5-31-17	
1,2-Dichlorobenzene	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2-Methylphenol (o-Cresol)	ND	0.045	EPA 8270D	5-31-17	5-31-17	
bis(2-Chloroisopropyl)ether	ND	0.045	EPA 8270D	5-31-17	5-31-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.045	EPA 8270D	5-31-17	5-31-17	
n-Nitroso-di-n-propylamine	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Hexachloroethane	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Nitrobenzene	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Isophorone	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2-Nitrophenol	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2,4-Dimethylphenol	ND	0.045	EPA 8270D	5-31-17	5-31-17	
bis(2-Chloroethoxy)methane	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2,4-Dichlorophenol	ND	0.045	EPA 8270D	5-31-17	5-31-17	
1,2,4-Trichlorobenzene	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Naphthalene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.22	EPA 8270D	5-31-17	5-31-17	
Hexachlorobutadiene	ND	0.045	EPA 8270D	5-31-17	5-31-17	
4-Chloro-3-methylphenol	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2-Methylnaphthalene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2,4,6-Trichlorophenol	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2,3-Dichloroaniline	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2,4,5-Trichlorophenol	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2-Chloronaphthalene	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2-Nitroaniline	ND	0.045	EPA 8270D	5-31-17	5-31-17	
1,4-Dinitrobenzene	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Dimethylphthalate	ND	0.045	EPA 8270D	5-31-17	5-31-17	
1,3-Dinitrobenzene	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2,6-Dinitrotoluene	ND	0.045	EPA 8270D	5-31-17	5-31-17	
1,2-Dinitrobenzene	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Acenaphthylene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.045	EPA 8270D	5-31-17	5-31-17	



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-10					
Laboratory ID:	05-299-03					
2,4-Dinitrophenol	ND	0.22	EPA 8270D	5-31-17	5-31-17	
Acenaphthene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2,4-Dinitrotoluene	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Dibenzofuran	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2,3,5,6-Tetrachlorophenol	ND	0.045	EPA 8270D	5-31-17	5-31-17	
2,3,4,6-Tetrachlorophenol	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Diethylphthalate	ND	0.22	EPA 8270D	5-31-17	5-31-17	
4-Chlorophenyl-phenylether	ND	0.045	EPA 8270D	5-31-17	5-31-17	
4-Nitroaniline	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Fluorene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.22	EPA 8270D	5-31-17	5-31-17	
n-Nitrosodiphenylamine	ND	0.045	EPA 8270D	5-31-17	5-31-17	
1,2-Diphenylhydrazine	ND	0.045	EPA 8270D	5-31-17	5-31-17	
4-Bromophenyl-phenylether	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Hexachlorobenzene	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Pentachlorophenol	ND	0.22	EPA 8270D	5-31-17	5-31-17	
Phenanthrene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Di-n-butylphthalate	ND	0.22	EPA 8270D	5-31-17	5-31-17	
Fluoranthene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.45	EPA 8270D	5-31-17	5-31-17	
Pyrene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.045	EPA 8270D	5-31-17	5-31-17	
bis-2-Ethylhexyladipate	ND	0.045	EPA 8270D	5-31-17	5-31-17	
3,3'-Dichlorobenzidine	ND	0.22	EPA 8270D	5-31-17	5-31-17	
Benzo[a]anthracene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Di-n-octylphthalate	ND	0.045	EPA 8270D	5-31-17	5-31-17	
Benzo[b]fluoranthene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0089	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	83	18 - 109				
Phenol-d6	81	25 - 111				
Nitrobenzene-d5	87	22 - 113				
2-Fluorobiphenyl	84	30 - 114				
2,4,6-Tribromophenol	85	22 - 116				
Terphenyl-d14	87	33 - 114				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

SEMIVOLATILES EPA 8270D/SIM
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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP2-2.5					
Laboratory ID:	05-299-04					
n-Nitrosodimethylamine	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.44	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.22	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.22	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.044	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.044	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.044	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.044	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.044	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.044	EPA 8270D	5-31-17	6-1-17	



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
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 Project: 15-05986-040

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP2-2.5					
Laboratory ID:	05-299-04					
2,4-Dinitrophenol	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.22	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.044	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.22	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.044	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.044	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.44	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.044	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.044	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0088	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	86	18 - 109				
Phenol-d6	86	25 - 111				
Nitrobenzene-d5	85	22 - 113				
2-Fluorobiphenyl	69	30 - 114				
2,4,6-Tribromophenol	73	22 - 116				
Terphenyl-d14	66	33 - 114				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

SEMIVOLATILES EPA 8270D/SIM
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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP2-10					
Laboratory ID:	05-299-05					
n-Nitrosodimethylamine	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.48	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.24	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.048	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.048	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.24	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.048	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.048	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.048	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.048	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.048	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.24	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.048	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.048	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.048	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.048	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.048	EPA 8270D	5-31-17	6-1-17	



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP2-10					
Laboratory ID:	05-299-05					
2,4-Dinitrophenol	ND	0.24	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.048	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.24	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.048	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.24	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.048	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.048	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.24	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.24	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.48	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.048	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.048	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.24	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.048	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0097	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	75	18 - 109				
Phenol-d6	72	25 - 111				
Nitrobenzene-d5	73	22 - 113				
2-Fluorobiphenyl	61	30 - 114				
2,4,6-Tribromophenol	61	22 - 116				
Terphenyl-d14	62	33 - 114				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP3-2.5					
Laboratory ID:	05-299-07					
n-Nitrosodimethylamine	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.42	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.21	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.042	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.042	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.042	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.042	EPA 8270D	5-31-17	6-1-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP3-2.5					
Laboratory ID:	05-299-07					
2,4-Dinitrophenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.21	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.042	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.042	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.42	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	62	18 - 109				
Phenol-d6	64	25 - 111				
Nitrobenzene-d5	63	22 - 113				
2-Fluorobiphenyl	53	30 - 114				
2,4,6-Tribromophenol	57	22 - 116				
Terphenyl-d14	55	33 - 114				



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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP3-10					
Laboratory ID:	05-299-08					
n-Nitrosodimethylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.41	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.21	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.041	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP3-10					
Laboratory ID:	05-299-08					
2,4-Dinitrophenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.21	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.41	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	74	18 - 109				
Phenol-d6	71	25 - 111				
Nitrobenzene-d5	75	22 - 113				
2-Fluorobiphenyl	70	30 - 114				
2,4,6-Tribromophenol	66	22 - 116				
Terphenyl-d14	72	33 - 114				



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 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP4-3					
Laboratory ID:	05-299-10					
n-Nitrosodimethylamine	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.42	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.21	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.042	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.042	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.042	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	0.017	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.042	EPA 8270D	5-31-17	6-1-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP4-3					
Laboratory ID:	05-299-10					
2,4-Dinitrophenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.21	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.042	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.042	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	0.028	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	0.0089	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	0.042	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.42	EPA 8270D	5-31-17	6-1-17	
Pyrene	0.046	0.042	EPA 8270D	5-31-17	6-1-17	
Butylbenzylphthalate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	0.029	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	0.037	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	0.042	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	0.014	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	0.034	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	0.027	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	0.032	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	65	18 - 109				
Phenol-d6	66	25 - 111				
Nitrobenzene-d5	67	22 - 113				
2-Fluorobiphenyl	58	30 - 114				
2,4,6-Tribromophenol	61	22 - 116				
Terphenyl-d14	57	33 - 114				



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 Project: 15-05986-040

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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP4-10					
Laboratory ID:	05-299-11					
n-Nitrosodimethylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.41	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.21	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.041	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	0.010	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP4-10					
Laboratory ID:	05-299-11					
2,4-Dinitrophenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.21	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	0.011	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.41	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	0.014	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0082	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	72	18 - 109				
Phenol-d6	72	25 - 111				
Nitrobenzene-d5	68	22 - 113				
2-Fluorobiphenyl	65	30 - 114				
2,4,6-Tribromophenol	59	22 - 116				
Terphenyl-d14	67	33 - 114				



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 Laboratory Reference: 1705-299
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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP5-2.5					
Laboratory ID:	05-299-13					
n-Nitrosodimethylamine	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.44	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.22	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.22	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.044	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.044	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.044	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.044	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.044	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.044	EPA 8270D	5-31-17	6-1-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP5-2.5					
Laboratory ID:	05-299-13					
2,4-Dinitrophenol	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.22	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.044	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.22	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.044	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.044	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.44	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.044	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.044	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.044	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0087	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	60	18 - 109				
Phenol-d6	60	25 - 111				
Nitrobenzene-d5	57	22 - 113				
2-Fluorobiphenyl	51	30 - 114				
2,4,6-Tribromophenol	46	22 - 116				
Terphenyl-d14	45	33 - 114				



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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP5-10					
Laboratory ID:	05-299-14					
n-Nitrosodimethylamine	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.45	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.22	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.045	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.045	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.22	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.045	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.045	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.045	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.045	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.045	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.045	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.045	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.045	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.045	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.045	EPA 8270D	5-31-17	6-1-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP5-10					
Laboratory ID:	05-299-14					
2,4-Dinitrophenol	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.045	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.22	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.045	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.22	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.045	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.045	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.45	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.045	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.045	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.22	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.045	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0090	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	67	18 - 109				
Phenol-d6	67	25 - 111				
Nitrobenzene-d5	52	22 - 113				
2-Fluorobiphenyl	56	30 - 114				
2,4,6-Tribromophenol	55	22 - 116				
Terphenyl-d14	62	33 - 114				



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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP6-2					
Laboratory ID:	05-299-16					
n-Nitrosodimethylamine	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.39	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.19	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.039	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.039	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.19	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.039	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.039	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.039	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.039	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.039	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
4-Chloroaniline	ND	0.19	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.039	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
1-Methylnaphthalene	ND	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
Hexachlorocyclopentadiene	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.039	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.039	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.039	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
3-Nitroaniline	ND	0.039	EPA 8270D	5-31-17	6-1-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP6-2					
Laboratory ID:	05-299-16					
2,4-Dinitrophenol	ND	0.19	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
4-Nitrophenol	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.039	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.19	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.039	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
4,6-Dinitro-2-methylphenol	ND	0.19	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.039	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.039	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.19	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
Anthracene	ND	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
Carbazole	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.19	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	0.013	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
Benzidine	ND	0.39	EPA 8270D	5-31-17	6-1-17	
Pyrene	0.015	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
Butylbenzylphthalate	ND	0.039	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.039	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.19	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	0.0084	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
Chrysene	0.012	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
bis(2-Ethylhexyl)phthalate	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.039	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	0.016	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
Benzo(j,k)fluoranthene	ND	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
Benzo[a]pyrene	0.012	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
Indeno[1,2,3-cd]pyrene	0.0092	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
Dibenz[a,h]anthracene	ND	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
Benzo[g,h,i]perylene	0.011	0.0077	EPA 8270D/SIM	5-31-17	6-1-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	79	18 - 109				
Phenol-d6	82	25 - 111				
Nitrobenzene-d5	80	22 - 113				
2-Fluorobiphenyl	63	30 - 114				
2,4,6-Tribromophenol	74	22 - 116				
Terphenyl-d14	63	33 - 114				



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 Samples Submitted: May 24, 2017
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 Project: 15-05986-040

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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP6-10					
Laboratory ID:	05-299-17					
n-Nitrosodimethylamine	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.50	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.25	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.050	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.050	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.25	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.050	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.050	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.050	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.050	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.050	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.25	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.050	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.050	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.050	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.050	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.050	EPA 8270D	5-31-17	6-1-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP6-10					
Laboratory ID:	05-299-17					
2,4-Dinitrophenol	ND	0.25	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.050	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.25	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.050	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.25	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.050	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.050	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.25	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.25	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.50	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.050	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.050	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.25	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.050	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0099	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	31	18 - 109				
Phenol-d6	34	25 - 111				
Nitrobenzene-d5	31	22 - 113				
2-Fluorobiphenyl	35	30 - 114				
2,4,6-Tribromophenol	44	22 - 116				
Terphenyl-d14	41	33 - 114				



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 Laboratory Reference: 1705-299
 Project: 15-05986-040

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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP7-0					
Laboratory ID:	05-299-19					
n-Nitrosodimethylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.41	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.20	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.20	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.041	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
4-Chloroaniline	ND	0.20	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
1-Methylnaphthalene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
Hexachlorocyclopentadiene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
3-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP7-0					
Laboratory ID:	05-299-19					
2,4-Dinitrophenol	ND	0.20	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
4-Nitrophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.20	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
4,6-Dinitro-2-methylphenol	ND	0.20	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.20	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
Anthracene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
Carbazole	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.20	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
Benzidine	ND	0.41	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
Butylbenzylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.20	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
Chrysene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
bis(2-Ethylhexyl)phthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
Benzo(j,k)fluoranthene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
Benzo[a]pyrene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
Indeno[1,2,3-cd]pyrene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
Dibenz[a,h]anthracene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
Benzo[g,h,i]perylene	ND	0.0082	EPA 8270D/SIM	5-31-17	6-1-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	62	18 - 109				
Phenol-d6	69	25 - 111				
Nitrobenzene-d5	69	22 - 113				
2-Fluorobiphenyl	71	30 - 114				
2,4,6-Tribromophenol	78	22 - 116				
Terphenyl-d14	76	33 - 114				



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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP7-10					
Laboratory ID:	05-299-20					
n-Nitrosodimethylamine	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.42	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.21	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.042	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.042	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.042	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.042	EPA 8270D	5-31-17	6-1-17	



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP7-10					
Laboratory ID:	05-299-20					
2,4-Dinitrophenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.21	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.042	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.042	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.042	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.42	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.042	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0084	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	71	18 - 109				
Phenol-d6	74	25 - 111				
Nitrobenzene-d5	72	22 - 113				
2-Fluorobiphenyl	70	30 - 114				
2,4,6-Tribromophenol	60	22 - 116				
Terphenyl-d14	64	33 - 114				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP8-0.5					
Laboratory ID:	05-299-22					
n-Nitrosodimethylamine	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.38	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.19	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.038	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.038	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	0.70	0.19	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.038	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.038	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.038	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.038	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.038	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.19	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.038	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.038	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.038	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.038	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.038	EPA 8270D	5-31-17	6-1-17	



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 Samples Submitted: May 24, 2017
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 Project: 15-05986-040

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP8-0.5					
Laboratory ID:	05-299-22					
2,4-Dinitrophenol	ND	0.19	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.038	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.19	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.038	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.19	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.038	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.038	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.19	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.19	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.38	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.038	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.038	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.19	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.038	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0076	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	80	18 - 109				
Phenol-d6	85	25 - 111				
Nitrobenzene-d5	85	22 - 113				
2-Fluorobiphenyl	87	30 - 114				
2,4,6-Tribromophenol	92	22 - 116				
Terphenyl-d14	94	33 - 114				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP8-10					
Laboratory ID:	05-299-23					
n-Nitrosodimethylamine	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.47	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.24	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.047	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.047	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.24	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.047	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.047	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.047	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.047	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.047	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.24	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.047	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.047	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.047	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.047	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.047	EPA 8270D	5-31-17	6-1-17	



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 Laboratory Reference: 1705-299
 Project: 15-05986-040

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP8-10					
Laboratory ID:	05-299-23					
2,4-Dinitrophenol	ND	0.24	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.047	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.24	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.047	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.24	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.047	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.047	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.24	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.24	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.47	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.047	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.047	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.24	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.047	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0095	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	76	18 - 109				
Phenol-d6	73	25 - 111				
Nitrobenzene-d5	82	22 - 113				
2-Fluorobiphenyl	78	30 - 114				
2,4,6-Tribromophenol	70	22 - 116				
Terphenyl-d14	70	33 - 114				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP9-0					
Laboratory ID:	05-299-25					
n-Nitrosodimethylamine	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.35	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.17	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.035	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.035	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.17	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.035	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.035	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.035	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.035	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.035	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.17	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.035	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.035	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.035	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.035	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.035	EPA 8270D	5-31-17	6-1-17	



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 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP9-0					
Laboratory ID:	05-299-25					
2,4-Dinitrophenol	ND	0.17	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.035	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.17	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.035	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.035	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.035	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.17	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.17	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.35	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.035	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.035	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.035	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.13	EPA 8270D	5-31-17	6-1-17	U1
Benzo[b]fluoranthene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0070	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	56	18 - 109				
Phenol-d6	63	25 - 111				
Nitrobenzene-d5	62	22 - 113				
2-Fluorobiphenyl	66	30 - 114				
2,4,6-Tribromophenol	69	22 - 116				
Terphenyl-d14	69	33 - 114				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP9-10					
Laboratory ID:	05-299-26					
n-Nitrosodimethylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.41	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.21	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.041	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP9-10					
Laboratory ID:	05-299-26					
2,4-Dinitrophenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.21	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.41	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.21	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0083	EPA 8270D/SIM	5-31-17	5-31-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	79	18 - 109				
Phenol-d6	78	25 - 111				
Nitrobenzene-d5	80	22 - 113				
2-Fluorobiphenyl	71	30 - 114				
2,4,6-Tribromophenol	67	22 - 116				
Terphenyl-d14	65	33 - 114				



Date of Report: June 13, 2017
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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP10-0					
Laboratory ID:	05-299-28					
n-Nitrosodimethylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Pyridine	ND	0.41	EPA 8270D	5-31-17	6-1-17	
Phenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Aniline	ND	0.20	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethyl)ether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Chlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,3-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,4-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Benzyl alcohol	ND	0.20	EPA 8270D	5-31-17	6-1-17	
1,2-Dichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Methylphenol (o-Cresol)	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroisopropyl)ether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.041	EPA 8270D	5-31-17	6-1-17	
n-Nitroso-di-n-propylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Hexachloroethane	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Nitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Isophorone	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Nitrophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dimethylphenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis(2-Chloroethoxy)methane	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2,4-Trichlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Naphthalene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
4-Chloroaniline	ND	0.20	EPA 8270D	5-31-17	6-1-17	
Hexachlorobutadiene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Chloro-3-methylphenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Methylnaphthalene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
1-Methylnaphthalene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
Hexachlorocyclopentadiene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4,6-Trichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3-Dichloroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4,5-Trichlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Chloronaphthalene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,4-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Dimethylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,3-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,6-Dinitrotoluene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2-Dinitrobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Acenaphthylene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
3-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP10-0					
Laboratory ID:	05-299-28					
2,4-Dinitrophenol	ND	0.20	EPA 8270D	5-31-17	6-1-17	
Acenaphthene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
4-Nitrophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,4-Dinitrotoluene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Dibenzofuran	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3,5,6-Tetrachlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
2,3,4,6-Tetrachlorophenol	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Diethylphthalate	ND	0.20	EPA 8270D	5-31-17	6-1-17	
4-Chlorophenyl-phenylether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Nitroaniline	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Fluorene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
4,6-Dinitro-2-methylphenol	ND	0.20	EPA 8270D	5-31-17	6-1-17	
n-Nitrosodiphenylamine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
1,2-Diphenylhydrazine	ND	0.041	EPA 8270D	5-31-17	6-1-17	
4-Bromophenyl-phenylether	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Hexachlorobenzene	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Pentachlorophenol	ND	0.20	EPA 8270D	5-31-17	6-1-17	
Phenanthrene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
Anthracene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
Carbazole	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Di-n-butylphthalate	ND	0.20	EPA 8270D	5-31-17	6-1-17	
Fluoranthene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
Benzidine	ND	0.41	EPA 8270D	5-31-17	6-1-17	
Pyrene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
Butylbenzylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
bis-2-Ethylhexyladipate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
3,3'-Dichlorobenzidine	ND	0.20	EPA 8270D	5-31-17	6-1-17	
Benzo[a]anthracene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
Chrysene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
bis(2-Ethylhexyl)phthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Di-n-octylphthalate	ND	0.041	EPA 8270D	5-31-17	6-1-17	
Benzo[b]fluoranthene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
Benzo[a]pyrene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
Indeno[1,2,3-cd]pyrene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
Benzo[g,h,i]perylene	ND	0.0081	EPA 8270D/SIM	5-31-17	6-1-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	75	18 - 109				
Phenol-d6	79	25 - 111				
Nitrobenzene-d5	84	22 - 113				
2-Fluorobiphenyl	77	30 - 114				
2,4,6-Tribromophenol	81	22 - 116				
Terphenyl-d14	78	33 - 114				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

SEMIVOLATILES EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0531S1					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Pyridine	ND	0.33	EPA 8270D	5-31-17	5-31-17	
Phenol	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Aniline	ND	0.17	EPA 8270D	5-31-17	5-31-17	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2-Chlorophenol	ND	0.033	EPA 8270D	5-31-17	5-31-17	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	5-31-17	5-31-17	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Benzyl alcohol	ND	0.17	EPA 8270D	5-31-17	5-31-17	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	5-31-17	5-31-17	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	5-31-17	5-31-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	5-31-17	5-31-17	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Hexachloroethane	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Nitrobenzene	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Isophorone	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2-Nitrophenol	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	5-31-17	5-31-17	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	5-31-17	5-31-17	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Naphthalene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
4-Chloroaniline	ND	0.17	EPA 8270D	5-31-17	5-31-17	
Hexachlorobutadiene	ND	0.033	EPA 8270D	5-31-17	5-31-17	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2-Chloronaphthalene	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2-Nitroaniline	ND	0.033	EPA 8270D	5-31-17	5-31-17	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Dimethylphthalate	ND	0.033	EPA 8270D	5-31-17	5-31-17	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	5-31-17	5-31-17	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
3-Nitroaniline	ND	0.033	EPA 8270D	5-31-17	5-31-17	



Date of Report: June 13, 2017
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SEMIVOLATILES EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0531S1					
2,4-Dinitrophenol	ND	0.17	EPA 8270D	5-31-17	5-31-17	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
4-Nitrophenol	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Dibenzofuran	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	5-31-17	5-31-17	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Diethylphthalate	ND	0.17	EPA 8270D	5-31-17	5-31-17	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	5-31-17	5-31-17	
4-Nitroaniline	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Fluorene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	5-31-17	5-31-17	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	5-31-17	5-31-17	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	5-31-17	5-31-17	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Hexachlorobenzene	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Pentachlorophenol	ND	0.17	EPA 8270D	5-31-17	5-31-17	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
Anthracene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
Carbazole	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Di-n-butylphthalate	ND	0.17	EPA 8270D	5-31-17	5-31-17	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
Benzidine	ND	0.33	EPA 8270D	5-31-17	5-31-17	
Pyrene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
Butylbenzylphthalate	ND	0.033	EPA 8270D	5-31-17	5-31-17	
bis-2-Ethylhexyladipate	ND	0.033	EPA 8270D	5-31-17	5-31-17	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	5-31-17	5-31-17	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
Chrysene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
bis(2-Ethylhexyl)phthalate	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Di-n-octylphthalate	ND	0.033	EPA 8270D	5-31-17	5-31-17	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	5-31-17	5-31-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	76	18 - 109				
Phenol-d6	76	25 - 111				
Nitrobenzene-d5	78	22 - 113				
2-Fluorobiphenyl	78	30 - 114				
2,4,6-Tribromophenol	75	22 - 116				
Terphenyl-d14	79	33 - 114				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

**SEMIVOLATILES EPA 8270D/SIM
 MS/MSD QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES										
Laboratory ID:	05-299-03									
	MS	MSD	MS	MSD		MS	MSD			
Phenol	0.904	0.784	1.33	1.33	ND	68	59	25 - 99	14	36
2-Chlorophenol	0.937	0.814	1.33	1.33	ND	70	61	21 - 104	14	38
1,4-Dichlorobenzene	0.479	0.408	0.667	0.667	ND	72	61	20 - 110	16	40
n-Nitroso-di-n-propylamine	0.436	0.371	0.667	0.667	ND	65	56	24 - 100	16	38
1,2,4-Trichlorobenzene	0.469	0.401	0.667	0.667	ND	70	60	21 - 110	16	40
4-Chloro-3-methylphenol	0.915	0.836	1.33	1.33	ND	69	63	26 - 109	9	29
Acenaphthene	0.422	0.359	0.667	0.667	ND	63	54	33 - 99	16	30
4-Nitrophenol	0.980	0.840	1.33	1.33	ND	74	63	21 - 107	15	29
2,4-Dinitrotoluene	0.436	0.383	0.667	0.667	ND	65	57	20 - 106	13	30
Pentachlorophenol	0.987	0.818	1.33	1.33	ND	74	62	20 - 113	19	31
Pyrene	0.462	0.409	0.667	0.667	ND	69	61	24 - 115	12	28
Surrogate:										
2-Fluorophenol						76	65	18 - 109		
Phenol-d6						78	67	25 - 111		
Nitrobenzene-d5						74	66	22 - 113		
2-Fluorobiphenyl						77	65	30 - 114		
2,4,6-Tribromophenol						72	65	22 - 116		
Terphenyl-d14						74	67	33 - 114		



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP1-W					
Laboratory ID:	05-299-02					
Naphthalene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
2-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
1-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Acenaphthylene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Acenaphthene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Fluorene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Phenanthrene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Anthracene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Fluoranthene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Pyrene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[a]anthracene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Chrysene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[b]fluoranthene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[j,k]fluoranthene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[a]pyrene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Indeno(1,2,3-c,d)pyrene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Dibenz[a,h]anthracene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[g,h,i]perylene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	46	30 - 124				
Pyrene-d10	42	40 - 143				
Terphenyl-d14	45	27 - 127				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
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 Project: 15-05986-040

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP2-W					
Laboratory ID:	05-299-06					
Naphthalene	ND	0.12	EPA 8270D/SIM	5-25-17	5-25-17	
2-Methylnaphthalene	ND	0.12	EPA 8270D/SIM	5-25-17	5-25-17	
1-Methylnaphthalene	ND	0.12	EPA 8270D/SIM	5-25-17	5-25-17	
Acenaphthylene	ND	0.12	EPA 8270D/SIM	5-25-17	5-25-17	
Acenaphthene	ND	0.12	EPA 8270D/SIM	5-25-17	5-25-17	
Fluorene	ND	0.12	EPA 8270D/SIM	5-25-17	5-25-17	
Phenanthrene	ND	0.12	EPA 8270D/SIM	5-25-17	5-25-17	
Anthracene	ND	0.12	EPA 8270D/SIM	5-25-17	5-25-17	
Fluoranthene	ND	0.12	EPA 8270D/SIM	5-25-17	5-25-17	
Pyrene	ND	0.12	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[a]anthracene	ND	0.012	EPA 8270D/SIM	5-25-17	5-25-17	
Chrysene	0.012	0.012	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[b]fluoranthene	0.020	0.012	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo(j,k)fluoranthene	ND	0.012	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[a]pyrene	ND	0.012	EPA 8270D/SIM	5-25-17	5-25-17	
Indeno(1,2,3-c,d)pyrene	0.014	0.012	EPA 8270D/SIM	5-25-17	5-25-17	
Dibenz[a,h]anthracene	ND	0.012	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[g,h,i]perylene	0.020	0.012	EPA 8270D/SIM	5-25-17	5-25-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	72	30 - 124				
Pyrene-d10	80	40 - 143				
Terphenyl-d14	103	27 - 127				



Date of Report: June 13, 2017
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 Project: 15-05986-040

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP3-W					
Laboratory ID:	05-299-09					
Naphthalene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
2-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
1-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Acenaphthylene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Acenaphthene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Fluorene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Phenanthrene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Anthracene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Fluoranthene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Pyrene	ND	0.096	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[a]anthracene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Chrysene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[b]fluoranthene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[j,k]fluoranthene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[a]pyrene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Indeno(1,2,3-c,d)pyrene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Dibenz[a,h]anthracene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[g,h,i]perylene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-25-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	88	30 - 124				
Pyrene-d10	83	40 - 143				
Terphenyl-d14	109	27 - 127				



Date of Report: June 13, 2017
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 Project: 15-05986-040

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP4-W					
Laboratory ID:	05-299-12					
Naphthalene	ND	0.10	EPA 8270D/SIM	5-25-17	5-26-17	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	5-25-17	5-26-17	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	5-25-17	5-26-17	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	5-25-17	5-26-17	
Acenaphthene	ND	0.10	EPA 8270D/SIM	5-25-17	5-26-17	
Fluorene	ND	0.10	EPA 8270D/SIM	5-25-17	5-26-17	
Phenanthrene	ND	0.10	EPA 8270D/SIM	5-25-17	5-26-17	
Anthracene	ND	0.10	EPA 8270D/SIM	5-25-17	5-26-17	
Fluoranthene	ND	0.10	EPA 8270D/SIM	5-25-17	5-26-17	
Pyrene	ND	0.10	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[a]anthracene	0.013	0.010	EPA 8270D/SIM	5-25-17	5-26-17	
Chrysene	0.021	0.010	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[b]fluoranthene	0.036	0.010	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[j,k]fluoranthene	0.011	0.010	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[a]pyrene	0.024	0.010	EPA 8270D/SIM	5-25-17	5-26-17	
Indeno(1,2,3-c,d)pyrene	0.040	0.010	EPA 8270D/SIM	5-25-17	5-26-17	
Dibenz[a,h]anthracene	0.011	0.010	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[g,h,i]perylene	0.046	0.010	EPA 8270D/SIM	5-25-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	49	30 - 124				
Pyrene-d10	47	40 - 143				
Terphenyl-d14	59	27 - 127				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP5-W					
Laboratory ID:	05-299-15					
Naphthalene	0.18	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
2-Methylnaphthalene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
1-Methylnaphthalene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Acenaphthylene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Acenaphthene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Fluorene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Phenanthrene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Anthracene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Fluoranthene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Pyrene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[a]anthracene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Chrysene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[b]fluoranthene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[j,k]fluoranthene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[a]pyrene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Indeno(1,2,3-c,d)pyrene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Dibenz[a,h]anthracene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[g,h,i]perylene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	35	30 - 124				
Pyrene-d10	31	40 - 143				Q
Terphenyl-d14	40	27 - 127				



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PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP6-W					
Laboratory ID:	05-299-18					
Naphthalene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
2-Methylnaphthalene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
1-Methylnaphthalene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Acenaphthylene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Acenaphthene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Fluorene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Phenanthrene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Anthracene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Fluoranthene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Pyrene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[a]anthracene	0.052	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Chrysene	0.080	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[b]fluoranthene	0.14	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[j,k]fluoranthene	0.042	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[a]pyrene	0.051	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Indeno(1,2,3-c,d)pyrene	0.066	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Dibenz[a,h]anthracene	0.018	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[g,h,i]perylene	0.055	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	66	30 - 124				
Pyrene-d10	64	40 - 143				
Terphenyl-d14	78	27 - 127				



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PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP7-W					
Laboratory ID:	05-299-21					
Naphthalene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
2-Methylnaphthalene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
1-Methylnaphthalene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Acenaphthylene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Acenaphthene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Fluorene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Phenanthrene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Anthracene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Fluoranthene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Pyrene	ND	0.097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[a]anthracene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Chrysene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[b]fluoranthene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo(j,k)fluoranthene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[a]pyrene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Indeno(1,2,3-c,d)pyrene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Dibenz[a,h]anthracene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[g,h,i]perylene	ND	0.0097	EPA 8270D/SIM	5-25-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	63	30 - 124				
Pyrene-d10	23	40 - 143				Q
Terphenyl-d14	54	27 - 127				



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PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP8-W					
Laboratory ID:	05-299-24					
Naphthalene	ND	0.095	EPA 8270D/SIM	5-25-17	5-26-17	
2-Methylnaphthalene	ND	0.095	EPA 8270D/SIM	5-25-17	5-26-17	
1-Methylnaphthalene	ND	0.095	EPA 8270D/SIM	5-25-17	5-26-17	
Acenaphthylene	ND	0.095	EPA 8270D/SIM	5-25-17	5-26-17	
Acenaphthene	ND	0.095	EPA 8270D/SIM	5-25-17	5-26-17	
Fluorene	ND	0.095	EPA 8270D/SIM	5-25-17	5-26-17	
Phenanthrene	ND	0.095	EPA 8270D/SIM	5-25-17	5-26-17	
Anthracene	ND	0.095	EPA 8270D/SIM	5-25-17	5-26-17	
Fluoranthene	ND	0.095	EPA 8270D/SIM	5-25-17	5-26-17	
Pyrene	ND	0.095	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[a]anthracene	ND	0.0095	EPA 8270D/SIM	5-25-17	5-26-17	
Chrysene	ND	0.0095	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[b]fluoranthene	ND	0.0095	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo(j,k)fluoranthene	ND	0.0095	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[a]pyrene	ND	0.0095	EPA 8270D/SIM	5-25-17	5-26-17	
Indeno(1,2,3-c,d)pyrene	ND	0.0095	EPA 8270D/SIM	5-25-17	5-26-17	
Dibenz[a,h]anthracene	ND	0.0095	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[g,h,i]perylene	ND	0.0095	EPA 8270D/SIM	5-25-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	75	30 - 124				
Pyrene-d10	79	40 - 143				
Terphenyl-d14	108	27 - 127				



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PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP9-W					
Laboratory ID:	05-299-27					
Naphthalene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
2-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
1-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Acenaphthylene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Acenaphthene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Fluorene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Phenanthrene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Anthracene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Fluoranthene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Pyrene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[a]anthracene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Chrysene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[b]fluoranthene	0.019	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo(j,k)fluoranthene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[a]pyrene	0.0098	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Indeno(1,2,3-c,d)pyrene	0.011	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Dibenz[a,h]anthracene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[g,h,i]perylene	0.012	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	62	30 - 124				
Pyrene-d10	44	40 - 143				
Terphenyl-d14	67	27 - 127				



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PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP10-W					
Laboratory ID:	05-299-29					
Naphthalene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
2-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
1-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Acenaphthylene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Acenaphthene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Fluorene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Phenanthrene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Anthracene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Fluoranthene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Pyrene	ND	0.096	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[a]anthracene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Chrysene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[b]fluoranthene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo(j,k)fluoranthene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[a]pyrene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Indeno(1,2,3-c,d)pyrene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Dibenz[a,h]anthracene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
Benzo[g,h,i]perylene	ND	0.0096	EPA 8270D/SIM	5-25-17	5-26-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>44</i>	<i>30 - 124</i>				
<i>Pyrene-d10</i>	<i>51</i>	<i>40 - 143</i>				
<i>Terphenyl-d14</i>	<i>61</i>	<i>27 - 127</i>				



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**PAHs EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0525W1						
Naphthalene	ND	0.10	EPA 8270D/SIM	5-25-17	5-25-17	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	5-25-17	5-25-17	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	5-25-17	5-25-17	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	5-25-17	5-25-17	
Acenaphthene	ND	0.10	EPA 8270D/SIM	5-25-17	5-25-17	
Fluorene	ND	0.10	EPA 8270D/SIM	5-25-17	5-25-17	
Phenanthrene	ND	0.10	EPA 8270D/SIM	5-25-17	5-25-17	
Anthracene	ND	0.10	EPA 8270D/SIM	5-25-17	5-25-17	
Fluoranthene	ND	0.10	EPA 8270D/SIM	5-25-17	5-25-17	
Pyrene	ND	0.10	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	5-25-17	5-25-17	
Chrysene	ND	0.010	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	5-25-17	5-25-17	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	5-25-17	5-25-17	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	5-25-17	5-25-17	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	5-25-17	5-25-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	81	30 - 124				
Pyrene-d10	87	40 - 143				
Terphenyl-d14	100	27 - 127				



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**PAHs EPA 8270D/SIM
 SB/SBD QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0525W1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.462	0.450	0.500	0.500	92	90	29 - 101	3	47	
Acenaphthylene	0.465	0.442	0.500	0.500	93	88	20 - 117	5	50	
Acenaphthene	0.478	0.469	0.500	0.500	96	94	37 - 109	2	43	
Fluorene	0.493	0.479	0.500	0.500	99	96	47 - 108	3	34	
Phenanthrene	0.468	0.435	0.500	0.500	94	87	49 - 109	7	28	
Anthracene	0.526	0.509	0.500	0.500	105	102	34 - 140	3	32	
Fluoranthene	0.528	0.513	0.500	0.500	106	103	45 - 120	3	39	
Pyrene	0.533	0.544	0.500	0.500	107	109	42 - 133	2	39	
Benzo[a]anthracene	0.550	0.523	0.500	0.500	110	105	71 - 117	5	28	
Chrysene	0.559	0.543	0.500	0.500	112	109	53 - 110	3	25	I
Benzo[b]fluoranthene	0.536	0.512	0.500	0.500	107	102	53 - 123	5	37	
Benzo(j,k)fluoranthene	0.550	0.554	0.500	0.500	110	111	52 - 119	1	41	
Benzo[a]pyrene	0.512	0.508	0.500	0.500	102	102	37 - 129	1	33	
Indeno(1,2,3-c,d)pyrene	0.638	0.608	0.500	0.500	128	122	45 - 128	5	31	
Dibenz[a,h]anthracene	0.513	0.486	0.500	0.500	103	97	54 - 120	5	30	
Benzo[g,h,i]perylene	0.494	0.486	0.500	0.500	99	97	49 - 117	2	29	
Surrogate:										
2-Fluorobiphenyl					85	81	30 - 124			
Pyrene-d10					93	86	40 - 143			
Terphenyl-d14					106	102	27 - 127			



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 Project: 15-05986-040

**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-01					
Client ID:	PP1-2					
Arsenic	ND	12	6010C	6-2-17	6-2-17	
Barium	62	3.1	6010C	6-2-17	6-2-17	
Cadmium	ND	0.62	6010C	6-2-17	6-2-17	
Chromium	20	0.62	6010C	6-2-17	6-2-17	
Lead	8.9	6.2	6010C	6-2-17	6-2-17	
Mercury	ND	0.31	7471B	5-31-17	5-31-17	
Selenium	ND	12	6010C	6-2-17	6-2-17	
Silver	ND	1.2	6010C	6-2-17	6-2-17	

Lab ID:	05-299-03					
Client ID:	PP1-10					
Arsenic	ND	13	6010C	6-2-17	6-5-17	
Barium	30	3.3	6010C	6-2-17	6-5-17	
Cadmium	ND	0.67	6010C	6-2-17	6-5-17	
Chromium	13	0.67	6010C	6-2-17	6-5-17	
Lead	ND	6.7	6010C	6-2-17	6-5-17	
Mercury	ND	0.33	7471B	5-31-17	5-31-17	
Selenium	ND	13	6010C	6-2-17	6-5-17	
Silver	ND	1.3	6010C	6-2-17	6-5-17	



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**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-04					
Client ID:	PP2-2.5					
Arsenic	ND	13	6010C	6-2-17	6-2-17	
Barium	31	3.3	6010C	6-2-17	6-2-17	
Cadmium	ND	0.66	6010C	6-2-17	6-2-17	
Chromium	11	0.66	6010C	6-2-17	6-2-17	
Lead	ND	6.6	6010C	6-2-17	6-2-17	
Mercury	ND	0.33	7471B	5-31-17	5-31-17	
Selenium	ND	13	6010C	6-2-17	6-2-17	
Silver	ND	1.3	6010C	6-2-17	6-2-17	

Lab ID:	05-299-05					
Client ID:	PP2-10					
Arsenic	ND	15	6010C	6-2-17	6-2-17	
Barium	21	3.6	6010C	6-2-17	6-2-17	
Cadmium	ND	0.73	6010C	6-2-17	6-2-17	
Chromium	11	0.73	6010C	6-2-17	6-2-17	
Lead	ND	7.3	6010C	6-2-17	6-2-17	
Mercury	ND	0.36	7471B	5-31-17	5-31-17	
Selenium	ND	15	6010C	6-2-17	6-2-17	
Silver	ND	1.5	6010C	6-2-17	6-2-17	



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**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-07					
Client ID:	PP3-2.5					
Arsenic	ND	13	6010C	6-2-17	6-2-17	
Barium	80	3.1	6010C	6-2-17	6-2-17	
Cadmium	ND	0.63	6010C	6-2-17	6-2-17	
Chromium	27	0.63	6010C	6-2-17	6-2-17	
Lead	25	6.3	6010C	6-2-17	6-2-17	
Mercury	ND	0.31	7471B	5-31-17	5-31-17	
Selenium	ND	13	6010C	6-2-17	6-2-17	
Silver	ND	1.3	6010C	6-2-17	6-2-17	

Lab ID:	05-299-08					
Client ID:	PP3-10					
Arsenic	ND	12	6010C	6-2-17	6-2-17	
Barium	26	3.1	6010C	6-2-17	6-2-17	
Cadmium	ND	0.62	6010C	6-2-17	6-2-17	
Chromium	9.5	0.62	6010C	6-2-17	6-2-17	
Lead	ND	6.2	6010C	6-2-17	6-2-17	
Mercury	ND	0.31	7471B	5-31-17	5-31-17	
Selenium	ND	12	6010C	6-2-17	6-2-17	
Silver	ND	1.2	6010C	6-2-17	6-2-17	



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**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-10					
Client ID:	PP4-3					
Arsenic	ND	13	6010C	6-2-17	6-2-17	
Barium	78	3.2	6010C	6-2-17	6-2-17	
Cadmium	ND	0.63	6010C	6-2-17	6-2-17	
Chromium	29	0.63	6010C	6-2-17	6-2-17	
Lead	84	6.3	6010C	6-2-17	6-2-17	
Mercury	ND	0.32	7471B	5-31-17	5-31-17	
Selenium	ND	13	6010C	6-2-17	6-2-17	
Silver	ND	1.3	6010C	6-2-17	6-2-17	

Lab ID:	05-299-11					
Client ID:	PP4-10					
Arsenic	ND	12	6010C	6-2-17	6-2-17	
Barium	38	3.1	6010C	6-2-17	6-2-17	
Cadmium	ND	0.62	6010C	6-2-17	6-2-17	
Chromium	13	0.62	6010C	6-2-17	6-2-17	
Lead	ND	6.2	6010C	6-2-17	6-2-17	
Mercury	ND	0.31	7471B	5-31-17	5-31-17	
Selenium	ND	12	6010C	6-2-17	6-2-17	
Silver	ND	1.2	6010C	6-2-17	6-2-17	



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**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-13					
Client ID:	PP5-2.5					
Arsenic	ND	13	6010C	6-2-17	6-2-17	
Barium	47	3.3	6010C	6-2-17	6-2-17	
Cadmium	ND	0.65	6010C	6-2-17	6-2-17	
Chromium	23	0.65	6010C	6-2-17	6-2-17	
Lead	27	6.5	6010C	6-2-17	6-2-17	
Mercury	ND	0.33	7471B	5-31-17	5-31-17	
Selenium	ND	13	6010C	6-2-17	6-2-17	
Silver	ND	1.3	6010C	6-2-17	6-2-17	

Lab ID:	05-299-14					
Client ID:	PP5-10					
Arsenic	ND	13	6010C	6-2-17	6-2-17	
Barium	28	3.4	6010C	6-2-17	6-2-17	
Cadmium	ND	0.67	6010C	6-2-17	6-2-17	
Chromium	13	0.67	6010C	6-2-17	6-2-17	
Lead	ND	6.7	6010C	6-2-17	6-2-17	
Mercury	ND	0.34	7471B	5-31-17	5-31-17	
Selenium	ND	13	6010C	6-2-17	6-2-17	
Silver	ND	1.3	6010C	6-2-17	6-2-17	



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**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-16					
Client ID:	PP6-2					
Arsenic	ND	12	6010C	6-2-17	6-2-17	
Barium	53	2.9	6010C	6-2-17	6-2-17	
Cadmium	ND	0.58	6010C	6-2-17	6-2-17	
Chromium	29	0.58	6010C	6-2-17	6-2-17	
Lead	9.7	5.8	6010C	6-2-17	6-2-17	
Mercury	ND	0.29	7471B	5-31-17	5-31-17	
Selenium	ND	12	6010C	6-2-17	6-2-17	
Silver	ND	1.2	6010C	6-2-17	6-2-17	

Lab ID:	05-299-17					
Client ID:	PP6-10					
Arsenic	ND	15	6010C	6-2-17	6-2-17	
Barium	34	3.7	6010C	6-2-17	6-2-17	
Cadmium	ND	0.74	6010C	6-2-17	6-2-17	
Chromium	14	0.74	6010C	6-2-17	6-2-17	
Lead	ND	7.4	6010C	6-2-17	6-2-17	
Mercury	ND	0.37	7471B	5-31-17	5-31-17	
Selenium	ND	15	6010C	6-2-17	6-2-17	
Silver	ND	1.5	6010C	6-2-17	6-2-17	



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**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-19					
Client ID:	PP7-0					
Arsenic	ND	12	6010C	6-2-17	6-2-17	
Barium	31	3.1	6010C	6-2-17	6-2-17	
Cadmium	ND	0.61	6010C	6-2-17	6-2-17	
Chromium	12	0.61	6010C	6-2-17	6-2-17	
Lead	ND	6.1	6010C	6-2-17	6-2-17	
Mercury	ND	0.31	7471B	5-31-17	5-31-17	
Selenium	ND	12	6010C	6-2-17	6-2-17	
Silver	ND	1.2	6010C	6-2-17	6-2-17	

Lab ID:	05-299-20					
Client ID:	PP7-10					
Arsenic	ND	13	6010C	6-2-17	6-2-17	
Barium	22	3.1	6010C	6-2-17	6-2-17	
Cadmium	ND	0.63	6010C	6-2-17	6-2-17	
Chromium	11	0.63	6010C	6-2-17	6-2-17	
Lead	ND	6.3	6010C	6-2-17	6-2-17	
Mercury	ND	0.31	7471B	5-31-17	5-31-17	
Selenium	ND	13	6010C	6-2-17	6-2-17	
Silver	ND	1.3	6010C	6-2-17	6-2-17	



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**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-22					
Client ID:	PP8-0.5					
Arsenic	ND	11	6010C	6-2-17	6-2-17	
Barium	22	2.8	6010C	6-2-17	6-2-17	
Cadmium	ND	0.57	6010C	6-2-17	6-2-17	
Chromium	13	0.57	6010C	6-2-17	6-2-17	
Lead	ND	5.7	6010C	6-2-17	6-2-17	
Mercury	ND	0.28	7471B	5-31-17	5-31-17	
Selenium	ND	11	6010C	6-2-17	6-2-17	
Silver	ND	1.1	6010C	6-2-17	6-2-17	



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**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-23					
Client ID:	PP8-10					
Arsenic	ND	14	6010C	6-2-17	6-2-17	
Barium	37	3.6	6010C	6-2-17	6-2-17	
Cadmium	ND	0.71	6010C	6-2-17	6-2-17	
Chromium	13	0.71	6010C	6-2-17	6-2-17	
Lead	ND	7.1	6010C	6-2-17	6-2-17	
Mercury	ND	0.36	7471B	5-31-17	5-31-17	
Selenium	ND	14	6010C	6-2-17	6-2-17	
Silver	ND	1.4	6010C	6-2-17	6-2-17	

Lab ID:	05-299-25					
Client ID:	PP9-0					
Arsenic	ND	10	6010C	6-2-17	6-2-17	
Barium	62	2.6	6010C	6-2-17	6-2-17	
Cadmium	ND	0.52	6010C	6-2-17	6-2-17	
Chromium	25	0.52	6010C	6-2-17	6-2-17	
Lead	ND	5.2	6010C	6-2-17	6-2-17	
Mercury	ND	0.26	7471B	5-31-17	5-31-17	
Selenium	ND	10	6010C	6-2-17	6-2-17	
Silver	ND	1.0	6010C	6-2-17	6-2-17	



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**TOTAL METALS
 EPA 6010C/7471B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-26					
Client ID:	PP9-10					
Arsenic	ND	12	6010C	6-2-17	6-2-17	
Barium	28	3.1	6010C	6-2-17	6-2-17	
Cadmium	ND	0.62	6010C	6-2-17	6-2-17	
Chromium	14	0.62	6010C	6-2-17	6-2-17	
Lead	ND	6.2	6010C	6-2-17	6-2-17	
Mercury	ND	0.31	7471B	5-31-17	5-31-17	
Selenium	ND	12	6010C	6-2-17	6-2-17	
Silver	ND	1.2	6010C	6-2-17	6-2-17	

Lab ID:	05-299-28					
Client ID:	PP10-0					
Arsenic	ND	12	6010C	6-2-17	6-2-17	
Barium	30	3.0	6010C	6-2-17	6-2-17	
Cadmium	ND	0.61	6010C	6-2-17	6-2-17	
Chromium	13	0.61	6010C	6-2-17	6-2-17	
Lead	ND	6.1	6010C	6-2-17	6-2-17	
Mercury	ND	0.30	7471B	5-31-17	5-31-17	
Selenium	ND	12	6010C	6-2-17	6-2-17	
Silver	ND	1.2	6010C	6-2-17	6-2-17	



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**TOTAL METALS
EPA 6010C
METHOD BLANK QUALITY CONTROL**

Date Extracted: 6-2-17
Date Analyzed: 6-2-17

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0602SM2

Analyte	Method	Result	PQL
Arsenic	6010C	ND	10
Barium	6010C	ND	2.5
Cadmium	6010C	ND	0.50
Chromium	6010C	ND	0.50
Lead	6010C	ND	5.0
Selenium	6010C	ND	10
Silver	6010C	ND	1.0



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**TOTAL MERCURY
EPA 7471B
METHOD BLANK QUALITY CONTROL**

Date Extracted: 5-31-17
Date Analyzed: 5-31-17

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0531S2

Analyte	Method	Result	PQL
Mercury	7471B	ND	0.25



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**TOTAL METALS
 EPA 6010C
 DUPLICATE QUALITY CONTROL**

Date Extracted: 6-2-17

Date Analyzed: 6-2-17

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 05-299-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	10	
Barium	50.2	41.8	18	2.5	
Cadmium	ND	ND	NA	0.50	
Chromium	15.9	19.1	18	0.50	
Lead	7.20	5.45	28	5.0	C
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	1.0	



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**TOTAL MERCURY
EPA 7471B
DUPLICATE QUALITY CONTROL**

Date Extracted: 5-31-17

Date Analyzed: 5-31-17

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 05-299-03

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.25	



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**TOTAL METALS
 EPA 6010C
 MS/MSD QUALITY CONTROL**

Date Extracted: 6-2-17

Date Analyzed: 6-2-17

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 05-299-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	98.8	99	99.1	99	0	
Barium	100	151	101	151	101	0	
Cadmium	50.0	49.4	99	49.6	99	0	
Chromium	100	114	98	114	98	0	
Lead	250	248	96	249	97	1	
Selenium	100	96.6	97	95.2	95	2	
Silver	25.0	23.3	93	23.5	94	1	



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**TOTAL MERCURY
EPA 7471B
MS/MSD QUALITY CONTROL**

Date Extracted: 5-31-17

Date Analyzed: 5-31-17

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 05-299-03

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	0.500	0.537	107	0.543	109	1	



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**TOTAL METALS
 EPA 200.8/7470A**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-02					
Client ID:	PP1-W					
Antimony	ND	5.6	200.8	5-26-17	5-26-17	
Arsenic	36	3.3	200.8	5-26-17	5-26-17	
Beryllium	ND	11	200.8	5-26-17	5-26-17	
Cadmium	ND	4.4	200.8	5-26-17	5-26-17	
Chromium	73	11	200.8	5-26-17	5-26-17	
Copper	80	11	200.8	5-26-17	5-26-17	
Lead	250	1.1	200.8	5-26-17	5-26-17	
Mercury	ND	0.50	7470A	5-25-17	5-25-17	
Nickel	33	22	200.8	5-26-17	5-26-17	
Selenium	ND	5.6	200.8	5-26-17	5-26-17	
Silver	ND	11	200.8	5-26-17	5-26-17	
Thallium	ND	5.6	200.8	5-26-17	5-26-17	
Zinc	700	56	200.8	5-26-17	6-1-17	



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**TOTAL METALS
 EPA 200.8/7470A**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-06					
Client ID:	PP2-W					
Antimony	ND	5.6	200.8	5-26-17	5-26-17	
Arsenic	910	6.7	200.8	5-26-17	5-26-17	
Beryllium	34	22	200.8	5-26-17	5-26-17	
Cadmium	24	8.9	200.8	5-26-17	5-26-17	
Chromium	2000	110	200.8	5-26-17	6-1-17	
Copper	4200	110	200.8	5-26-17	6-1-17	
Lead	2100	22	200.8	5-26-17	6-1-17	
Mercury	4.3	0.50	7470A	5-25-17	5-25-17	
Nickel	1800	220	200.8	5-26-17	6-1-17	
Selenium	53	11	200.8	5-26-17	5-26-17	
Silver	ND	11	200.8	5-26-17	5-26-17	
Thallium	9.6	5.6	200.8	5-26-17	6-1-17	
Zinc	5500	560	200.8	5-26-17	6-1-17	



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**TOTAL METALS
 EPA 200.8/7470A**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-09					
Client ID:	PP3-W					
Antimony	ND	5.6	200.8	5-26-17	5-26-17	
Arsenic	18	3.3	200.8	5-26-17	5-26-17	
Beryllium	ND	11	200.8	5-26-17	5-26-17	
Cadmium	ND	4.4	200.8	5-26-17	5-26-17	
Chromium	63	11	200.8	5-26-17	5-26-17	
Copper	120	11	200.8	5-26-17	5-26-17	
Lead	54	1.1	200.8	5-26-17	5-26-17	
Mercury	ND	0.50	7470A	5-25-17	5-25-17	
Nickel	32	22	200.8	5-26-17	5-26-17	
Selenium	ND	5.6	200.8	5-26-17	5-26-17	
Silver	ND	11	200.8	5-26-17	5-26-17	
Thallium	ND	5.6	200.8	5-26-17	5-26-17	
Zinc	130	28	200.8	5-26-17	5-26-17	



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**TOTAL METALS
 EPA 200.8/7470A**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-12					
Client ID:	PP4-W					
Antimony	47	5.6	200.8	5-26-17	5-26-17	
Arsenic	110	3.3	200.8	5-26-17	5-26-17	
Beryllium	ND	11	200.8	5-26-17	5-26-17	
Cadmium	ND	4.4	200.8	5-26-17	5-26-17	
Chromium	240	11	200.8	5-26-17	5-26-17	
Copper	460	11	200.8	5-26-17	5-26-17	
Lead	2800	11	200.8	5-26-17	6-1-17	
Mercury	1.2	0.50	7470A	5-25-17	5-25-17	
Nickel	190	22	200.8	5-26-17	5-26-17	
Selenium	ND	5.6	200.8	5-26-17	5-26-17	
Silver	ND	11	200.8	5-26-17	5-26-17	
Thallium	ND	5.6	200.8	5-26-17	5-26-17	
Zinc	1000	280	200.8	5-26-17	6-1-17	



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**TOTAL METALS
 EPA 200.8/7470A**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-15					
Client ID:	PP5-W					
Antimony	ND	5.6	200.8	5-26-17	5-26-17	
Arsenic	14	3.3	200.8	5-26-17	5-26-17	
Beryllium	ND	11	200.8	5-26-17	5-26-17	
Cadmium	ND	4.4	200.8	5-26-17	5-26-17	
Chromium	29	11	200.8	5-26-17	5-26-17	
Copper	50	11	200.8	5-26-17	5-26-17	
Lead	32	1.1	200.8	5-26-17	5-26-17	
Mercury	ND	0.50	7470A	5-25-17	5-25-17	
Nickel	ND	22	200.8	5-26-17	5-26-17	
Selenium	ND	5.6	200.8	5-26-17	5-26-17	
Silver	ND	11	200.8	5-26-17	5-26-17	
Thallium	ND	5.6	200.8	5-26-17	5-26-17	
Zinc	49	28	200.8	5-26-17	5-26-17	



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**TOTAL METALS
 EPA 200.8/7470A**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-18					
Client ID:	PP6-W					
Antimony	ND	5.6	200.8	5-26-17	5-26-17	
Arsenic	14	3.3	200.8	5-26-17	5-26-17	
Beryllium	ND	11	200.8	5-26-17	5-26-17	
Cadmium	ND	4.4	200.8	5-26-17	5-26-17	
Chromium	45	11	200.8	5-26-17	5-26-17	
Copper	54	11	200.8	5-26-17	5-26-17	
Lead	55	1.1	200.8	5-26-17	5-26-17	
Mercury	ND	0.50	7470A	5-25-17	5-25-17	
Nickel	46	22	200.8	5-26-17	5-26-17	
Selenium	ND	5.6	200.8	5-26-17	5-26-17	
Silver	ND	11	200.8	5-26-17	5-26-17	
Thallium	ND	5.6	200.8	5-26-17	5-26-17	
Zinc	100	28	200.8	5-26-17	5-26-17	



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**TOTAL METALS
 EPA 200.8/7470A**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-21					
Client ID:	PP7-W					
Antimony	ND	5.6	200.8	5-26-17	5-26-17	
Arsenic	110	3.3	200.8	5-26-17	5-26-17	
Beryllium	ND	11	200.8	5-26-17	5-26-17	
Cadmium	ND	4.4	200.8	5-26-17	5-26-17	
Chromium	210	11	200.8	5-26-17	5-26-17	
Copper	570	22	200.8	5-26-17	6-1-17	
Lead	250	1.1	200.8	5-26-17	5-26-17	
Mercury	0.68	0.50	7470A	5-25-17	5-25-17	
Nickel	210	22	200.8	5-26-17	5-26-17	
Selenium	6.0	5.6	200.8	5-26-17	5-26-17	
Silver	ND	11	200.8	5-26-17	5-26-17	
Thallium	ND	5.6	200.8	5-26-17	5-26-17	
Zinc	520	28	200.8	5-26-17	5-26-17	



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**TOTAL METALS
 EPA 200.8/7470A**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-24					
Client ID:	PP8-W					
Antimony	ND	5.6	200.8	5-26-17	5-26-17	
Arsenic	ND	3.3	200.8	5-26-17	5-26-17	
Beryllium	ND	11	200.8	5-26-17	5-26-17	
Cadmium	ND	4.4	200.8	5-26-17	5-26-17	
Chromium	ND	11	200.8	5-26-17	5-26-17	
Copper	ND	11	200.8	5-26-17	5-26-17	
Lead	ND	1.1	200.8	5-26-17	5-26-17	
Mercury	ND	0.50	7470A	5-25-17	5-25-17	
Nickel	ND	22	200.8	5-26-17	5-26-17	
Selenium	ND	5.6	200.8	5-26-17	5-26-17	
Silver	ND	11	200.8	5-26-17	5-26-17	
Thallium	ND	5.6	200.8	5-26-17	5-26-17	
Zinc	71	28	200.8	5-26-17	5-26-17	



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**TOTAL METALS
 EPA 200.8/7470A**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-27					
Client ID:	PP9-W					
Antimony	ND	5.6	200.8	5-26-17	5-26-17	
Arsenic	30	3.3	200.8	5-26-17	5-26-17	
Beryllium	ND	11	200.8	5-26-17	5-26-17	
Cadmium	ND	4.4	200.8	5-26-17	5-26-17	
Chromium	49	11	200.8	5-26-17	5-26-17	
Copper	110	11	200.8	5-26-17	5-26-17	
Lead	61	1.1	200.8	5-26-17	5-26-17	
Mercury	ND	0.50	7470A	5-25-17	5-25-17	
Nickel	44	22	200.8	5-26-17	5-26-17	
Selenium	ND	5.6	200.8	5-26-17	5-26-17	
Silver	ND	11	200.8	5-26-17	5-26-17	
Thallium	ND	5.6	200.8	5-26-17	5-26-17	
Zinc	210	28	200.8	5-26-17	5-26-17	



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**TOTAL METALS
 EPA 200.8/7470A**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-29					
Client ID:	PP10-W					
Antimony	ND	5.6	200.8	5-26-17	5-26-17	
Arsenic	ND	3.3	200.8	5-26-17	5-26-17	
Beryllium	ND	11	200.8	5-26-17	5-26-17	
Cadmium	ND	4.4	200.8	5-26-17	5-26-17	
Chromium	ND	11	200.8	5-26-17	5-26-17	
Copper	ND	11	200.8	5-26-17	5-26-17	
Lead	ND	1.1	200.8	5-26-17	5-26-17	
Mercury	ND	0.50	7470A	5-25-17	5-25-17	
Nickel	ND	22	200.8	5-26-17	5-26-17	
Selenium	ND	5.6	200.8	5-26-17	5-26-17	
Silver	ND	11	200.8	5-26-17	5-26-17	
Thallium	ND	5.6	200.8	5-26-17	5-26-17	
Zinc	78	28	200.8	5-26-17	5-26-17	



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**TOTAL METALS
 EPA 200.8
 METHOD BLANK QUALITY CONTROL**

Date Extracted: 5-26-17
 Date Analyzed: 5-26-17

 Matrix: Water
 Units: ug/L (ppb)

 Lab ID: MB0526WM1

Analyte	Method	Result	PQL
Antimony	200.8	ND	5.6
Arsenic	200.8	ND	3.3
Beryllium	200.8	ND	11
Cadmium	200.8	ND	4.4
Chromium	200.8	ND	11
Copper	200.8	ND	11
Lead	200.8	ND	1.1
Nickel	200.8	ND	22
Selenium	200.8	ND	5.6
Silver	200.8	ND	11
Thallium	200.8	ND	5.6
Zinc	200.8	ND	28



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**TOTAL MERCURY
EPA 7470A
METHOD BLANK QUALITY CONTROL**

Date Extracted: 5-25-17

Date Analyzed: 5-25-17

Matrix: Water

Units: ug/L (ppb)

Lab ID: MB0525W1

Analyte	Method	Result	PQL
Mercury	7470A	ND	0.50



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**TOTAL METALS
 EPA 200.8
 DUPLICATE QUALITY CONTROL**

Date Extracted: 5-26-17

Date Analyzed: 5-26-17

Matrix: Water

Units: ug/L (ppb)

Lab ID: 05-299-29

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Antimony	ND	ND	NA	5.6	
Arsenic	ND	ND	NA	3.3	
Beryllium	ND	ND	NA	11	
Cadmium	ND	ND	NA	4.4	
Chromium	ND	ND	NA	11	
Copper	ND	ND	NA	11	
Lead	ND	ND	NA	1.1	
Nickel	ND	ND	NA	22	
Selenium	ND	ND	NA	5.6	
Silver	ND	ND	NA	11	
Thallium	ND	ND	NA	5.6	
Zinc	78.3	76.7	2	28	



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**TOTAL MERCURY
EPA 7470A
DUPLICATE QUALITY CONTROL**

Date Extracted: 5-25-17

Date Analyzed: 5-25-17

Matrix: Water

Units: ug/L (ppb)

Lab ID: 05-299-02

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.50	



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**TOTAL METALS
 EPA 200.8
 MS/MSD QUALITY CONTROL**

Date Extracted: 5-26-17

Date Analyzed: 5-26-17

Matrix: Water

Units: ug/L (ppb)

Lab ID: 05-299-29

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Antimony	222	246	111	246	111	0	
Arsenic	222	247	111	247	111	0	
Beryllium	222	233	105	235	106	1	
Cadmium	222	240	108	239	108	0	
Chromium	222	219	99	224	101	3	
Copper	222	218	98	222	100	2	
Lead	222	242	109	238	107	1	
Nickel	222	221	99	225	101	2	
Selenium	222	271	122	266	120	2	
Silver	222	223	100	223	100	0	
Thallium	222	246	111	244	110	1	
Zinc	222	317	108	329	113	4	



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**TOTAL MERCURY
EPA 7470A
MS/MSD QUALITY CONTROL**

Date Extracted: 5-25-17

Date Analyzed: 5-25-17

Matrix: Water

Units: ug/L (ppb)

Lab ID: 05-299-02

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	12.5	13.0	104	13.0	104	0	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date	Date	Flags
				Prepared	Analyzed	
Lab ID:	05-299-02					
Client ID:	PP1-W					
Antimony	ND	5.0	200.8		5-26-17	
Arsenic	18	3.0	200.8		5-26-17	
Beryllium	ND	10	200.8		5-26-17	
Cadmium	ND	4.0	200.8		5-26-17	
Chromium	ND	10	200.8		5-26-17	
Copper	ND	10	200.8		5-26-17	
Lead	ND	1.0	200.8		5-26-17	
Mercury	ND	0.50	7470A		5-25-17	
Nickel	ND	20	200.8		5-26-17	
Selenium	ND	5.0	200.8		5-26-17	
Silver	ND	10	200.8		5-26-17	
Thallium	ND	5.0	200.8		5-26-17	
Zinc	39	25	200.8		5-26-17	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-06					
Client ID:	PP2-W					
Antimony	ND	5.0	200.8		5-26-17	
Arsenic	28	3.0	200.8		5-26-17	
Beryllium	ND	10	200.8		5-26-17	
Cadmium	ND	4.0	200.8		5-26-17	
Chromium	ND	10	200.8		5-26-17	
Copper	ND	10	200.8		5-26-17	
Lead	1.2	1.0	200.8		5-26-17	
Mercury	ND	0.50	7470A		5-25-17	
Nickel	ND	20	200.8		5-26-17	
Selenium	ND	5.0	200.8		5-26-17	
Silver	ND	10	200.8		5-26-17	
Thallium	ND	5.0	200.8		5-26-17	
Zinc	ND	25	200.8		5-26-17	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-09					
Client ID:	PP3-W					
Antimony	ND	5.0	200.8		5-26-17	
Arsenic	3.5	3.0	200.8		5-26-17	
Beryllium	ND	10	200.8		5-26-17	
Cadmium	ND	4.0	200.8		5-26-17	
Chromium	ND	10	200.8		5-26-17	
Copper	ND	10	200.8		5-26-17	
Lead	ND	1.0	200.8		5-26-17	
Mercury	ND	0.50	7470A		5-25-17	
Nickel	ND	20	200.8		5-26-17	
Selenium	ND	5.0	200.8		5-26-17	
Silver	ND	10	200.8		5-26-17	
Thallium	ND	5.0	200.8		5-26-17	
Zinc	ND	25	200.8		5-26-17	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-12					
Client ID:	PP4-W					
Antimony	7.1	5.0	200.8		5-26-17	
Arsenic	7.1	3.0	200.8		5-26-17	
Beryllium	ND	10	200.8		5-26-17	
Cadmium	ND	4.0	200.8		5-26-17	
Chromium	ND	10	200.8		5-26-17	
Copper	ND	10	200.8		5-26-17	
Lead	3.1	1.0	200.8		5-26-17	
Mercury	ND	0.50	7470A		5-25-17	
Nickel	ND	20	200.8		5-26-17	
Selenium	ND	5.0	200.8		5-26-17	
Silver	ND	10	200.8		5-26-17	
Thallium	ND	1.0	200.8		5-26-17	
Zinc	ND	25	200.8		5-26-17	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-15					
Client ID:	PP5-W					
Antimony	ND	5.0	200.8		5-26-17	
Arsenic	3.3	3.0	200.8		5-26-17	
Beryllium	ND	10	200.8		5-26-17	
Cadmium	ND	4.0	200.8		5-26-17	
Chromium	ND	10	200.8		5-26-17	
Copper	ND	10	200.8		5-26-17	
Lead	ND	1.0	200.8		5-26-17	
Mercury	ND	0.50	7470A		5-25-17	
Nickel	ND	20	200.8		5-26-17	
Selenium	ND	5.0	200.8		5-26-17	
Silver	ND	10	200.8		5-26-17	
Thallium	ND	1.0	200.8		5-26-17	
Zinc	ND	25	200.8		5-26-17	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-18					
Client ID:	PP6-W					
Antimony	ND	5.0	200.8		5-26-17	
Arsenic	3.6	3.0	200.8		5-26-17	
Beryllium	ND	10	200.8		5-26-17	
Cadmium	ND	4.0	200.8		5-26-17	
Chromium	ND	10	200.8		5-26-17	
Copper	ND	10	200.8		5-26-17	
Lead	ND	1.0	200.8		5-26-17	
Mercury	ND	0.50	7470A		5-25-17	
Nickel	ND	20	200.8		5-26-17	
Selenium	ND	5.0	200.8		5-26-17	
Silver	ND	10	200.8		5-26-17	
Thallium	ND	1.0	200.8		5-26-17	
Zinc	ND	25	200.8		5-26-17	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-21					
Client ID:	PP7-W					
Antimony	ND	5.0	200.8		5-26-17	
Arsenic	ND	3.0	200.8		5-26-17	
Beryllium	ND	10	200.8		5-26-17	
Cadmium	ND	4.0	200.8		5-26-17	
Chromium	ND	10	200.8		5-26-17	
Copper	ND	10	200.8		5-26-17	
Lead	ND	1.0	200.8		5-26-17	
Mercury	ND	0.50	7470A		5-25-17	
Nickel	ND	20	200.8		5-26-17	
Selenium	ND	5.0	200.8		5-26-17	
Silver	ND	10	200.8		5-26-17	
Thallium	ND	5.0	200.8		5-26-17	
Zinc	ND	25	200.8		5-26-17	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-24					
Client ID:	PP8-W					
Antimony	ND	5.0	200.8		5-26-17	
Arsenic	ND	3.0	200.8		5-26-17	
Beryllium	ND	10	200.8		5-26-17	
Cadmium	ND	4.0	200.8		5-26-17	
Chromium	ND	10	200.8		5-26-17	
Copper	ND	10	200.8		5-26-17	
Lead	ND	1.0	200.8		5-26-17	
Mercury	ND	0.50	7470A		5-25-17	
Nickel	ND	20	200.8		5-26-17	
Selenium	ND	5.0	200.8		5-26-17	
Silver	ND	10	200.8		5-26-17	
Thallium	ND	5.0	200.8		5-26-17	
Zinc	62	25	200.8		5-26-17	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-27					
Client ID:	PP9-W					
Antimony	ND	5.0	200.8		5-26-17	
Arsenic	ND	3.0	200.8		5-26-17	
Beryllium	ND	10	200.8		5-26-17	
Cadmium	ND	4.0	200.8		5-26-17	
Chromium	ND	10	200.8		5-26-17	
Copper	ND	10	200.8		5-26-17	
Lead	ND	1.0	200.8		5-26-17	
Mercury	ND	0.50	7470A		5-25-17	
Nickel	ND	20	200.8		5-26-17	
Selenium	ND	5.0	200.8		5-26-17	
Silver	ND	10	200.8		5-26-17	
Thallium	ND	1.0	200.8		5-26-17	
Zinc	ND	25	200.8		5-26-17	



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DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	05-299-29					
Client ID:	PP10-W					
Antimony	ND	5.0	200.8		5-26-17	
Arsenic	ND	3.0	200.8		5-26-17	
Beryllium	ND	10	200.8		5-26-17	
Cadmium	ND	4.0	200.8		5-26-17	
Chromium	ND	10	200.8		5-26-17	
Copper	ND	10	200.8		5-26-17	
Lead	ND	1.0	200.8		5-26-17	
Mercury	ND	0.50	7470A		5-25-17	
Nickel	ND	20	200.8		5-26-17	
Selenium	ND	5.0	200.8		5-26-17	
Silver	ND	10	200.8		5-26-17	
Thallium	ND	1.0	200.8		5-26-17	
Zinc	64	25	200.8		5-26-17	



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**DISSOLVED METALS
 EPA 200.8
 METHOD BLANK QUALITY CONTROL**

Date Analyzed: 5-26-17

 Matrix: Water
 Units: ug/L (ppb)

 Lab ID: MB0524F1

Analyte	Method	Result	PQL
Antimony	200.8	ND	5.0
Arsenic	200.8	ND	3.0
Beryllium	200.8	ND	10
Cadmium	200.8	ND	4.0
Chromium	200.8	ND	10
Copper	200.8	ND	10
Lead	200.8	ND	1.0
Nickel	200.8	ND	20
Selenium	200.8	ND	5.0
Silver	200.8	ND	10
Thallium	200.8	ND	5.0
Zinc	200.8	ND	25



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**DISSOLVED MERCURY
EPA 7470A
METHOD BLANK QUALITY CONTROL**

Date Analyzed: 5-25-17

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0524F1

Analyte	Method	Result	PQL
Mercury	7470A	ND	0.50



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**DISSOLVED METALS
 EPA 200.8
 DUPLICATE QUALITY CONTROL**

Date Analyzed: 5-26-17

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 05-299-29

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Antimony	ND	ND	NA	5.0	
Arsenic	ND	ND	NA	3.0	
Beryllium	ND	ND	NA	10	
Cadmium	ND	ND	NA	4.0	
Chromium	ND	ND	NA	10	
Copper	ND	ND	NA	10	
Lead	ND	ND	NA	1.0	
Nickel	ND	ND	NA	20	
Selenium	ND	ND	NA	5.0	
Silver	ND	ND	NA	10	
Thallium	ND	ND	NA	5.0	
Zinc	64.0	64.5	1	25	



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**DISSOLVED MERCURY
EPA 7470A
DUPLICATE QUALITY CONTROL**

Date Analyzed: 5-25-17

Matrix: Water
Units: ug/L (ppb)

Lab ID: 05-299-02

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.5	



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**DISSOLVED METALS
 EPA 200.8
 MS/MSD QUALITY CONTROL**

Date Analyzed: 5-26-17

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 05-299-29

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Antimony	200	199	99	208	104	5	
Arsenic	200	201	101	208	104	3	
Beryllium	200	191	95	200	100	5	
Cadmium	200	199	100	205	102	3	
Chromium	200	183	92	188	94	2	
Copper	200	182	91	184	92	1	
Lead	200	194	97	200	100	3	
Nickel	200	184	92	189	94	3	
Selenium	200	214	107	224	112	5	
Silver	200	183	91	196	98	7	
Thallium	200	185	93	204	102	10	
Zinc	200	271	103	274	105	1	



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**DISSOLVED MERCURY
EPA 7470A
MS/MSD QUALITY CONTROL**

Date Analyzed: 5-25-17

Matrix: Water
Units: ug/L (ppb)

Lab ID: 05-299-02

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	12.5	12.6	100	12.4	99	1	



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**PCBs
 EPA 8082A**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	PP3-2.5					
Laboratory ID:	05-299-07					
Aroclor 1016	ND	0.063	EPA 8082A	6-6-17	6-6-17	
Aroclor 1221	ND	0.063	EPA 8082A	6-6-17	6-6-17	
Aroclor 1232	ND	0.063	EPA 8082A	6-6-17	6-6-17	
Aroclor 1242	ND	0.063	EPA 8082A	6-6-17	6-6-17	
Aroclor 1248	ND	0.063	EPA 8082A	6-6-17	6-6-17	
Aroclor 1254	ND	0.063	EPA 8082A	6-6-17	6-6-17	
Aroclor 1260	ND	0.063	EPA 8082A	6-6-17	6-6-17	
Surrogate:	Percent Recovery	Control Limits				
DCB	90	42-139				
Client ID:	PP4-3					
Laboratory ID:	05-299-10					
Aroclor 1016	ND	0.063	EPA 8082A	6-6-17	6-6-17	
Aroclor 1221	ND	0.063	EPA 8082A	6-6-17	6-6-17	
Aroclor 1232	ND	0.063	EPA 8082A	6-6-17	6-6-17	
Aroclor 1242	ND	0.063	EPA 8082A	6-6-17	6-6-17	
Aroclor 1248	ND	0.063	EPA 8082A	6-6-17	6-6-17	
Aroclor 1254	ND	0.063	EPA 8082A	6-6-17	6-6-17	
Aroclor 1260	0.18	0.063	EPA 8082A	6-6-17	6-6-17	
Surrogate:	Percent Recovery	Control Limits				
DCB	88	42-139				
Client ID:	PP4-10					
Laboratory ID:	05-299-11					
Aroclor 1016	ND	0.062	EPA 8082A	6-6-17	6-6-17	
Aroclor 1221	ND	0.062	EPA 8082A	6-6-17	6-6-17	
Aroclor 1232	ND	0.062	EPA 8082A	6-6-17	6-6-17	
Aroclor 1242	ND	0.062	EPA 8082A	6-6-17	6-6-17	
Aroclor 1248	ND	0.062	EPA 8082A	6-6-17	6-6-17	
Aroclor 1254	ND	0.062	EPA 8082A	6-6-17	6-6-17	
Aroclor 1260	ND	0.062	EPA 8082A	6-6-17	6-6-17	
Surrogate:	Percent Recovery	Control Limits				
DCB	91	42-139				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

PCBs
EPA 8082A

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:		PP5-2.5				
Laboratory ID:		05-299-13				
Aroclor 1016	ND	0.065	EPA 8082A	6-6-17	6-6-17	
Aroclor 1221	ND	0.065	EPA 8082A	6-6-17	6-6-17	
Aroclor 1232	ND	0.065	EPA 8082A	6-6-17	6-6-17	
Aroclor 1242	ND	0.065	EPA 8082A	6-6-17	6-6-17	
Aroclor 1248	ND	0.065	EPA 8082A	6-6-17	6-6-17	
Aroclor 1254	ND	0.065	EPA 8082A	6-6-17	6-6-17	
Aroclor 1260	ND	0.065	EPA 8082A	6-6-17	6-6-17	
Surrogate:	Percent Recovery	Control Limits				
DCB	80	42-139				
Client ID:		PP6-2				
Laboratory ID:		05-299-16				
Aroclor 1016	ND	0.058	EPA 8082A	6-6-17	6-6-17	
Aroclor 1221	ND	0.058	EPA 8082A	6-6-17	6-6-17	
Aroclor 1232	ND	0.058	EPA 8082A	6-6-17	6-6-17	
Aroclor 1242	ND	0.058	EPA 8082A	6-6-17	6-6-17	
Aroclor 1248	ND	0.058	EPA 8082A	6-6-17	6-6-17	
Aroclor 1254	0.12	0.058	EPA 8082A	6-6-17	6-6-17	
Aroclor 1260	ND	0.058	EPA 8082A	6-6-17	6-6-17	
Surrogate:	Percent Recovery	Control Limits				
DCB	84	42-139				
Client ID:		PP7-0				
Laboratory ID:		05-299-19				
Aroclor 1016	ND	0.061	EPA 8082A	6-6-17	6-6-17	
Aroclor 1221	ND	0.061	EPA 8082A	6-6-17	6-6-17	
Aroclor 1232	ND	0.061	EPA 8082A	6-6-17	6-6-17	
Aroclor 1242	ND	0.061	EPA 8082A	6-6-17	6-6-17	
Aroclor 1248	ND	0.061	EPA 8082A	6-6-17	6-6-17	
Aroclor 1254	ND	0.061	EPA 8082A	6-6-17	6-6-17	
Aroclor 1260	ND	0.061	EPA 8082A	6-6-17	6-6-17	
Surrogate:	Percent Recovery	Control Limits				
DCB	77	42-139				



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

**PCBs
 EPA 8082A
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0606S1					
Aroclor 1016	ND	0.050	EPA 8082A	6-6-17	6-6-17	
Aroclor 1221	ND	0.050	EPA 8082A	6-6-17	6-6-17	
Aroclor 1232	ND	0.050	EPA 8082A	6-6-17	6-6-17	
Aroclor 1242	ND	0.050	EPA 8082A	6-6-17	6-6-17	
Aroclor 1248	ND	0.050	EPA 8082A	6-6-17	6-6-17	
Aroclor 1254	ND	0.050	EPA 8082A	6-6-17	6-6-17	
Aroclor 1260	ND	0.050	EPA 8082A	6-6-17	6-6-17	
Surrogate:	Percent Recovery	Control Limits				
DCB	97	42-139				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES										
Laboratory ID:	06-020-14									
	MS	MSD	MS	MSD		MS	MSD			
Aroclor 1260	0.340	0.307	0.500	0.500	ND	68	61	26-127	10	22
Surrogate:										
DCB						73	70	42-139		



Date of Report: June 13, 2017
 Samples Submitted: May 24, 2017
 Laboratory Reference: 1705-299
 Project: 15-05986-040

% MOISTURE

Date Analyzed: 5-25-17

Client ID	Lab ID	% Moisture
PP1-2	05-299-01	19
PP1-10	05-299-03	25
PP2-2.5	05-299-04	24
PP2-10	05-299-05	31
PP3-2.5	05-299-07	20
PP3-10	05-299-08	19
PP4-3	05-299-10	21
PP4-10	05-299-11	19
PP5-2.5	05-299-13	24
PP5-10	05-299-14	26
PP6-2	05-299-16	14
PP6-10	05-299-17	33
PP7-0	05-299-19	18
PP7-10	05-299-20	20
PP8-0.5	05-299-22	12
PP8-10	05-299-23	30
PP9-0	05-299-25	4
PP9-10	05-299-26	19
PP10-0	05-299-28	18





Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - X1 - Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.
 - Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
 - Z -
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference



Chain of Custody

Company: Herrera Environmental

Project Number: 15-05986-040

Project Name: Pacific Park

Project Manager: Bruce Carpenter

Sampled by: Bruce Carpenter/Brianna Bland

**Turnaround Request
(in working days)**

(Select One)

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

Number of Containers

Laboratory Number: **05-299**

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number	NWTP	NWTP	NWTP	NWTP	Volatiles	Halogenes	EDB E	Semivolatile (with 10)	PAHs	PCBs	Organic	Organic	Chlorine	Total R	Total M	TCLP	HEM (C	Total	Diss	% Moist	
1	PP1-2	5/23/17	9:20	S	6			X	X				X						X							X
2	PP1-W	5/23/17	10:00	W	11			X	X					X										X	X	
3	PP1-10	5/23/17	9:45	S	6			X	X				X						X							X
4	PP2-2.5	5/23/17	10:35	S	6			X	X				X						X							X
5	PP2-10	5/23/17	10:50	S	6			X	X				X						X							X
6	PP2-W	5/23/17	11:00	W	9			X	X					X										X	X	X Bn
7	PP3-2.5	5/24/17	10:05	S	6			X	X				X		(X)				X							X
8	PP3-10	5/24/17	10:15	S	6			X	X				X						X							X
9	PP3-W	5/24/17	10:00	W	11			X	X				Bn X						Bn X					X	X	
10	PP4-3	5/24/17	8:30	S	6			X	X				X		(X)				X							X

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished	Bruce A. Carpenter	Herrera	5/24/17	17:15	Perform PCBs analyses if oil-range petroleum hydrocarbons detected in Soil Sample. ⓧ Added 6/2/17. DB (STA)
Received	[Signature]	QSE	5/24/17	17:15	
Relinquished					
Received					
Relinquished					
Received					Data Package: Standard ☒ Level III ☐ Level IV ☐
Reviewed/Date		Reviewed/Date			Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒

Chain of Custody

Company:	Herrera Environmental
Project Number:	15-05986-040
Project Name:	Pacific Park
Project Manager:	Bruce Carpenter
Sampled by:	Bruce Carpenter / Brianna Blaud

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

Laboratory Number: **05-299**

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx Acid / SG Clean-up	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Total P.P. Metals	Dissolved P.P. Metals	% Moisture
11	PP4-10	5/24/17	8:40	S	6			X	X	X			X		(X)				X						X
12	PP4-W	5/24/17	9:00	W	11			X	X	X			X	X									XX		
13	PP5-2.5	5/23/17	15:40	S	6			X	X	X			X		(X)				X						X
14	PP5-10	5/23/17	15:50	S	6			X	X	X			X						X						X
15	PP5-W	5/23/17	16:00	W	11			X	X	X			X	X									XX		
16	PP6-2	5/23/17	14:35	S	6			X	X	X			X		(X)				X						X
17	PP6-10	5/23/17	14:45	S	6			X	X	X			X						X						X
18	PP6-W	5/23/17	15:00	W	11			X	X	X			X	X									XX		
19	PP7-0	5/24/17	14:30	S	6			X	X	X			X		(X)				X						X
20	PP7-10	5/24/17	14:40	S	6			X	X	X			X						X						X

Signature	Company	Date	Time	Comments/Special Instructions
Relinquished	Bruce Carpenter	Herrera	5/24/17 17:15	Perform PCBs analyses if oil-range petroleum hydrocarbons detected in soil samples.
Received	QSE	5/24/17	17:15	
Relinquished				
Received				
Relinquished				
Received				Data Package: Standard ☒ Level III ☐ Level IV ☐
Reviewed/Date		Reviewed/Date		Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒

Chain of Custody

Company: Herrera Environmental
Project Number: 15-05986-040
Project Name: Pacific Park
Project Manager: Bruce Carpenter
Sampled by: Bruce Carpenter / Brianna Blair

**Turnaround Request
(in working days)**

(Check One)

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

Laboratory Number: **05-299**

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HClD	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Total Priority Pollutants Dissolved PP Metals	% Moisture
21	PP7-W	5/24/17	14:50	W	11			X	X	X			X	X									X	
22	TP8-0.5	5/24/17	13:20	S	6			X	X	X			X	X					X					
23	PP8-10	5/24/17	13:30	S	6			X	X	X			X	X					X					
24	PP8-W	5/24/17	13:10	W	11			X	X	X			X	X									X	
25	TP9-0	5/24/17	11:50	S	6			X	X	X			X	X					X					
26	PP9-10	5/24/17	12:00	S	6			X	X	X			X	X					X					
27	PP9-W	5/24/17	12:10	W	11			X	X	X			X	X									X	
28	TP10-0	5/24/17	15:10	S	6			X	X	X			X	X					X					
29	TP10-W	5/24/17	13:45	W	11			X	X	X			X	X									X	
30	Tip Blank	-	-	W	5					X														

Signature	Company	Date	Time	Comments/Special Instructions
<u>Bruce A. Carpenter</u>	<u>Herrera</u>	<u>5/24/17</u>	<u>17:15</u>	<u>Perform PCBs analyses if oil-range petroleum hydrocarbons detected in soil samples</u>
<u>[Signature]</u>	<u>[Signature]</u>	<u>5/24/17</u>	<u>17:15</u>	
Relinquished				
Received				
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date	Reviewed/Date	Data Package: Standard ☒ Level III ☐ Level IV ☐		
		Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒		

APPENDIX E

Data Quality Assurance Review

Herrera Environmental Consultants, Inc.

Memorandum

To Project File 15-05986-040
From Gina Catarra, Herrera Environmental Consultants
Date July 18, 2017
Subject Data Quality Assurance Review of the Pacific Park/Dumpsite Data

This memorandum presents a review of data quality for 19 soil samples (including one field duplicate), 17 groundwater samples (including one field duplicate), one filter blank sample, and two trip blank samples collected for the Pacific Park/Dumpsite property between May 12 and 24, 2017. OnSite Environmental, Inc., of Redmond, Washington analyzed the samples for:

- Gasoline-range petroleum hydrocarbons (TPH-G) by Ecology's NWPTH-Gx method
- Diesel- and lube oil-range petroleum hydrocarbons by Ecology's NWTPH-Dx method
- Volatile organic compounds (VOCs) by EPA Method 8260C
- Semivolatile organic compounds (SVOCs) by EPA Method 8270D/SIM (only soil samples)
- Polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270D/SIM (only groundwater samples)
- Polychlorinated biphenyls (PCBs) by EPA Method 8082A
- Total Resource Conservation and Recovery Act (RCRA) metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) by EPA 6010C/7471B (soil samples)
- Total and dissolved Priority Pollutant metals (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc) by EPA Method 200.8/7470A.

Results for the following samples were validated.

Sample ID	Lab SDG	Date Collected	Matrix	Analyses
MW1	1705-184	5/12/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
MW2	1705-184	5/12/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
MW3	1705-184	5/12/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
MW4	1705-184	5/12/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
MW5	1705-184	5/12/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
MW6	1705-184	5/12/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
MWDUP ^a	1705-184	5/12/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
Filter Blank ^b	1705-184	5/12/2017	Water	Metals
Trip Blank ^c	1705-184	5/12/2017	Water	TPH-G, VOCs
PP1-2	17-05-299	5/23/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, total metals
PP1-W	17-05-299	5/23/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
PP1-10	17-05-299	5/23/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, total metals
PP2-2.5	17-05-299	5/23/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, total metals
PP2-10	17-05-299	5/23/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, total metals
PP2-W	17-05-299	5/23/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
PP3-2.5	17-05-299	5/23/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, PCBs, total metals
PP3-10	17-05-299	5/23/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, total metals
PP3-W	17-05-299	5/23/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
PP4-3	17-05-299	5/24/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, PCBs, total metals
PP4-10	17-05-299	5/24/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, PCBs, total metals
PP4-W	17-05-299	5/24/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
PP5-2.5	17-05-299	5/23/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, PCBs, total metals
PP5-10	17-05-299	5/23/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, total metals
PP5-W	17-05-299	5/23/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
PP6-2	17-05-299	5/23/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, PCBs, total metals
PP6-10	17-05-299	5/23/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, total metals
PP6-W	17-05-299	5/23/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
PP7-0	17-05-299	5/24/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, PCBs, total metals
PP7-10	17-05-299	5/24/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, total metals
PP7-W	17-05-299	5/24/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
PP8-0.5	17-05-299	5/24/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, total metals
PP8-10	17-05-299	5/24/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, total metals
PP8-W	17-05-299	5/24/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
PP9-0	17-05-299	5/24/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, total metals
PP9-10	17-05-299	5/24/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, total metals
PP9-W	17-05-299	5/24/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
PP10-0 ^d	17-05-299	5/24/2017	Soil	TPH-G, TPH-D, VOCs, SVOCs, total metals
PP10-W ^e	17-05-299	5/24/2017	Groundwater	TPH-G, TPH-D, VOCs, PAHs, total/dissolved metals
Trip Blank ^c	17-05-299	5/24/2017	Water	TPG-G, VOCs

- ^a Field duplicate of MW2
^b Field filter blank
^c Trip blank
^d Field duplicate of PP7-10
^e Field duplicate of PP7-W

The data were reviewed using guidance and quality control criteria documented in the *Pacific Park/Dumpsite Environmental and Economic Assessment Sampling and Analysis Plan (SAP)* (Herrera 2017), and in accordance with quality control (QC) criteria established by the laboratory and in the specified methods.

Quality control data summaries submitted by the laboratories were reviewed; raw data were not submitted by the laboratories. Data qualifiers (flags) were added to the sample results in the laboratory reports. Data validation results are summarized below, followed by definitions of data qualifiers.

Custody, Preservation, Holding Times, and Completeness—Acceptable

The samples were properly preserved and sample custody was maintained from sample collection to receipt at the laboratories. All samples were analyzed within the required method holding time. The laboratory report was complete and contained results for all samples and tests requested on the chain-of-custody (COC) forms.

Laboratory Reporting Limits—Acceptable

The laboratory reporting limits met those specified in the SAP.

Method Blank Analysis—Acceptable

Method blanks were analyzed at the required frequency for all analyses. Method blanks did not contain levels of target analytes above the laboratory reporting limits.

Trip Blank Analysis—Acceptable

Trip blanks were analyzed for gasoline and VOCs at the required frequency. Trip blanks did not contain levels of target analytes above the laboratory reporting limits.

Filter Blank Analysis—Acceptable

A filter blank was analyzed with the dissolved metals as required by the SAP. The filter blank did not contain levels of target analytes above the laboratory reporting limits.

Laboratory Control Sample Analysis—Acceptable with Discussion

Blank spike (BS) or blank spike/blank spike duplicate (BS/BSD) samples were analyzed with project samples for VOCs and PAHs at the required frequency. With the exception noted below, the percent recovery values met the control limits established by the SAP.

The BS percent recovery for chrysene (112 percent) exceeded the upper control limit of 110 percent. Chrysene was detected above the reporting limits in three associated samples (PP2-W, PP4-W, and PP6-W). However, no data were qualified because the exceedance was marginal (2 percent) and the percent recovery in the BSD (109 percent) was within control limits.

Surrogate Analysis—Acceptable

Surrogate compounds were added to all samples as required by the specified methods. The percent recovery values for all surrogate compounds met the criteria established by the laboratory or specified method.

Matrix Spike Analysis—Acceptable

Matrix spike/matrix spike duplicate (MS/MSD) samples were analyzed with groundwater samples for VOCs (batch samples) and total/dissolved metals (sample MW1), and soil samples for SVOCs (sample PP1-10) and metals (sample PP1-0). All percent recovery values met those established in the SAP.

Laboratory Duplicate Analysis—Acceptable

Project-sample laboratory duplicates were analyzed for with groundwater samples for TPH-G, TPH-D, and total/dissolved metals, and with soil samples for TPH-G, TPH-D, and metals. The relative percent difference (RPD) was calculated for each analyte where both duplicate values were greater than five times the reporting limit (RL). The RPD values met the control limits established in the SAP.

Field Duplicate Analysis—Acceptable

Field duplicates were analyzed for groundwater samples MW2 and PP7-W, and soil sample PP7-10. The RPD was calculated for each analyte where both the original sample and duplicate values were greater than five times the reporting limit (RL). The RPD values met the control limits established in the SAP.

Definition of Data Qualifiers

The following data qualifier definitions are taken from *USEPA National Functional Guidelines for Inorganic Superfund Data Review* (USEPA 2014).

- U** The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J** The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** The material was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- R** The data are unusable. (Note: analyte may or may not be present.)

References

Herrera. 2017. Pacific Park/Dumpsite Environmental and Economic Assessment, Pacific, Washington, Sampling and Analysis Plan. Prepared by Herrera Environmental Consultants for River and Floodplain Management Section, King County Water and Land Resources Division. April.

USEPA. 2014. National functional guidelines for inorganic superfund data review. US Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation (OSRTI), Washington, D.C. (EPA-540-R-013-001).

