PES Environmental, Inc.
Engineering & Environmental Services
AN NV5 COMPANY

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STATUS REPORT – JANUARY 2020 THROUGH JUNE 2021
MANHATTAN VILLAGE SHOPPING CENTER AND HARRIS PROPERTIES
NORMANDY PARK, WASHINGTON

Dear Mr. Grant and Mr. Bloch:

PES Environmental, Inc. (PES), has prepared this letter to summarize the remediation system expansion, soil excavation, remediation system operation and maintenance (O&M) activities, and groundwater monitoring and sampling, performed in between January 2020 and June 2021. The work was performed at Manhattan Village Shopping Center (MVSC) property located at 17835 First Avenue South (the "MVSC property"), and the Harris property located at 17817 – 17825 First Avenue South, in Normandy Park, Washington (the "Harris property"), collectively referred to as the "Property." The location and current features of the Property are shown on Figures 1 and 2. The O&M and sampling were conducted in accordance with the Remedial Action Work Plan (RAWP[1]) and the O&M Plan[2]. A Sampling and Analysis Plan (SAP) is included as Appendix H to the RAWP. Remediation system expansion was performed in accordance with the October 2019 design,[3] which was included as an attachment to the 2019 annual status report.[4]

Following expansion and startup of the SVE system near Four Star Cleaners and the former Manhattan Cleaners, and excavation of shallow soil behind the former Manhattan Cleaners in

[1] PES Environmental, Inc. 2016. *Remedial Action Work Plan, Manhattan Village Shopping Center and Harris Properties, VCP NW1873, Normandy Park, Washington*. October.
[2] PES Environmental, Inc. 2016. *Operations and Maintenance Plan, Manhattan Village Shopping Center and Harris Properties, VCP NW1873, Normandy Park, Washington.* December.
[3] PES Environmental, Inc. 2019. *Soil Vapor Extraction System Expansion and Soil Excavation Design, Manhattan Village Shopping Center and Harris Properties, Normandy Park, Washington.* October 22.
[4] PES Environmental, Inc. 2020, *Status Report – 2019, Manhattan Village Shopping Center and Harris Properties, Normandy Park, Washington.* May 29.

2020 and 2021, PES prepared a June 2021 addendum to the RAWP[5] (RAWP Addendum No. 1) to describe the process for completing remediation on the Property. The RAWP Addendum No. 1 summarizes data and work performed since the current remediation system began operating in October 2016 and includes data and descriptions of work performed during the current reporting period. This status report references information presented in RAWP Addendum No. 1, where appropriate.

REMEDIATION SYSTEM EXPANSION AND STARTUP

Remediation System Expansion and Excavation

As described in the 2019 status report, concentrations of tetrachloroethene (PCE) in the 22-well SVE system have declined significantly since SVE system startup in October 2016. Soil confirmation samples collected in 2018 and sub-slab soil vapor samples collected in 2019 from beneath Four Star Cleaners and the former Manhattan Cleaners, however, indicated that additional remediation was needed to address the remaining vadose zone areas impacted with PCE. During the reporting period, in an attempt to expedite remediation of PCE in soil exceeding the Washington Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A cleanup level (CUL) of 0.050 milligrams per kilogram (mg/kg), the SVE system was expanded, and a limited shallow excavation was conducted in the gravel covered parking area behind the former Manhattan Cleaners.

The work included installing the SVE wells, pre-excavation soil waste profiling, completing the shallow excavation and SVE lateral pipe trenching, piping installation, constructing a manifold for the new SVE wells, and replacing 4-inch SVE header piping with 6-inch piping. The work was completed in phases during the period between August 31, 2020 and March 1, 2021 in accordance with the design. The SVE system was shut-down for the period from January 28 through February 19, 2021 for tie-in of the new SVE wells. The SVE system layout and excavation area are shown on Figures 3, 4, and 5. The work is summarized below, and a copy of as-built drawings are included in (Attachment A).

SVE Well Installations. Six new SVE wells were installed to supplement the existing 22-well SVE system on August 31 through September 2, 2020. Three wells were installed near the Four Star Cleaners (SVE-20, -21, and -22) and three wells were installed near the former Manhattan Cleaners (SVE-23, -24, and -25). The SVE wells are screened to target the vadose zone below 10 feet (ft) below ground surface (bgs) and the wells are designed to operate in tandem with nearby existing wells SVE-6, SVE-7, SVE-8, and SVE-10. The SVE well construction details are documented in the as-built drawings (Sheet C-4), SVE well logs (Attachment B), and on the well summary table (Table C1 in Attachment C).

- **SVE-20 and SVE-21.** These wells are designed to provide deeper vadose zone coverage near existing SVE-6. This area has historically had the highest PCE concentrations in soil samples and vapor samples collected from SVE-6 have consistently had the highest PCE

[5] PES, 2021. Remedial Action Workplan Addendum No. 1, *Manhattan Village Shopping Center and Harris Properties, VCP NW1873, Normandy Park, Washington*. June 29.

concentrations. SVE-20 and SVE-21 are screened between 10 to 25 ft bgs and 26 to 38 ft bgs, respectively.

- **SVE-22.** This well is designed to provide deeper vadose zone coverage in the area between existing SVE-7 and SVE-8 and is screened between 21 to 36 ft bgs.

- **SVE-23.** This well is designed to provide deeper vadose zone coverage near existing SVE-10 and is screened between 20 and 35 ft bgs.

- **SVE-24 and SVE-25.** These 45 degree angled wells extend beneath the former Manhattan Cleaners suite to provide SVE coverage directly beneath the building. The vertical screened intervals are 10 to 23 ft bgs and 23 to 36 ft bgs, respectively.

The wells were installed by Cascade Drilling, Inc,. using a sonic drilling machine. Prior to drilling, the Washington Utility Notification Center was notified, and each location was individually cleared from utilities by APS locating services. After the utility clearing, a hand auger and vacuum truck was used to clear the borings to a depth of 3 to 4 feet prior to drilling. Soil samples were collected during hand auger clearing and during drilling. Samples were screened with a photoionization detector (PID) and logged to confirm lithology relative to nearby wells and borings. Select samples with the highest PID measurements were submitted to Fremont Analytical in Seattle, Washington for laboratory analysis of volatile organic compounds (VOCs) by EPA Method 8260. The wells were temporarily completed below grade without well monuments and covered with protective steel plates pending tie-in to the SVE system piping.

As described in a later section of this report, during drilling vacuum truck clearing for SVE-24, PES observed that 4-inch diameter sanitary side-sewer pipe was leaking water. The driller exposed the area around the leak and Wyser Construction, Inc., performed a temporary repair by patching the area with cement mud.

- **Laboratory Results for SVE Wells near Four Star Cleaners.** PCE was detected all in soil samples submitted for laboratory analysis during installation drilling of SVE-20, SVE-21, and SVE-22 (located near Four Star Cleaners). PCE exceeded its CUL at depths of 2, 8.5, and 11 ft bgs in SVE-20 (0.0907 to 1.54 mg/kg), at 2, 25, and 35 ft bgs in SVE-21 (0.0558 to 0.254 mg/kg), and at 26 and 32 ft bgs in SVE-22 (0.102 to 0.105 mg/kg). These PCE concentrations were similar to slightly lower than those detected in 2018 during sampling of soil borings SB-13, SB-13b, SB-14, SB-14a, and SB-15 (see Figure 4 and Table C2 in Attachment C).

- **Laboratory Results for SVE Wells near the former Manhattan Cleaners.** The only sample with PCE above the CUL was collected from SVE-35 at a vertical depth of 30.9 ft bgs beneath the former Manhattan Cleaners suite. The PCE concentration (0.063 mg/kg) was barely above the CUL.

The PCE data was reported in the RAWP Addendum No. 1 and is included in Attachment C, and validated laboratory data reports are included in Attachment D.

Pre-Excavation Waste Profiling. In preparation for excavation and trenching and consistent with the design, PES submitted the SVE well analytical data and copies of historical soil data to Ecology on September 10, 2020 as part of a contained-in-determination (CID) request for disposal of excavated soil at a Subtitle D solid waste landfill. Citing the age of the historical soil results, however, Ecology denied the CID request and required that current soil samples be collected along the SVE pipe trench alignment and at the proposed limits of the shallow excavation area.

With your permission, PES reallocated unused budget from SVE well installation (Task 12) to collect pre-excavation soil samples at the lateral limits of the excavation and along the proposed SVE piping trench alignment. The pre-excavation soil samples were collected on September 17, 2020, from 15 borings (EX-1 through EX-15, see Figure 4) using a direct push technology machine operated by Cascade Drilling, Inc. Prior to drilling, the Washington Utility Notification Center was notified, and each location was cleared from utilities by APS locating services. Samples were screened with a PID and logged to confirm lithology relative to nearby wells and borings. Select samples were submitted to Fremont Analytical in Seattle, Washington for laboratory analysis of VOCs by EPA Method 8260. Samples from borings located along the trench alignment submitted for select ion monitoring (SIM) level analysis to support potential reuse of trench spoils as backfill material for soil with no detections of PCE.

The sampling methodology was based on prior investigations which indicated that PCE impacts, if present, would likely be in the range of 2 to 3 ft bgs and would not likely extend below 4 ft bgs. All borings were advanced to 4 ft bgs and (1) at borings located along the perimeter of the planned 300 square foot excavation, samples were collected at the depth of highest PID reading and at 4 ft bgs, and (2) at borings located along the trench alignment, samples were collected at the depth of the highest PID readings.

All results were below laboratory PQLs except for PCE in 1.5 ft deep sample in EX-1 (0.144 mg/kg) near the southern boundary adjacent to the walk-in freezer, and PCE in the 2 ft deep sample in EX-4 (0.13 mg/kg) in the northwestern corner of the excavation near monitoring well DC-12. Both of these samples slightly exceeded the PCE CUL.

Based on the September 17, 2020 sample results, PES submitted a revised CID request to Ecology on September 24, 2020. Ecology approved the request in a letter dated November 5, 2020. The PCE data was reported in RAWP Addendum No. 1 and is shown on Figure 4. Copies of validated laboratory data reports are included in Attachment D and copies of the CID correspondence is included in Attachment F.

Shallow Excavation behind the former Manhattan Cleaners. A shallow excavation was conducted to remove soil with PCE concentrations exceeding the CUL within the upper 3 to 4 ft bgs. The soil was excavated, but the excavation not backfilled, on January 27, 2021 by Wyser Construction, Inc. The excavation was extended as far south of EX-1 as possible to the edge of the walk-in freezer, extended north and west of EX-4, and was over-excavated near the building to more fully expose the 4-inch concrete sanitary side-sewer pipe so that it could be repaired. The final excavation area was approximately 380 square feet and extended to an average depth of approximately 3-ft bgs.

The excavation base and sidewalls were field screened with a PID as the excavation advanced. Soil samples were collected at multiple depths throughout the excavation area. None of the samples exceeded background PID readings. A select number of confirmation samples (EX-9 through EX-17) were submitted to Fremont Analytical for laboratory analysis of VOCs by EPA Method 8260. Consistent with prior VOC detections, these samples were collected at depths of between 1.5 ft to 3 ft bgs. All results were below laboratory PQLs except for the 1.5 ft bgs sample at EX-17 (0.0876 mg/kg) located just south of pre-excavation sample EX-1. Sample EX-17 represents the only location within the post-excavation area in which PCE has been detected above the CUL.

A total of 70.3 tons of soil was disposed off-site at the Republic Services Roosevelt Landfill in Klickitat County, Washington under the CID approval from Ecology. The total soil quantity includes both the shallow excavation behind the former Manhattan Cleaners, the soil from trenching in the alley behind Four Star Cleaners (described below), and cuttings from installing the SVE wells and from pre-profile sampling. Copies of disposal tickets were forwarded via e-mail to Ecology on March 2, 2021 per the CID approval. Copies of disposal documentation is included in Attachment F.

The excavation was backfilled with gravel to near surface grade and compacted per the design on February 5, 2021. A concrete pad was installed adjacent to the back door of the building to replace the former asphalt pad in the same location on February 18, 2021. The concrete surface seals for the new wells were installed on the same day. More gravel was imported and final graded on February 22, 2021.

SVE Trench, Piping, and Manifold Construction. Wyser Construction Inc. completed the trenches including excavation, installing new lateral pipes, pipe pressure testing, backfilling, installing a manifold for the new wells, and replacing the 4-inch polyvinyl chloride (PVC) header pipe with a 6-inch pipe to accommodate the flow from the 6 new wells. Per the design, piping was sloped towards the SVE wells to prevent SVE condensate from accumulating in the pipes. The work was largely completed between January 29 and February 18, 2021, and the SVE system was started-up on February 19. The contractor mistakenly overlooked installing the above-ground lateral pipe to SVE-22 and had to return to the site to tie-in the well on March 1 after procuring the necessary materials.

- **SVE-20 and SVE-21.** The lateral trenches for SVE-20 and SVE-21 were completed by hand and the excavated soil was disposed off-site under CID approval from Ecology.

- **SVE-22.** The lateral pipe for this well was installed above grade per the design.

- **SVE-23 through SVE-25.** The lateral piping for SVE-23, SVE-24, and SVE-25 were installed along the pre-determined alignment. The trench spoils were field screened with a PID to confirm consistency with the below-PQL soil samples collected from borings EX-6 through EX-15 (Figure 5) earlier in September 2020. A portion of the non-detect trench spoils were reused to backfill the upper section of the pipe trench. The remainder of the spoils were thin spread on the ground to fill-in low spots adjacent to the trench.

Other Related Work. Other related work included installing a new lateral pipe for SVE-10, installing a spare lateral for a potential future SVE well near the former Manhattan Cleaners, if needed, servicing the existing condensate knockout, replacing a leaking 4-inch concrete sanitary sewer line discovered during drilling, replacing a section of 6-inch PVC sewer line that was nicked during excavation, replacing the 2-inch lateral pipe to existing well SVE-9 that had been damaged during a grass fire in 2020, repair of monitoring wells MW-1 and DC-12, and surveying.

- **SVE-10 Lateral Replacement and Spare Lateral**. A new lateral pipe for SVE-10 was installed and routed with the new SVE piping laterals to the new manifold. A spare lateral pipe was also installed for a future SVE well near the former Manhattan Cleaners, if necessary.

- **4-inch Sewer Line Repair.** As mentioned above, a leaking 4-inch concrete sanitary side-sewer pipe was discovered adjacent to the building during the clearing for angled well SVE-24 located behind the former Manhattan Cleaners on August 31, 2020. During drilling, the leaking pipe was exposed using a vacuum truck and the leak pipe was patched with cement mud as a temporary measure. Field PID screening of soil near the leak did not indicate the presence of VOC impacted soil. A confirmatory soil sample (Trench 2.5) was collected near the base of the leaking pipe and laboratory results were below laboratory PQLs. The faulty section of concrete piping was removed and replaced with new PVC sewer pipe during shallow soil excavation on January 27, 2021. The repair was inspected by Southwest Suburban Sewer District and the area around the repair was backfilled.

- **6-inch Sanitary Sewer Line Repair.** A 6-inch PVC sanitary sewer line was discovered near the west end of the excavation and the top of the pipe was cracked by the backhoe in one area. The damaged area was removed and replaced with new PVC sewer pipe on January 27, 2021. The repair was inspected by Southwest Suburban Sewer District and the area around the repair was backfilled.

- **2-inch SVE-9 Lateral Pipe Replacement.** The 2-inch PVC lateral to existing SVE-9 was replaced on February 19, 2021. The lateral had been damaged during a brush fire in early September 2020 (as described in the O&M discussion below).

- **Monitoring Well Repairs.** MW-1 was discovered during excavation of the lateral pipe trench behind the former Manhattan Cleaners. This well, which had not been able to be located since 2012, was discovered when the backhoe contacted the buried well monument. The monument and concrete surface seal were replaced on February 18, 2021.

  DC-12 was damaged during over-excavation of the area near soil boring EX-4 near the northwest corner of the excavation. The upper several feet of the 2-inch PVC casing as replaced on February 3, 2020 and a new well monument and concrete surface seal were installed on February 18, 2021.

- **Condensate Knockout Service.** Wyser Construction serviced the condensate knockout on March 1, 2021, including replacing the internal particulate filter, removing accumulated grit and debris from the bottom of the knockout, and replacing the three level switches. The bottom two level switches were fouled with debris and the bottom level switch and bulkhead fitting was rusted. The top-level switch was in relatively good condition, so it was stored onsite for future use as a spare level switch.

- **Surveying.** Lanktree Land Surveying, Inc., a Washington State licensed surveyor, surveyed the locations and elevations of the new SVE wells and monitoring wells MW-1 and DC-12, and the locations of the pre-excavation profiling borings, SVE lateral trench corners, and the new SVE manifold on March 19, 2021. Horizontal coordinates were surveyed to the North American Datum of 1983 (NAD 83) and elevations were surveyed to the North American Vertical Datum of 1983 (NAVD 88). A copy of the survey data is included in Attachment C.

Startup of Expanded SVE System

The expanded SVE system was started on February 19, 2021, shut-down briefly to add-in SVE-22 on March 1, and since then, the system has been operating with the following 13 SVE wells in three areas:

- **Four Star Cleaners Area Wells.** There are seven operating wells including existing wells SVE-5, SVE-6, SVE-7 and SVE-8 and new wells SVE-20, SVE-21, and SVE-22.

- **Former Manhattan Cleaners Area Wells.** There are four operating wells including existing well SVE-10 and new wells SVE-23, SVE-24, and SVE-25.

- **QFC Area Wells.** There are two operating wells including existing wells SVE-11A and SVE-12A.

Per the design, the three-week startup period included several rounds of monitoring and well balancing to distribute SVE influence and ensure proper operation. The SVE system was initially operated at approximately 640 standard cubic feet per minute (scfm) for the first two weeks and then dialed back to approximately 580 scfm as vacuum patterns developed. Samples of each of the six new SVE wells and two SVE stack samples were collected during startup. Start-up sampling is discussed below in the O&M discussion.

REMEDIATION SYSTEM O&M

Remediation System Description

The expanded SVE system consists of 28 SVE wells including 13 active wells and 15 off-line wells (Figure 3). The 31 well air sparging (AS) system, shut down in December 2018, remains in standby. The SVE system consists of two well manifolds, positive displacement blower, inline silencers, moisture knockout, condensate storage and transfer pumps, and discharge stack installed on a concrete pad inside a locked-fence enclosure. Each leg of the SVE manifold

includes a balancing valve, sampling port, and flow and vacuum monitoring ports. The discharge stack includes a temperature gauge, flow meter, sampling port, and an inline silencer. The SVE blower is mounted inside a galvanized steel and insulated enclosure to dampen the equipment noise.

The SVE wells are installed at two levels within the vadose zone. Shallow screened wells (5 to 20 ft bgs) target the upper vadose zone, and deeper screened wells (20 to 30 ft or 35 ft bgs depending on location) target the lower vadose zone. Detailed descriptions of the AS and SVE systems and operations and maintenance (O&M) procedures are included in the O&M Plan. As-built drawings for SVE system expansion are included in Attachment A of this report.

Operations and Maintenance

O&M activities during the reporting period included field inspections, testing, and O&M of SVE components. Specific work included documenting and maintaining the operational status of the SVE equipment, documenting general operating conditions, monitoring and balancing SVE wells (flow rate, vacuum), monitoring field VOC concentrations from SVE wells and the discharge stack and responding to system alarms. Annual brush cutting on Harris property to maintain access to remediation and monitoring wells was conducted in October 2020. The SVE blower was serviced by Beckwith and Kuffel in January 2020, July 2020, and April 2021.

There was a brush fire onsite near the east end of the 4-inch SVE header pipe in early September 2020. The fire resulted in damage to the header pipe leading to off-line well SVE-9, and the fire department cut through the security fence to access the fire. PES isolated the damaged header pipe to prevent fresh air infiltration into the SVE process stream. As described above, Wyser Construction, Inc. replaced the damaged pipe during construction of the SVE system expansion in early 2021.

The SVE system operated with approximately 29 days of downtime from January 2020 through June 2021 (94% uptime) including the 22 days during SVE system expansion. The remediation system has operated with 92% uptime since start-up in 2016, including temporary shut-down periods for groundwater sampling (but not including the six-month shut-down period in 2019 to evaluate SVE rebound). The SVE system operating data is summarized in Table 1.

The SVE system operated with a total flow rate of between approximately 520 and 640 scfm and vacuums of 29 to 56 inches of water column (in. w.c.) at the SVE well manifold. Individual SVE wells operated with an average flow of 47 scfm per well and average vacuum of 18 in. w.c. prior to system expansion, and approximately 44 scfm per well at 15 in. w.c. vacuum after SVE system expansion.

SVE Sampling. Performance vapor samples are collected periodically from the SVE discharge stack, and the samples were analyzed by ALS Environmental (an accredited laboratory) for VOCs by EPA Method TO-15 to evaluate mass removed and to verify compliance with Puget Sound Clean Air Agency (PSCAA) and Ecology discharge criteria. The SVE system stack was sampled in February, May, August, and December 2020 prior to SVE system expansion; and the

stack was sampled twice in March 2021 during startup of the expanded SVE system. The individual SVE wells were also sampled in March during startup.

Prior to SVE system expansion, PCE concentrations in the SVE stack were 270, 260, 11, and 210 micrograms per cubic meter ($\mu g/m^3$) in February, May, August, and December 2020, respectively. The low concentration in August was presumed to be due to a cracked header pipe which allowed fresh air to dilute the process vapors. The leak was noticed a few days later and was isolated from the SVE system.

During startup of the expanded SVE system, stack samples were collected on March 2 and March 12, 2021. The PCE concentrations were 180 and 210 µg/m3, respectively. These concentrations were similar to stack concentrations in December 2020 prior to SVE system expansion.

New SVE Well Sampling. The six new SVE wells were sampled on March 2, 2021. The PCE concentrations in SVE-20 were 170 $\mu g/m^3$, 310 $\mu g/m^3$ in SVE-21, 230 $\mu g/m^3$ in SVE-22, 170 $\mu g/m^3$ in SVE-23, 69 $\mu g/m^3$ in SVE-24, and 7.4 $\mu g/m^3$ in SVE-25. Flow rates in the new SVE wells were between 45 and 48 scfm on March 2. These results were used to adjust the SVE well flow rates to optimize PCE mass removal.

PCE Mass Removal. The PCE removal rate averaged 0.010 pounds per day (lb/day) during the reporting period. A total of 5.2 pounds of PCE was removed during the reporting period, and a total of 126.0 pounds of PCE is estimated to have been removed throughout the lifetimes of the SVE systems that operated from September 2009 through June 2021.

Charts showing SVE effluent PCE concentrations and cumulative PCE mass removal are included as Attachments E1 and E2, and historical SVE well data is included in Attachment E3. Copies of the validated laboratory analytical reports are included in Attachment D.

Regulatory Compliance. The SVE system discharge has remained in compliance with the PSCAA exemption limits of 500 lb/year of total VOCs and is below the Ecology small quantity emission rate of 27 lb/year of PCE.

Sub-Slab Vacuum Monitoring. Sub-slab vapor monitoring points SVS-10, SVS-11, SVS-13, SVS-14, and SVS-15 were monitored for vacuum and field VOC concentrations on April 20, 2021. SVS-10 and SVS-11 are located inside the Four Star Dry Cleaners building, and SVS-12, SVS-13, SVS-14, and SVS-15 are located inside the former Manhattan Cleaners building. Vacuums in sub-slab vapor monitoring points were between 0.1 to 0.7 in. w.c. Field VOC concentrations (as measured with a PID) were between 0.1 and 0.5 parts per million by volume (ppmv) and were similar to outdoor ambient air readings.

Soil vapor monitoring point SVS-17, located in the alley near SVE-6 was monitored on April 20 and May 27, 2021 for comparison to sub-slab monitoring points. Vacuum was approximately 3 in. w.c. Field VOC concentrations (as measured with a PID) were between 0.1 and 0.5 ppmv and were similar to outdoor ambient background readings.

The monitoring results are included in Attachment E4.

PERFORMANCE GROUNDWATER MONITORING AND SAMPLING

Two rounds of groundwater performance monitoring and sampling were conducted during the reporting period to evaluate status of select monitoring wells.

- **June 2020.** MW-17 and MW-20 were sampled to monitor for potential changes in PCE concentrations along the northern Property line and confirm the prior non-detect results in MW-20.

- **May 2021.** DC-7 was sampled to evaluate monitor for potential changes in PCE concentrations in the northwest corner of the Property.

Groundwater Level Monitoring

Groundwater levels were measured from sampled wells prior to sample collection during each sampling event on June 3, 2020 and May 11, 2021. Depth to water was measured from the surveyed top of casing (TOC) to the nearest 0.01 foot, using an electronic water level probe.

Groundwater Sampling

Groundwater samples were collected using low-flow sampling techniques. For each sampling event, a bladder pump with a dedicated bladder was lowered into each well. Groundwater was purged prior to sample collection until parameters stabilized. Field parameters measured during sampling consisted of temperature, pH, specific conductance, dissolved oxygen (DO), and oxidation reduction potential (ORP). The pump intake was set at approximately two to three feet below the static water level, generally consistent with previous sampling events. For wells with completed submerged screened intervals, the pump intake was typically set within approximately one to two feet below the top of the screen. Samples were collected into preserved 40-ml volatile organics analysis (VOA) sampling containers and submitted to Fremont Analytical in Seattle, WA (a Washington State accredited laboratory) for analysis of VOCs by EPA Method 8260.

Water Level Monitoring Results

Water level measurements and groundwater elevations for the three wells sampled during the reporting period are summarized in Table 2 and field parameter measurements are shown in Table 3. The groundwater elevations were within the historical ranges of measured elevations. Monitoring well details are included as Attachment C1, and a complete summary of historical groundwater elevations is included as Attachment C2.

Groundwater Analytical Results

The laboratory analytical results for PCE are shown in Table 3. A complete summary of historical PCE concentrations in groundwater monitoring wells is included as Attachment C3.

The results from the June 2020 and May 2021 sampling events are summarized as follows:

- **MW-17.** PCE was barely above CUL (5 µg/L) at concentrations of 5.35 µg/L. These results continue to suggest that this well is near the edge of the PCE plume;

- **MW-20.** PCE was below the laboratory PQL (1.00 U µg/L) and is consistent with results sampling in 2019 sampling; and

- **DC-7.** PCE was lower than it had been in prior sampling events but remained above the CUL at a concentration of 8.35 µg/L in this sentinel well near the downgradient edge of the Harris property.

Laboratory Data Validation

The laboratory analytical reports for the groundwater monitoring and sampling events were validated in accordance with the EPA guidelines for organic data review.[6] All of the data was judged to be acceptable for their intended use. Copies of the laboratory analytical reports and data validation memoranda are included in Attachment D.

RESIDUALS MANAGEMENT AND DISPOSAL

Residuals accumulated during the reporting period included SVE system condensate, groundwater sampling purge water, decontamination water, and soil from installation of SVE wells and expanding the SVE system. SVE system condensate is managed within the operating SVE system until sufficient volume can be generated for disposal and a waste profile sample is collected shortly prior to disposal. Purge water and decontamination water were accumulated in a 55-gallon drum temporarily stored adjacent to the remediation system enclosure pending off-site disposal. Soil from SVE system expansion was accumulated in roll-off boxes per the CID approval. Waste profile samples were collected prior to disposal of all wastes. Copies of laboratory reports containing waste profile data are included in Attachment D, and copies of disposal documentation are included in Attachment F.

- **Wastewater Disposal.** A total of 3,400 gallons of SVE system condensate were disposed of as non-hazardous wastewater by Marine Vacuum Service, Inc. during the reporting period. There were three separate disposal events in January 2020 (1,300 gallons), December 2020 (1,500 gallons), and February 2021 (600 gallons).

- **Soil Disposal.** A total of 70.3 tons of soil from excavation and drilling associated with the SVE system expansion was disposed at Roosevelt Landfill in Klickitat County, Washington under the November 5, 2020 CID approval from Ecology.

SUMMARY AND CONCLUSIONS

The SVE system was expanded in areas near Four Star Cleaners and the former Manhattan Cleaners in early 2021 to improve treatment of PCE contaminated soil in these areas, and to

[6] *EPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*. OSWER 9240.1-05A-P PB99-963506 EPA540/R-99/008, October.

continue to protect building occupants from potential vapor intrusion. The PCE mass removal rates, however, have not changed significantly following the installation of the new SVE wells. Vacuum monitoring in sub-slab soil vapors indicates the presence of SVE influence below the buildings.

Groundwater sampling in during the reporting period continue to indicate stable to declining PCE concentration trends in wells near the northern Harris property line.

PES appreciates the opportunity to conduct these groundwater monitoring activities. If you have any questions regarding this report, or need any additional information, please feel free to contact either of us at (206) 529-3980.

Sincerely,
PES ENVIRONMENTAL, INC., an NV5 company

Matthew V. Dahl, P.E.
Associate Engineer

Brian L. O'Neal, P.E.
Principal Engineer

Attachments:

List of Abbreviations
Figures 1 through 7
Tables 1 through 6
Attachment A through F

LIST OF ABBREVIATIONS

AS	Air Sparging
bgs	Below Ground Surface
CID	Contained-In Determination
CUL	MTCA Method A Cleanup Level
DO	Dissolved Oxygen
Ecology	Washington State Department of Ecology
EPA	Environmental Protection Agency
ft	Foot (or feet)
in. w.c.	Inches of Water Column
lb	Pound or Pounds
Manhattan Cleaners	Manhattan Cleaners and Coin-Op Laundry
µg/L	Micrograms per Liter (parts per billion)
$\mu g/m^3$	Micrograms per Cubic Meter
mg/kg	Milligrams per Kilogram (parts per million)
MTCA	Model Toxics Control Act
MVSC	Manhattan Village Shopping Center
NAD 83	North American Datum of 1983
NAVD 88	North American Vertical Datum of 1988
O&M	Operation & Maintenance
ORP	Oxidation Reduction Potential
PCE	Perchloroethylene/Tetrachloroethylene
PES	PES Environmental, Inc.
PID	Photoionization Detector
PQL	Practical Quantitation Limit
ppmv	Parts per Million by Volume
PSCAA	Puget Sound Clean Air Agency
PVC	Polyvinyl Chloride
RAWP	Remedial Action Work Plan
SAP	Sampling and Analysis Plan
scfm	Standard Cubic Feet per Minute
SVE	Soil Vapor Extraction
TOC	Top of Casing
VCP	Voluntary Cleanup Program
VOA	Volatile Organic Analysis
VOC	Volatile Organic Compound

ILLUSTRATIONS

- Figure 1– Subject Property Location Map
- Figure 2 – Site Plan
- Figure 3 – Existing Remediation Well Locations
- Figure 4 – Well and Boring Location Map
- Figure 5 – Excavation and SVE Trench Detail



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Subject Property Location Map
Manhattan Village/Harris Properties
17817, 17825, and 17835 1st Avenue South
Normandy Park, Washington

FIGURE
1

1358.001.02.016	135800102016_2021SR_1-2	BLO	4/22
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

SW 176th STREET

RESIDENCES

SW 177th STREET

1st AVE SOUTH

RESIDENCES

DUNN LUMBER

DUNN LUMBER

FORMER WATER SUPPLY WELL

COMMERCIAL

SW 178th STREET

2nd AVE SW

TOWN HOUSES

RESIDENCE

RESIDENCE

HARRIS PROPERTY

COMMERCIAL BUILDING

FORMER SEPTIC TANK

VACANT SHED

WELL HOUSE

RETAINING WALL

FORMER TREATMENT SYSTEM

REMEDIATION EQUIPMENT ENCLOSURE

SHED

FORMER MANHATTAN CLEANERS AND COIN-OP LAUNDRY

PARKING LOT

RETAINING WALL

STARBUCKS

SECOND BUILDING (VARIOUS SHOPS)

FOUR STAR DRY CLEANERS

DAY CARE

MANHATTAN VILLAGE SHOPPING CENTER

PARKING LOT

QFC BUILDING

FORMER SEPTIC TANK

EXPLANATION

- Approximate Property Boundary
- SS Sanitary Sewer
- SD Storm Drain
- G Natural Gas
- W Water
- E Overhead Electrical
- E Buried Electrical
- T Telephone

0 N 100

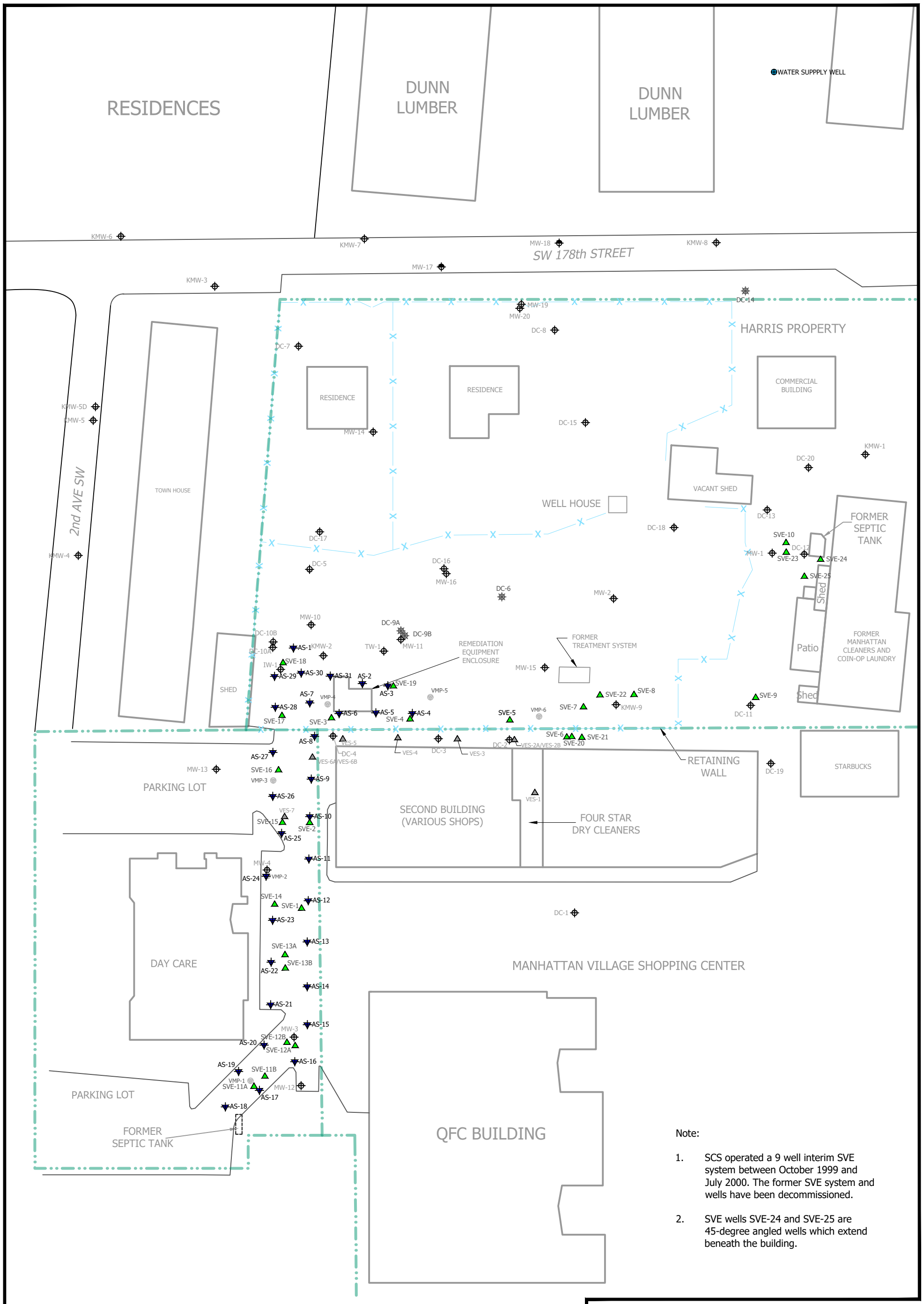
SCALE IN FEET

PES Environmental, Inc.
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Site Plan
Manhattan Village/Harris Properties
17817, 17825, and 17835 1st Avenue South
Normandy Park, Washington

FIGURE 2

1358.001.02.016	135800102016_2021SR_1-2	BLO	4/22
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



Note:

1. SCS operated a 9 well interim SVE system between October 1999 and July 2000. The former SVE system and wells have been decommissioned.

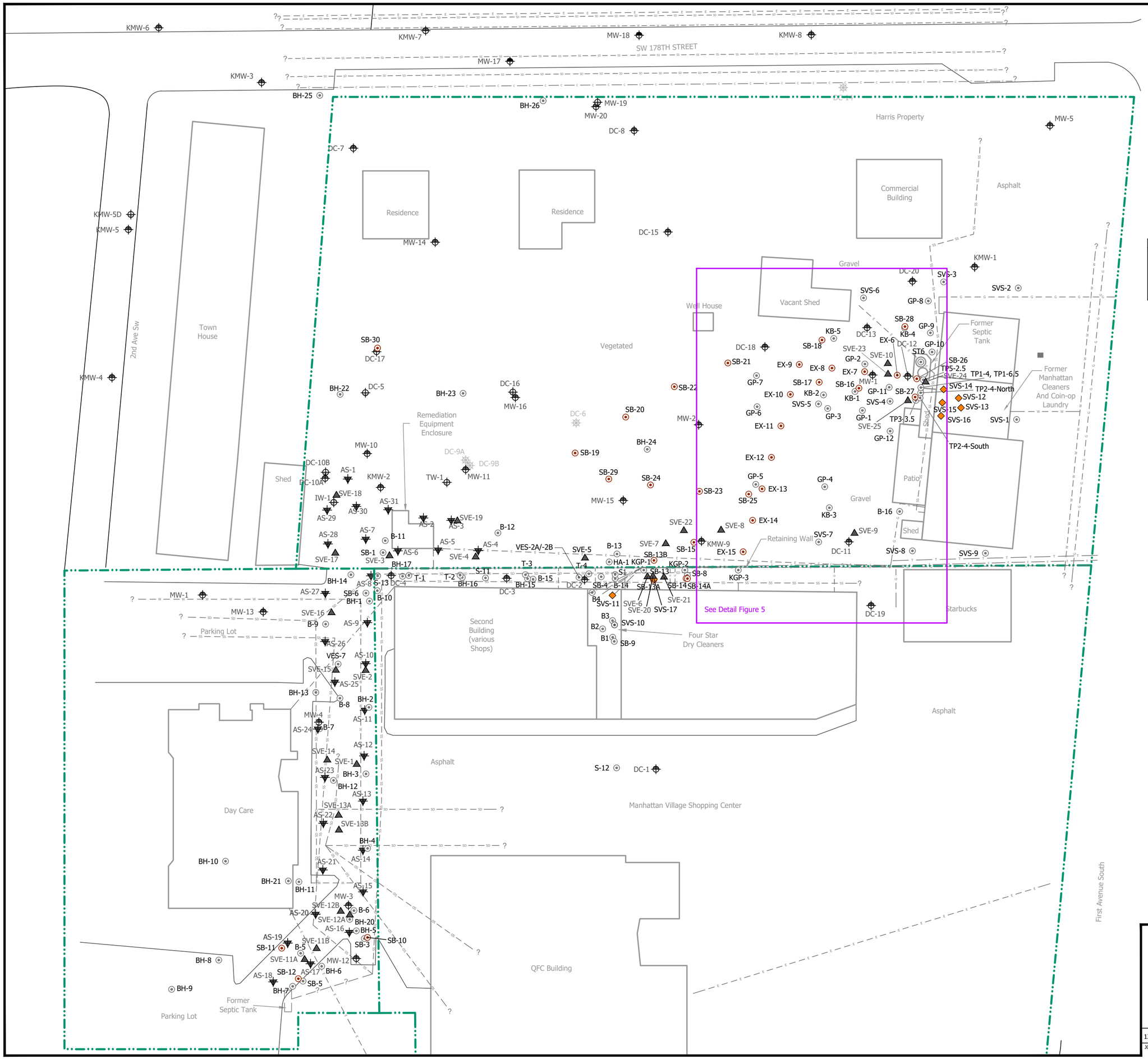
2. SVE wells SVE-24 and SVE-25 are 45-degree angled wells which extend beneath the building.

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Existing Remediation Well Locations
Manhattan Village/Harris Properties
17817, 17825, and 17835 1st Avenue South
Normandy Park, Washington

FIGURE
3

1358.001.02.016	135800102016_2021SR_3	BLO	4/22
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



EXPLANATION

- Approximate Property Boundary
- SVE Trench
- DC-6 Decommissioned or Missing Monitoring Well
- DC-15 Shallow Monitoring Well
- DC-16 Deep Monitoring Well
- SVE-1 Soil Vapor Extraction Well
- AS-1 Air Sparge Well
- TW-1 Pilot Test Well (Kane 2006, ERM 2011)
- KB-3 Boring Location by Others (See Identification List)
- SB-24 Soil Boring (PES, 2018-2021)
- SVS-11 Soil Gas Probe (PES, 2019)

Boring Identification List

Consultant	Boring IDs	Year
SCS	B1 - B4 / S1 - S13 / BH-1 - BH-26 / T-1 - T-4	1998-2000
ADAPT	HA-1	1999
Farallon	SVS-1 - SVS-10 / GP-1 - GP-12 / TP1 - TP5	2005 - 2008
Kane	KB-1 - KB-5 / KGP-1 - KGP-3 / ST6	2003 - 2007
ERM	B-5 - B-18 / SB-1 - SB-9	2008 - 2012
PES	SB-10 - SB-30 / SVS-11 - SVS-17 / EX-1 - EX-27	2018 - 2021

- W Water
- SS Sanitary Sewer
- E Electrical Line
- SD Storm Drain
- G Gas
- C Communication
- T Telephone

Notes:

1. Borings drilled from 1998 through 2012 were not surveyed. Locations are estimated from prior consultants' site maps.
2. Investigation borings B-5, B-7, B-9, B-11, B-12, and B-13 were completed as vapor monitoring probes VMP-1 through VMP-6.
3. The temporary SVE system installed in 1999 included nine wells which operated for approximately one year, and were subsequently decommissioned. Six SVE wells were installed in investigation borings B-1 (VES-1), BH-1 (VES6A/6B), BH-15 (VES-5), BH-16 (VES-4), and BH-17 (VES-3). The other three wells (VES-2A/2B and VES-7) were installed in separate locations.
4. The former septic tank on Harris Property was removed in April 2006. Four sidewall and two bottom samples were collected. Bottom sample ST6 represents the only detection in the 6 samples
5. SCS borings B-1, B-2, and B-3 were completed as 1-inch diameter vapor monitoring probes in 1998. Well construction details are not available.
6. Soil gas sampling probes SVS-10 through SVS-16 are installed beneath the building slabs and requires specialized tools for access to the flush grade monuments. SVS-17 is installed in the asphalt behind Four Star Cleaners and includes a standard 6-inch diameter flush grade monument.
7. Borings EX-1 through EX-15 were advanced in September 2020 to evaluate conditions prior to excavation and constructing an SVE piping trench. The excavation was completed in January 2021 and confirmation samples were collected. The SVE trench was completed in February 2021. See Figure 5 for locations of borings EX-1 through EX-5 and excavation confirmation samples EX-16 through EX-27.

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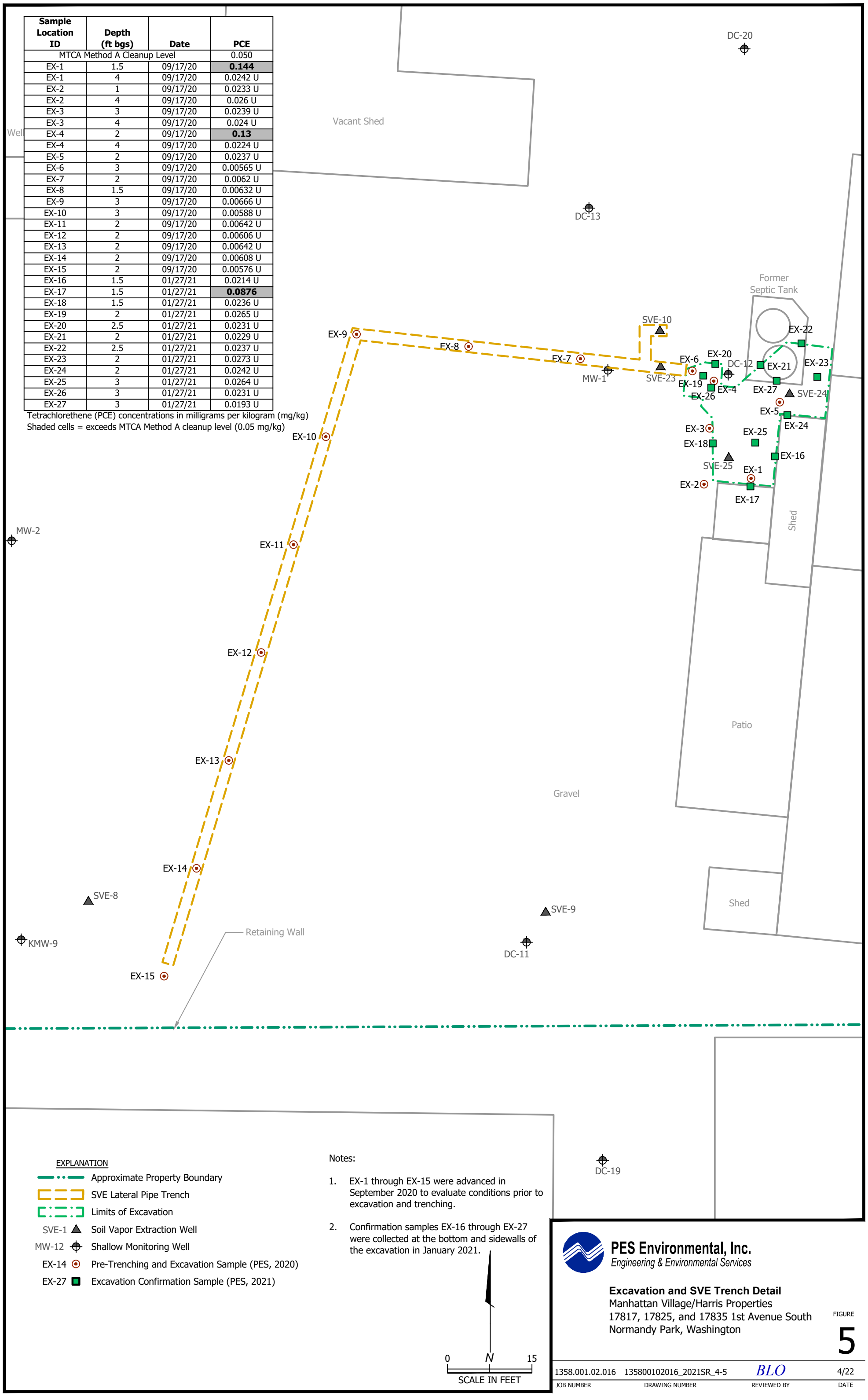
Well and Boring Location Map
Manhattan Village/Harris Properties
17817, and 17825, and 17835 1st Avenue South
Normandy Park, Washington

FIGURE 4

1358.001.02.016	135800102016_2021SR_4-5	BLO	4/22
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

Sample Location ID	Depth (ft bgs)	Date	PCE
MTCA Method A Cleanup Level			0.050
EX-1	1.5	09/17/20	**0.144**
EX-1	4	09/17/20	0.0242 U
EX-2	1	09/17/20	0.0233 U
EX-2	4	09/17/20	0.026 U
EX-3	3	09/17/20	0.0239 U
EX-3	4	09/17/20	0.024 U
EX-4	2	09/17/20	**0.13**
EX-4	4	09/17/20	0.0224 U
EX-5	2	09/17/20	0.0237 U
EX-6	3	09/17/20	0.00565 U
EX-7	2	09/17/20	0.0062 U
EX-8	1.5	09/17/20	0.00632 U
EX-9	3	09/17/20	0.00666 U
EX-10	3	09/17/20	0.00588 U
EX-11	2	09/17/20	0.00642 U
EX-12	2	09/17/20	0.00606 U
EX-13	2	09/17/20	0.00642 U
EX-14	2	09/17/20	0.00608 U
EX-15	2	09/17/20	0.00576 U
EX-16	1.5	01/27/21	0.0214 U
EX-17	1.5	01/27/21	**0.0876**
EX-18	1.5	01/27/21	0.0236 U
EX-19	2	01/27/21	0.0265 U
EX-20	2.5	01/27/21	0.0231 U
EX-21	2	01/27/21	0.0229 U
EX-22	2.5	01/27/21	0.0237 U
EX-23	2	01/27/21	0.0273 U
EX-24	2	01/27/21	0.0242 U
EX-25	3	01/27/21	0.0264 U
EX-26	3	01/27/21	0.0231 U
EX-27	3	01/27/21	0.0193 U

Tetrachlorethene (PCE) concentrations in milligrams per kilogram (mg/kg)
Shaded cells = exceeds MTCA Method A cleanup level (0.05 mg/kg)



EXPLANATION

- Approximate Property Boundary
- SVE Lateral Pipe Trench
- Limits of Excavation
- SVE-1 Soil Vapor Extraction Well
- MW-12 Shallow Monitoring Well
- EX-14 Pre-Trenching and Excavation Sample (PES, 2020)
- EX-27 Excavation Confirmation Sample (PES, 2021)

Notes:

1. EX-1 through EX-15 were advanced in September 2020 to evaluate conditions prior to excavation and trenching.
2. Confirmation samples EX-16 through EX-27 were collected at the bottom and sidewalls of the excavation in January 2021.

0 N 15
SCALE IN FEET

PES Environmental, Inc.
Engineering & Environmental Services

Excavation and SVE Trench Detail
Manhattan Village/Harris Properties
17817, 17825, and 17835 1st Avenue South
Normandy Park, Washington

FIGURE 5

1358.001.02.016	135800102016_2021SR_4-5	BLO	4/22
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

TABLES

- Table 1 – SVE System Operation and Maintenance Data
- Table 2 – Groundwater Elevations
- Table 3 – Groundwater Sampling Field Parameters
- Table 4 – Tetrachloroethene Concentrations in Groundwater

Table 1
SVE System Operation and Maintenance Data
Manhattan Village/Harris Properties
Normandy Park, Washington

Date	Time	Operating Days (days)	System Down Time (days)	Electric Meter (KWH)	Blower				Vacuum		SVE Wells[6]	Stack				PCE Removal Rate[4] (lb/day)	PCE Mass Removed[5] (lbs)	Condensate		Notes
					Speed (hz)	Electric Meter (KWH)	Run Time (hr)	Temp. Out (deg F)	Blower (in. w.c.)	Manifold (in. w.c.)		DP (in. w.c.)	Flow[1] (scfm)	VOC[2] (ppm)	Lab PCE[3] (µg/m^3)			DAT Tank (gal)	Holding Tank (gal)	
10/19/16	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	97.5	-	-	per PES previous O&M Data Tables
10/19/16	11:30	0	-	-	51	-	-	85	42	19	1 to 19	2.25	830	-	-	-	-	-	-	SVE system startup, balance wells
10/21/16	-	2	-	-	50	-	-	85	48	25	1 to 19	2.10	800	2.96	-	-	-	-	-	AS system startup, balance wells, noise testing
10/25/16	10:32	6	-	1,274	51	1,285	159	86	42	20	1 to 19	2.15	830	2.39	2,100	0.157	98.5	169	90	Balance SVE and AS wells, stack TO-15 sample
11/2/16	9:00	14	-	-	51	2,859	349	85	45	20	1 to 19	2.3	840	2.51	1,310	0.099	99.6	92	160	Startup monitoring, stack TO-15 sample
11/10/16	10:30	22	-	-	51	4,318	390	80	35	15	1 to 19	2.5	880	1.25	966	0.076	99.7	-	325	Startup monitoring, stack TO-15 sample
11/16/16	10:30	28	-	-	51	5,418	688	80	35	16	1 to 19	2.0	790	2.57	942	0.067	100.6	60	340	Startup monitoring, stack TO-15 sample
11/23/16	9:00	35	-	-	51	6,655	853	75	30	15	1 to 19	-	-	0.86	-	-	-	120	425	Check AS, clean debris from transfer pump
11/30/16	7:00	42	-	-	51	7,914	1,020	75	33	10	1 to 19	2.0	790	-	-	-	-	75	490	Check AS, clean debris from transfer pump
12/12/16	9:00	54	-	3,398	51	10,209	1,312	75	35	10	1 to 19	2.4	860	1.31	288	0.022	101.7	10	580	O&M, stack TO-15 sample, shutdown for GW sampling
12/15/16	-	57	3	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Restarted system after GW sampling
12/20/16	8:00	59	-	3,704	51	11,115	1,430	75	34	9	1 to 19	2.0	790	-	-	-	-	90	520	Changed blower and compressor oil, check belts
12/28/16	-	-	-	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	750	Respond to DAT Alarm, reset, system operatiing
1/1/17	-	-	-	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	System down on power outage alarm
1/3/17	13:35	-	2	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Responded to alarm, system off - frozen equipment
1/9/17	12:15	72	9	4,444	51	13,211	1,723	65	30	8	1 to 19	2.3	850	-	-	-	-	80	825	Test and restart system after power outage
1/10/17	9:45	-	-	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	System check after restart
1/18/17	11:00	81	-	4,976	51	14,751	1,936	75	32	6	1 to 19	2.3	845	0.5	359	0.027	102.4	0	5	O&M and TO-15 sample, condensate disposal
1/29/17	-	-	-	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Reset alarm, system running
2/1/17	6:45	95	-	5,801	51	17,171	2,269	70	32	10	1 to 19	2.2	-	-	-	-	-	85	220	Install check valve, repair transfer pump leak
2/6/17	5:20	-	1	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Power outage. Restarted system.
2/14/17	11:00	107	-	6,558	51	19,370	2,573	75	32	2	1 to 19	2.3	845	1.1	248	0.019	103.0	85	350	O&M, stack TO-15 sample, clean level switches
2/16/17	15:30	-	-	6,685	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	140	365	System check
3/2/17	-	-	-	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Respond to DAT Alarm, reset, system operatiing
3/10/17	9:00	131	-	8,006	51	23,567	3,146	75	35	26	1 to 19	2.3	845	0.2	275	0.021	103.5	100	565	O&M, stack TO-15 sample,shutdown for GW sampling
3/17/17	-	-	7	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Restarted system after GW sampling
4/8/17	9:40	152	1	9,229	-	27,115	3,653	75	30	24	1 to 19	2.3	845	-	-	-	-	95	670	Power bump/surge, blower low flow alarm, restarted
4/20/17	12:00	-	-	10,022	51	29,101	3,942	75	32	25	1 to 19	2.4	865	0.3	477 EJ	0.037	104.4	93	670	O&M, stack TO-15 sample
4/22/17	-	-	-	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Power bump/surge, blower low flow alarm
4/23/17	15:40	166	1	10,136	51	29,398	3,985	75	30	25	1 to 19	2.3	845	-	-	-	-	92	670	Restarted system
5/29/17	12:00	202	-	12,283	51	35,228	4,845	85	32	32	All except 13A & 14	2.3	835	0.3	137	0.010	105.3	80	680	Closed SVE13A & SVE14, Closed AS10 to AS26
6/16/17	11:00	-	-	-	-	-	-	-	-	-	All except 13A & 14	-	-	-	-	-	-	-	-	Power bump/surge, low flow alarm. Restarted system
6/20/17	8:00	223	-	13,352	51	38,915	5,359	85	34	32	All except 13A & 14	2.3	835	0.4	246	0.018	105.6	68	686	O&M, changed blower and compressor oil, check belts
7/15/17	10:00	248	-	14,596	51	43,192	5,959	94	35	30	All except 13A & 14	2.4	845	0.3	745	0.057	106.6	50	686	O&M , stack TO-15 sample, shut down for GW sampling
7/20/17	14:00	248	5	14,607	51	43,227	5,963	100	40	32	All except 13A & 14	2.3	830	-	-	-	-	48	686	Restarted system after GW sampling, ROI evaluation
8/18/17	9:15	277	-	16,061	51	48,555	6,655	90	38	30	All except 13A & 14	2.3	835	2.4	910	0.068	108.4	20	686	O&M, stack TO-15 sample
9/22/17	10:30	312	-	17,766	51	54,570	7,495	80	40	30	All except 13A & 14	2.4	860	2.0	590	0.046	110.4	10	686	O&M, stack TO-15 sample
10/17/17	8:15	337	-	18,992	51	58,991	8,097	80	40	30	All except 13A & 14	2.3	845	1.3	310	0.024	111.2	0	686	O&M, stack TO-15 sample
10/18/17	-	-	-	-	-	-	-	-	-	-	All except 13A & 14	-	-	-	-	-	-	-	-	Power bump/surge during storm, blower low flow alarm
10/19/17	11:00	339	1	-	51	-	8,127	-	-	-	All except 13A & 14	-	-	-	-	-	-	-	-	Inspect/test system, leave down for GW sampling
10/27/17	10:00	-	8	-	-	-	-	-	-	-	All except 13A & 14	-	-	-	-	-	-	-	-	Restarted system after GW sampling
11/14/17	9:00	-	1	-	-	-	-	-	-	-	All except 13A & 14	-	-	-	-	-	-	-	-	Power bump/surge, blower low flow alarm, restarted
11/16/17	7:00	357	-	20,098	51	62,657	8,576	75	40	32	All except 13A & 14	2.2	825	0.4	230	0.017	111.7	80	775	O&M, stack TO-15 sample
12/7/17	14:00	378	-	21,269	51	66,675	9,084	-	-	-	All except 13A & 14	-	-	-	-	-	-	-	-	DAT tank high level alarm, system running upon arrival
12/27/17	12:30	-	-	-	-	-	-	-	-	-	All except 13A & 14	-	-	-	-	-	-	-	-	Measure water levels and DO only
12/28/17	7:00	399	-	22,800	51	70,712	9,585	75	35	30	1 to 19	2.2	810	0.2	160	0.012	112.3	90	1100	O&M, stack & SVE well TO-15 samples, disposal

Table 1
SVE System Operation and Maintenance Data
Manhattan Village/Harris Properties
Normandy Park, Washington

Date	Time	Operating Days (days)	System Down Time (days)	Electric Meter (KWH)	Blower				Vacuum		SVE Wells[6]	Stack				PCE Removal Rate[4] (lb/day)	PCE Mass Removed[5] (lbs)	Condensate		Notes
					Speed (hz)	Electric Meter (KWH)	Run Time (hr)	Temp. Out (deg F)	Blower (in. w.c.)	Manifold (in. w.c.)		DP (in. w.c.)	Flow[1] (scfm)	VOC[2] (ppm)	Lab PCE[3] (µg/m^3)			DAT Tank (gal)	Holding Tank (gal)	
1/4/18	8:30	-	-	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	O&M, changed blower and compressor oil, check belts
1/5/18	6:45	407	-	22,836	53	72,115	9,773	75	35	27	1 to 19	2.2	810	-	-	-	-	80	80	SVE-10 ROI test, repair transfer pump seal
1/17/18	8:00	419	-	23,641	53	74,327	10,057	-	-	-	1 to 19	-	-	-	-	-	-	80	150	Replace bearings on compressor, belts on both units
1/23/18	10:30	425	-	24,040	53	75,464	10,205	75	35	30	1 to 19	2.3	850	0.2	200	0.015	112.6	80	210	O&M, stack TO-15 sample,shutdown for GW sampling
1/29/18	12:20	425	6	-	-	-	10,205	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Restarted system after GW sampling
2/20/18	-	-	3	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Power outage on 2/18, equipment frozen, restarted
2/21/18	6:45	445	-	25,223	53	79,279	10,685	70	36	29	1 to 19	2.4	860	0.2	200	0.015	112.9	80	340	O&M, stack TO-15 sample
3/10/18	-	-	1	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Power outage on 3/9, blower low flow alarm, restarted
3/27/18	10:15	478	-	27,159	53	85,473	11,479	76	38	30	1 to 19	2.1	810	0.5	130	0.009	113.3	95	340	O&M, stack TO-15 sample
4/16/18	-	-	-	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Shut down system for GW sampling
4/20/18	-	-	4	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Restarted system after GW sampling
4/25/18	10:00	502	1	28,566	53	89,903	12,055	80	35	32	1 to 19	2.0	790	0.3	-	-	-	90	340	O&M, stack sample not analyzed - summa faulty.
5/3/18	-	-	-	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Heat exchanger failure. Shut off air sparging.
5/16/18	-	-	-	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Replace heat exchanger motor and transfer pump
5/21/18	8:00	528	1	29,555	53	94,640	12,675	80	35	35	1 to 19	2.1	825	0.3	220	0.016	114.0	82	340	O&M, stack TO-15 sample, raise motor speeds
6/6/18	9:15	-	-	30,403	53	-	-	80	35	26	1 to 19	2.3	845	-	-	-	-	78	340	Respond to heat exchanger alarm, restart
6/7/18	13:35	-	-	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Repond to heat exchanger alarm, rewire, restart
6/18/18	13:35	556	-	31,063	53	99,732	13,344	100	30	26	1 to 19	2.5	865	0.4	240	0.019	114.5	82	340	O&M, stack TO-15 sample, blower & comp service
7/16/18	8:00	584	-	32,742	53	104,750	14,013	100	36	21	1 to 19	2.5	845	0.2	240	0.018	115.0	82	340	O&M, stack TO-15 sample, shutdown for GW sampling
7/23/18	8:00	584	7	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Restarted system after GW sampling
8/17/18	6:30	609	-	34,231	53	109,213	14,611	80	36	20	1 to 19	2.5	860	0.2	400	0.031	115.6	55	340	O&M, stack TO-15 sample
9/12/18	8:00	-	0.5	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Power outage on 9/11, blower low flow alarm, restarted
9/27/18	8:30	649	-	36,633	53	116,536	15,587	80	36	26	1 to 19	2.5	879	0.8	210	0.017	116.5	55	340	O&M, stack and SVE well TO-15 samples
10/13/18	14:00	666	-	-	-	-	15,973	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Shut down system for GW sampling
10/23/18	17:00	666	8	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Restarted system after GW sampling
10/31/18	8:30	676	-	38,132	53	121,512	16,225	65	40	25	1 to 19	2.5	892	0.4	250	0.020	117.0	50	350	O&M, stack TO-15 sample
11/9/18	8:00	-	-	38,678	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	440	Reset transfer pump level warning alarm.
11/21/18	6:30	697	-	39,416	53	125,554	16,727	80	42	25	1 to 19	2.4	861	0.4	200	0.015	117.4	90	510	O&M, stack TO-15 sample
11/27/18	7:00	700	3	-	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	-	Restarted system after alarm on 11/24
11/28/18	11:30	700	1	39,584	-	-	-	-	-	-	1 to 19	-	-	-	-	-	-	-	640	Restarted system after power outage on 11/27
12/6/18	15:00	707	1	40,040	53	127,534	16,970				1 to 19	-	-	-	-	-	-	-	-	System down 12/5 - high knockout level. Restart.
12/13/18	16:00	714	-	40,456	-	128,865	17,132	-	-	-	1 to 19	-	-	-	-	-	117.7	-	845	Power out alarm. Leave down for rebound evaluation.
6/6/19	14:15	714	-	-	40	128,881	17,135	105	40	35	See Note 7	1.0	542	-	-	-	-	142	850	Service blower and compressor. Restart SVE system.
6/7/19	13:20	-	-	40,644	36	-	-	80	41	35	See Note 7	1.2	609	-	-	-	-	148	855	O&M
7/8/19	12:00	746	-	41,049	36	132,369	17,900	100	60	52	See Note 7	1.1	572	0.1	440	0.023	118.3	140	0	O&M, stack TO-15 sample, condensate disposal
8/8/19	13:15	777	-	41,545	36	136,635	18,644	90	41	39	See Note 7	1.1	577	-	-	-	-	10	130	O&M
9/27/19	10:05	785	41	41,718	36	137,619	18,851	80	44	39	See Note 7	1.1	583	-	-	-	-	10	140	O&M, system was off - restarted. Power outage on 8/17. No alarm sent - autodialer battery backup failed.
10/28/19	11:16	816	-	42,127	36	141,045	19,595	70	35	29	See Note 7	1.1	588	0.1	310	0.016	119.7	15	145	O&M, stack TO-15 sample
10/29/19	15:43	818	-	42,141	36	141,158	19,622	72	36	30	See Note 7	1.1	588	0.1	-	-	-	15	145	O&M
11/1/19	14:45	820	-	42,173	36	141,435	19,684	70	38	28	See Note 7	1.1	588	-	-	-	-	145	145	Hi level alarm, service level switch, restart
11/27/19	9:02	846	-	42,496	36	144,106	20,304	68	36	30	See Note 7	1.1	588	-	-	-	-	90	475	Mid-month O&M
12/2/19	-	-	-	-	-	-	-	-	-	-	See Note 7	-	-	-	-	-	-	90	575	DAT high high alarm, serviced, restart
12/13/19	13:45	862	-	42,692	36	145,755	20,680	65	39	30	See Note 7	1.1	-	-	-	-	-	90	680	KO high & KO high high alarm. Serviced.
12/20/19	9:00	868	-	42,776	36	146,472	20,843	70	37	30	See Note 7	1.1	588	-	-	-	-	90	790	O&M. Soil and Water drums removed from site.
12/27/19	9:45	876	-	42,863	36	147,220	21,012	67	35	30	See Note 7	1.1	588	-	-	-	120.8	90	910	KO high and low level switches stuck - service.

Table 1
SVE System Operation and Maintenance Data
Manhattan Village/Harris Properties
Normandy Park, Washington

Date	Time	Operating Days (days)	System Down Time (days)	Electric Meter (KWH)	Blower				Vacuum		SVE Wells[6]	Stack				PCE Removal Rate[4] (lb/day)	PCE Mass Removed[5] (lbs)	Condensate		Notes
					Speed (hz)	Electric Meter (KWH)	Run Time (hr)	Temp. Out (deg F)	Blower (in. w.c.)	Manifold (in. w.c.)		DP (in. w.c.)	Flow[1] (scfm)	VOC[2] (ppm)	Lab PCE[3] (µg/m^3)			DAT Tank (gal)	Holding Tank (gal)	
1/7/20	12:45	887	-	43,001	36	148,395	21,279	72	32	31	See Note 7	1.1	-	-	-	-	-	120	1100	KO high and low level switches stuck - service.
1/14/20	15:54	894	-	43,091	36	149,157	21,449	57	38	32	See Note 7	1.1	-	-	-	-	-	90	1180	KO high and low level switches stuck - service.
1/16/20	9:00	895	-	43,111	36	149,336	21,490	72	44	42	See Note 7	1.1	587	0.5	-	-	-	32	0	O&M, SVE blower and AS compressor serviced.
1/23/20	10:50	902	-	43,217	36	150,245	21,659	75	48	44	See Note 7	1.1	586	-	-	-	-	90	0	KO high level switch stuck - serviced.
2/4/20	8:30	914	-	43,397	36	151,789	21,945	70	48	45	See Note 7	1.0	588	-	-	-	-	160	95	DAT high high alarm, serviced, restart
2/10/20	11:40	918	2.6	43,453	36	152,239	22,027	65	50	45	See Note 7	1.0	591	-	-	-	-	145	180	SVE Low Flow alarm, restarted
2/13/20	11:20	921	-	43,499	36	152,633	22,099	72	45	41	See Note 8	1.0	561	1.0	270	0.014	121.3	145	180	O&M, Well Balancing. TO-15 Stack Sample.
2/19/20	10:30	927	-	43,585	36	153,375	22,242	72	46	40	See Note 8	1.1	587	-	-	-	-	90	320	KO high and low level switches stuck - service.
2/24/20	9:41	932	-	43,656	36	153,990	22,361	72	46	40	See Note 8	1.1	587	-	-	-	-	132	375	DAT high high alarm, serviced, restart
3/2/20	12:12	939	-	43,758	36	154,873	22,532	72	44	40	See Note 8	1.1	587	-	-	-	-	132	475	KO low level switch stuck - service.
3/9/20	13:36	946	-	43,859	36	155,745	22,700	75	46	41	See Note 8	1.1	586	-	-	-	-	28	650	DAT high high alarm, serviced, restart,routine O&M.
3/18/20	-	-	-	-	-	-	-	-	-	-	See Note 8	-	-	-	-	-	-	10	760	KO low level switch stuck - service. Transfer condensate
4/3/20	14:30	971	-	44,218	36	158,826	23,300	75	45	39	See Note 8	1.1	586	-	-	-	-	10	900	KO low level switch stuck - service. Transfer condensate
4/14/20	13:30	982	-	44,372	36	160,140	23,563	80	44	41	See Note 9	1.1	582	-	-	-	-	10	940	KO lo switch stuck - service. Trans cond. Balance wells.
4/16/20	14:30	984	-	44,402	36	160,399	23,613	90	47	42	See Note 9	1.0	550	0.0	-	-	-	10	940	Monitor wells with PID
5/19/20	11:00	1017	-	44,880	36	164,459	24,401	85	49	42	See Note 9	1.1	580	-	260	0.014	122.6	10	940	High level switch stuck - service. TO-15 stack sample.
6/3/20	8:30	1032	-	45,094	36	166,280	24,758	84	49	44	See Note 9	1.1	580	-	-	-	-	15	940	Add oil to blower. Reconnect holding tank level switch.
6/8/20	11:00	1034	2.5	45,133	36	166,577	24,818	80	46	41	See Note 9	1.1	582	-	-	-	-	15	940	Blower fail to run alarm - reset - system started
6/16/20	11:45	1042	-	45,247	36	167,542	25,010	80	46	42	See Note 9	1.1	582	0.2	-	-	-	15	940	O&M; check SVE well field balance; move drums.
7/29/20	8:45	1085	-	45,853	36	172,677	26,038	87	46	41	See Note 9	1.1	579	-	-	-	-	15	940	O&M, SVE blower and AS compressor serviced.
8/28/20	14:48	1115	-	46,278	36	176,277	26,763	98	46	47	See Note 9	1.1	573	0.7	11	0.001	123.3	15	940	O&M, Balance wells. Refresh paint on well markers.
9/8/20	12:40	1125	0.6	46,435	36	177,628	27,012	90	40	37	See Note 9	1.1	577	-	-	-	-	15	940	On site to turn system on after power outage
9/9/20	18:20	1127	-	46,449	36	177,751	27,038	102	47	45	See Note 9	1.1	571	-	-	-	-	15	940	Document fire damage. Troubleshoot autodialer. Repair.
9/24/20	11:20	1141	-	46,668	36	179,660	27,391	90	52	48	See Note 9	1.0	550	0.3	-	-	-	15	940	O&M; Monitor SVE wells, Replace monument lids.
10/8/20	-	-	-	-	-	-	-	-	-	-	See Note 9	-	-	-	-	-	-	-	-	Annual vegetation mowing on Harris property
10/12/20	15:15	1159	-	46,924	36	182,053	27,827	90	49	49	See Note 9	1.1	577	-	-	-	-	19	940	O&M; Electrician spliced phone line. Fix leak on SVE-8.
11/2/20	15:55	1181	-	47,296	36	184,931	28,332	87	52	48	See Note 9	1.0	552	-	-	-	-	19	940	Turn off system for PSE meter changeout
11/3/20	12:45	1181	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Restart system after PSE meter changeout
11/11/20	16:10	1188	-	47,394	36	186,027	28,518	75	55	50	See Note 9	1.0	585	-	-	-	-	60	1000	KO high level alarm - KO pump line clogged. Cleared
11/13/20	11:25	1190	-	47,423	36	186,286	28,562	85	53	51	See Note 9	0.9	524	-	-	-	-	62	1000	Holding Tank High Level alarm maintenance
11/18/20	11:30	1195	-	47,502	36	186,998	28,682	83	54	51	See Note 9	1.0	524	0.0	-	-	-	90	1110	Monitor wells with PID. Sample cond: Cond-111820
12/2/20	15:00	1209	-	47,729	36	189,034	29,021	80	55	51	See Note 9	1.0	555	-	-	-	-	39	1270	KO high level switch stuck - service. Transfer condensate
12/9/20	13:25	1216	-	47,843	36	190,016	29,188	80	56	54	See Note 9	1.0	555	-	-	-	-	25	1450	KO high level switch stuck - service. Transfer condensate
12/18/20	11:05	1225	-	47,987	36	191,285	29,401	80	59	54	See Note 9	1.0	555	0.2	210	0.010	123.9	0	0	Sample: Stack-121820. Marvac removed condensate.
12/23/20	17:10	1230	-	48,070	36	192,034	29,527	78	60	56	See Note 9	1.0	556	-	-	-	-	20	80	Transfer condenste
12/30/20	8:50	1237	-	48,178	36	192,999	29,687	78	60	55	See Note 9	1.0	556	-	-	-	-	70	140	KO high level switch stuck - service. Transfer condensate
1/7/21	15:00	1245	-	48,130	36	194,181	29,885	80	61	56	See Note 9	1.0	555	-	-	-	-	48	290	KO high level switch stuck - service. Transfer condensate
1/13/21	12:55	1251	0.6	48,397	36	194,958	30,016	80	59	55	See Note 9	1.0	555	-	-	-	-	60	350	Restart system after power outage. Transfer condensate
1/19/21	10:05	1257	-	48,492	36	195,813	30,157	80	62	56	See Note 9	1.0	555	-	-	-	-	29	480	Meet Wyser for site walk. Transfer condensate
1/28/21	9:52	1266	-	48,638	36	197,115	30,373	80	62	56	See Note 9	1.0	556	-	-	-	-	10	630	Turn system OFF for SVE Expansion
2/19/21	10:09	1266	21.9	48,469	39	197,124	30,374	66	32	29	See Note 10	1.3	642	2.2	-	-	-	10	640	Turn system ON; Adjust blower speed. Bal SVE wells.
2/22/21	7:00	1268	-	48,469	39	197,495	30,444	75	42	38	See Note 10	1.2	611	-	-	-	-	10	640	Turn system OFF to plumb in SVE-22
2/22/21	16:50	1269	-	48,469	39	197,499	30,444	75	40	36	See Note 10	1.3	636	-	-	-	-	10	640	Turn system ON
2/23/21	8:40	1269	-	48,702	39	197,585	30,460	75	42	39	See Note 10	1.3	636	1.0	-	-	-	10	640	O&M; Balance SVE wells
2/26/21	12:40	1272	-	48,750	39	197,997	30,536	75	42	39	See Note 10	1.3	636	-	-	-	-	119	640	O&M; MarVac remove condensate from holding tank
3/1/21	10:45	1275	-	48,793	39	198,374	30,606	75	42	39	See Note 10	1.3	636	-	-	-	-	10	160	Turn system OFF to service KO

Table 1
SVE System Operation and Maintenance Data
Manhattan Village/Harris Properties
Normandy Park, Washington

Date	Time	Operating Days (days)	System Down Time (days)	Electric Meter (KWH)	Blower				Vacuum		SVE Wells[6]	Stack				PCE Removal Rate[4] (lb/day)	PCE Mass Removed[5] (lbs)	Condensate		Notes
					Speed (hz)	Electric Meter (KWH)	Run Time (hr)	Temp. Out (deg F)	Blower (in. w.c.)	Manifold (in. w.c.)		DP (in. w.c.)	Flow[1] (scfm)	VOC[2] (ppm)	Lab PCE[3] (µg/m^3)			DAT Tank (gal)	Holding Tank (gal)	
3/1/21	14:45	1275	-	48,794	39	198,675	30,607	75	33	39	See Note 11	1.3	636	-	-	-	-	10	160	Turn system ON. SVE-22 connected
3/2/21	10:45	1276	-	48,805	36	198,487	30,630	75	35	36	See Note 11	1.1	585	0.1	180	0.009	124.4	10	160	O&M; Balance SVE wells and collect air samples.
3/12/21	13:30	1286	-	48,933	36	199,562	30,871	78	46	46	See Note 11	1.1	584	0.2	210	0.011	124.5	75	240	O&M; Balance SVE wells and collect stack sample
3/19/21	7:55	1293	-	49,019	36	200,299	31,031	80	45	46	See Note 11	1.1	583	-	-	-	-	62	330	O&M; Balance SVE wells
4/6/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Investigate and measure catch basin.
4/20/21	11:50	1325	-	2,723	36	204,341	31,800	90	46	46	See Note 11	1.1	583	0.2	-	-	-	50	490	O&M; monitor SVE wells, monitor vapor pins
4/21/21	8:00	1326	-	2,840	36	204,440	31,820	80	49	46	See Note 11	1.1	577	-	-	-	-	60	490	O&M; B&K change oil in SVE blower
5/27/21	12:15	1362	-	8,008	36	208,855	32,688	85	50	47	See Note 11	1.0	553	0.2	-	-	-	80	490	O&M; Monitor SVE field and SVS-17
6/30/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	125.8	-	-	Estimate mass removal at end of reporting period

Notes:

1. Calculated flow rate based on velocity measurements in feet per minute, converted to cfm based on pipe cross sectional area, and normalized to standard conditions
2. As measured with a photoionization detector (PID)
3. SVE system discharge samples analyzed for VOCs using United States Environmental Protection Agency Method TO-15; see laboratory reports for the complete analytical list.
4. Mass Removal Rate = [flow (scfm) * PCE (µg/m$^{3)}$ * 28.3168 (L/cf) / 1,000 (L/m^3) / 453,592,370 (µg/lb) * 60 (min/hour) * 24 (hour/day)]
5. Cumulative mass removed = average mass removal rates from previous and current O&M visit * period run time.
6. SVE wells operating. The numbers refer to the SVE well number: SVE-1, SVE-2, SVE-3, SVE-4, SVE-5, SVE-6, SVE-7, SVE-8, SVE-9, SVE-10, SVE-11a, SVE-11b, SVE-12a, SVE-12b, SVE-13a, SVE-14, SVE-15, SVE-16, SVE-17, SVE-18, and SVE-19.
7. Operating SVE wells include SVE-2, SVE-3, SVE-5, SVE-6, SVE-7, SVE-8, SVE-10, SVE-11A, SVE-12A, SVE-15, SVE-16, and SVE-18.
8. Operating SVE wells include SVE-2, SVE-5, SVE-6, SVE-7, SVE-8, SVE-10, SVE-11A, SVE-12A, SVE-15, and SVE-18.
9. Operating SVE wells include SVE-2, SVE-5, SVE-6, SVE-7, SVE-8, SVE-10, SVE-11A, SVE-12A, SVE-15, SVE-16, and SVE-18.
10. Operating SVE wells include SVE-5, SVE-6, SVE-7, SVE-8, SVE-10, SVE-11A, SVE-12A, SVE-20, SVE-21, SVE-23, SVE-24, and SVE-25.
11. Operating SVE wells include SVE-5, SVE-6, SVE-7, SVE-8, SVE-10, SVE-11A, SVE-12A, SVE-20, SVE-21, SVE-22, SVE-23, SVE-24, and SVE-25.

KWH = Kilowatt Hours
in. w.c. = inches of water column
scfm = standard cubic feet per minute
deg F = degrees Fahrenheit
NM = not measured
PCE = tetrachloroethene
ppm = parts per million
DAT = diffused aeration tank
VOC = Volatile Organic Compounds
µg/m^3 = micrograms per cubic meter
lb/day = pounds per day
Temp. = Temperature
DP = Differential Pressure
EJ = estimated value

Table 2

Groundwater Elevations
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	Monument Type	Top of Casing Elevation (feet, NAVD88)	Screened Interval Depth (feet)	Depth to Water (feet)	Groundwater Elevation (feet, NAVD88)
June 2020 Event						
MW-17	6/3/2020	Flush	305.35	27.61-37.61	31.88	273.47
MW-20	6/3/2020	Flush	305.51	29.41-44.41	34.02	271.49
May 2021 Event						
DC-7	5/11/2021	Flush	302.61	34.35-39.35	31.15	271.46

NOTES:

1. '-- = not measured or not applicable.
2. Well monument types: flush grade monuments and above ground (AG) monuments.
3. Depth to water is measured from top of well casing.
4. Elevations are reported relative to North American Vertical Datum of 1988 (NAVD 88).
5. Top of casing (TOC) elevations were surveyed by D.R. Strong Consulting Engineers, Inc. in February and May 2013 and by Lanktree Land Surveying, Inc. in July 2015, March 2019, and October 2019.
6. Screened interval depth is estimated using from surveyed elevations (top of casing elevations, ground surface, and monument rim) and field measurements at the time of drilling.
7. Screened intervals completely submerged are shaded.

Table 3

Groundwater Field Sampling Parameters
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	Depth to Water (feet TOC)	pH (units)	Specific Conductivity (µS/cm)	Temp (°C)	DO (mg/L)	ORP (mV)
June 2020 Event							
MW-17	6/3/2020	31.88	6.43	228	12.9	6.6	186
MW-20	6/3/2020	34.02	6.45	259	12.7	6.3	189
May 2021 Event							
DC-7	5/11/2021	31.15	6.34	255	12.3	6.6	100

NOTES:

1. TOC = top of casing.
2. units: pH standard units reported to 0.01.
3. µS/cm = microsiemens per centimeter @ 25 degrees Celsius (°C).
4. Dissolved Oxygen (DO) reported to 0.1 milligrams per liter (mg/L).
5. ORP = oxidation-reduction potential.
6. mV = millivolts.

Table 4

Tetrachloroethene Concentrations in Groundwater
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

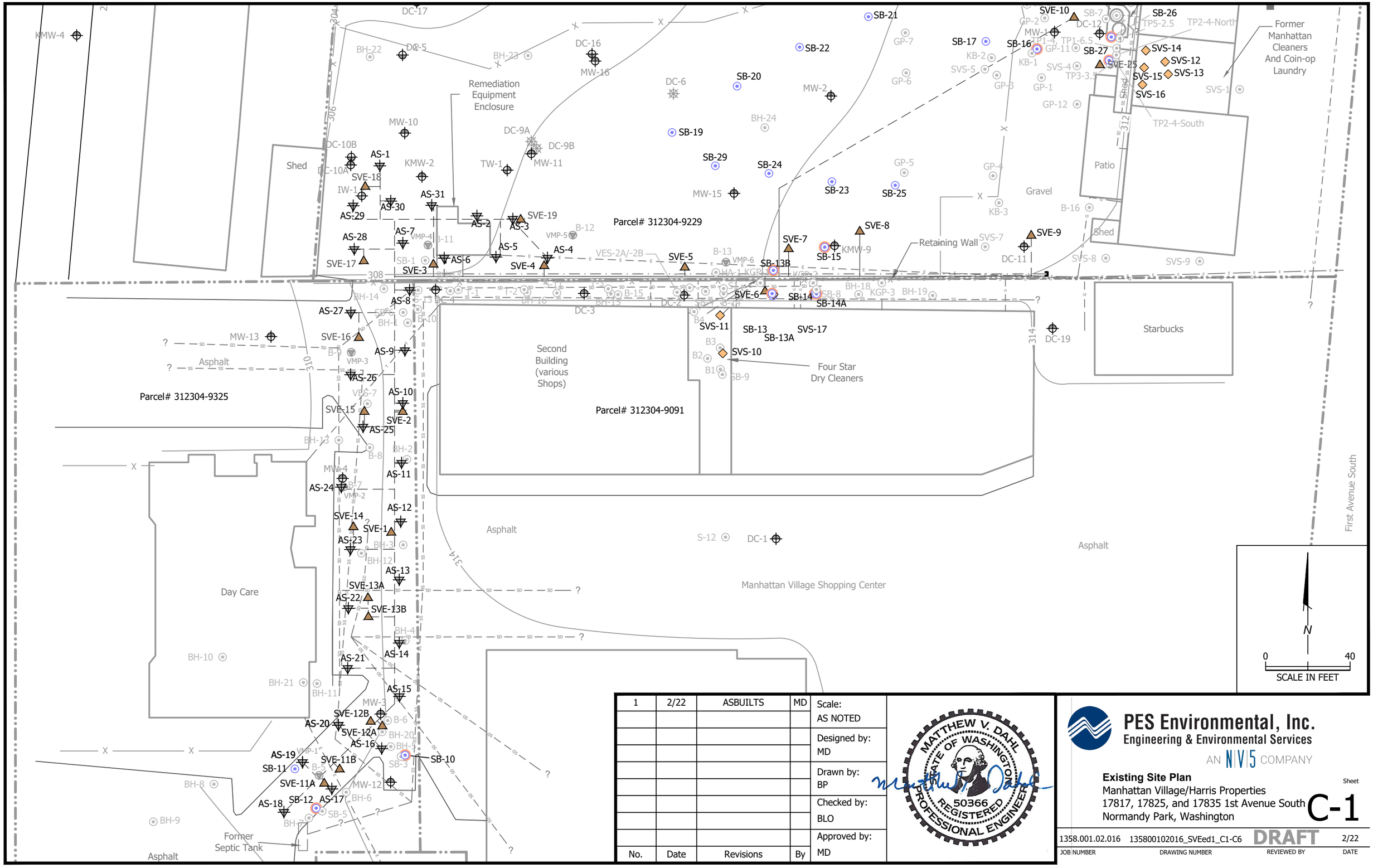
Monitoring Well	Date	Screened Interval Depth (feet TOC)	Depth to Water (feet TOC)	Pump Intake Depth (feet TOC)	PCE (µg/l)
MTCA Method A Ground Water Cleanup Level					**5**
June 2020 Event					
MW-17	6/3/2020	27.61-37.61	31.88	33.5	**5.35**
MW-20	6/3/2020	29.41-44.41	34.02	37.0	1.00 U
May 2021 Event					
DC-7	5/11/2021	34.35-39.35	31.15	35.0	**8.35**

NOTES:

1. Tetrachloroethene (PCE) concentrations in migrograms per liter (µg/l). Other VOCs, if detected above the laboratory practical quantitation limit (PQL), are listed in Table D3.
2. Groundwater samples analyzed using USEPA Method 8260C.
3. U = concentration not detected at or above the laboratory PQL.
4. J = the identification of the analyte is acceptable; the reported value is an estimate
5. Detected concentrations are shown in **bold.**
6. Concentrations exceeding the cleanup level are **bold and shaded**.
7. Screened interval depth is estimated using from surveyed elevations (top of casing elevations, ground surface, and monument rim) and field measurements at the time of drilling.
8. Pump intake depth and depth to water is measured in feet below the top of casing (TOC).
9. Screened intervals completely submerged are shaded.

ATTACHMENT A

SVE SYSTEM EXPANSION AS-BUILT DRAWINGS



No.	Date	Revisions	By
1	2/22	ASBUILTS	MD

Scale: AS NOTED

Designed by: MD

Drawn by: BP

Checked by: BLO

Approved by: MD

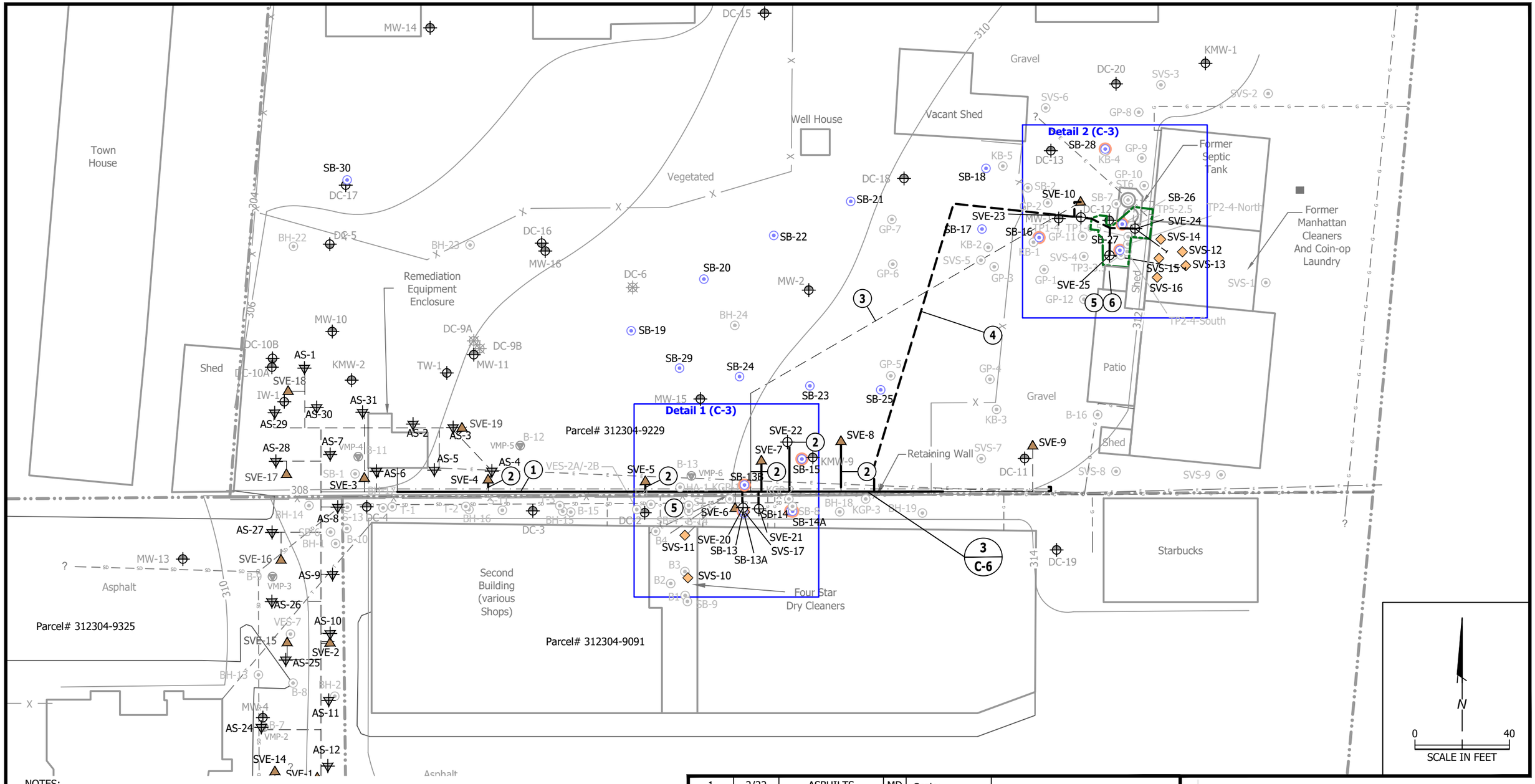
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Existing Site Plan
Manhattan Village/Harris Properties
17817, 17825, and 17835 1st Avenue South
Normandy Park, Washington

Sheet C-1

1358.001.02.016	135800102016_SVEed1_C1-C6	DRAFT	2/22
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



NOTES:

1. REPLACE 4-INCH HEADER PIPE WITH 6-INCH HEADER AT THE 8-INCH TEE. SECURE THE NEW HEADER PIPE TO THE RETAINING WALL. TIE-IN LATERALS FOR SVE-4 THROUGH SVE-10 AND SVE-20 THROUGH SVE-25.
2. INSTALL NEW ABOVE GROUND LATERAL TO SVE-22 AND REPLACE THE EXISTING 2-INCH ABOVE GROUND LATERALS TO SVE-4 THROUGH SVE-8. SLOPE LATERALS AT 1% TOWARDS THE WELLS. SECURE LATERALS TO UNISTRUT PIPE SUPPORTS AS NEEDED TO MAINTAIN SLOPE.
3. DECOMMISSION ABOVE GROUND AND BURIED LATERAL TO SVE-10. REPLACE WITH NEW LATERAL IN COMMON TRENCH WITH SVE-23, SVE-24, AND SVE-25.
4. CONSTRUCT NEW LATERAL TRENCH FOR SVE-10, SVE-23, SVE-24, AND SVE-25. FIELD LOCATE TO AVOID CONFLICT WITH TREES.
5. MANAGE EXCAVATED SOIL WITHIN APPROXIMATELY 20 FT OF THE BUILDINGS AS ECOLOGY APPROVED CONTAINED-IN WASTE. ASSUME SPOILS GENERATED FROM OUTSIDE OF THESE AREAS IS CLEAN FILL AND MAY BE THIN SPREAD ON THE GROUND INSIDE THE FENCED AREA PENDING SAMPLE CONFIRMATION. ENGINEER APPROVAL REQUIRED FOR USE AS TRENCH BACKFILL.
6. SHALLOW SOIL EXCAVATION AREA. EXCAVATE AND SAMPLE 5 LOCATIONS TO DETERMINE THE EXCAVATION DIMENSIONS. ASSUME 300 SQUARE FT BY 4-FT DEEP. SAMPLE LOCATIONS EX-1 THROUGH EX-5.
7.

No.	Date	Revisions	By
1	2/22	ASBUILTS	MD

Scale: AS NOTED
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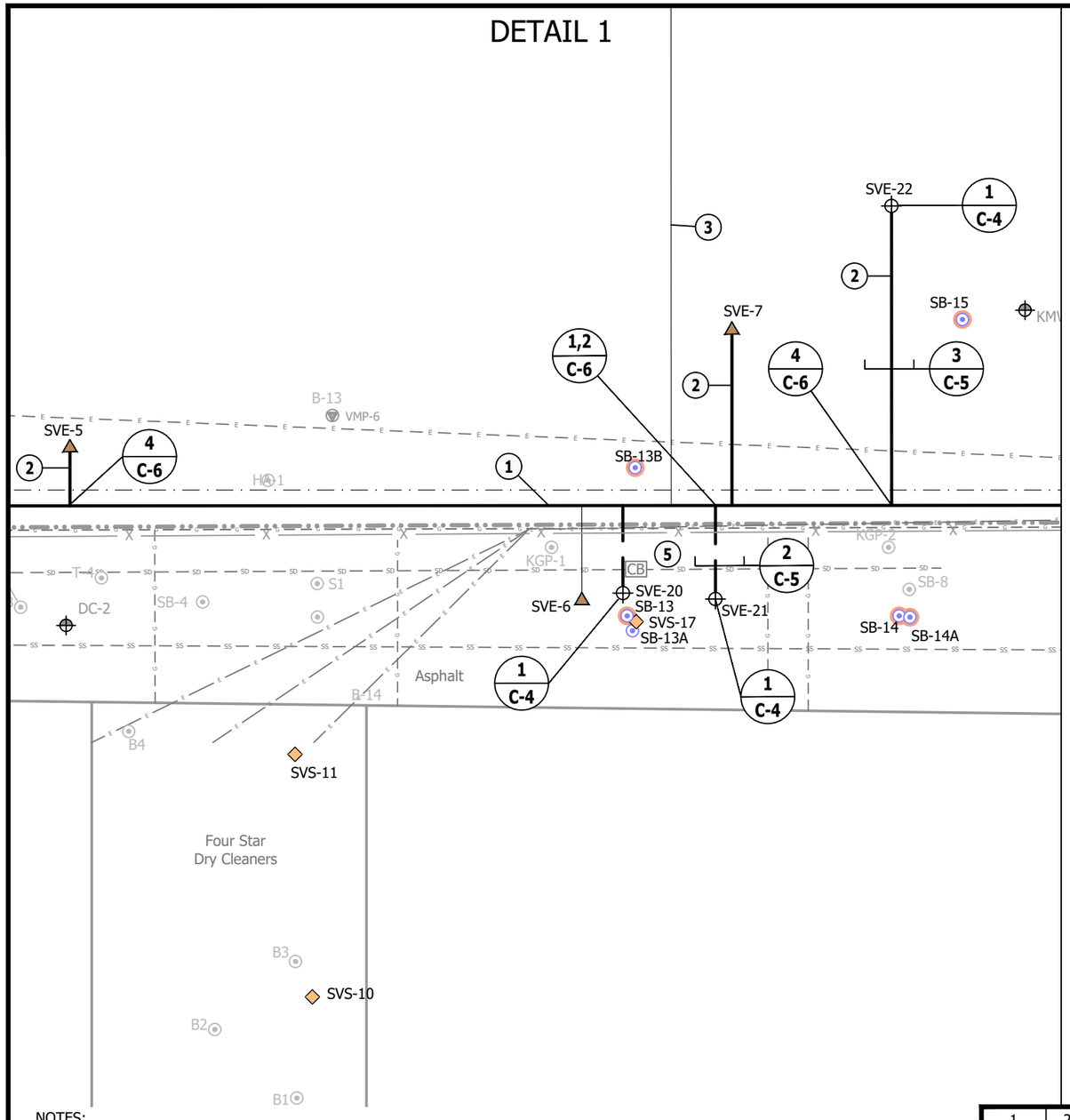
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SVE Expansion and Excavation Layout
Manhattan Village/Harris Properties
17817, 17825, and 17835 1st Avenue South
Normandy Park, Washington

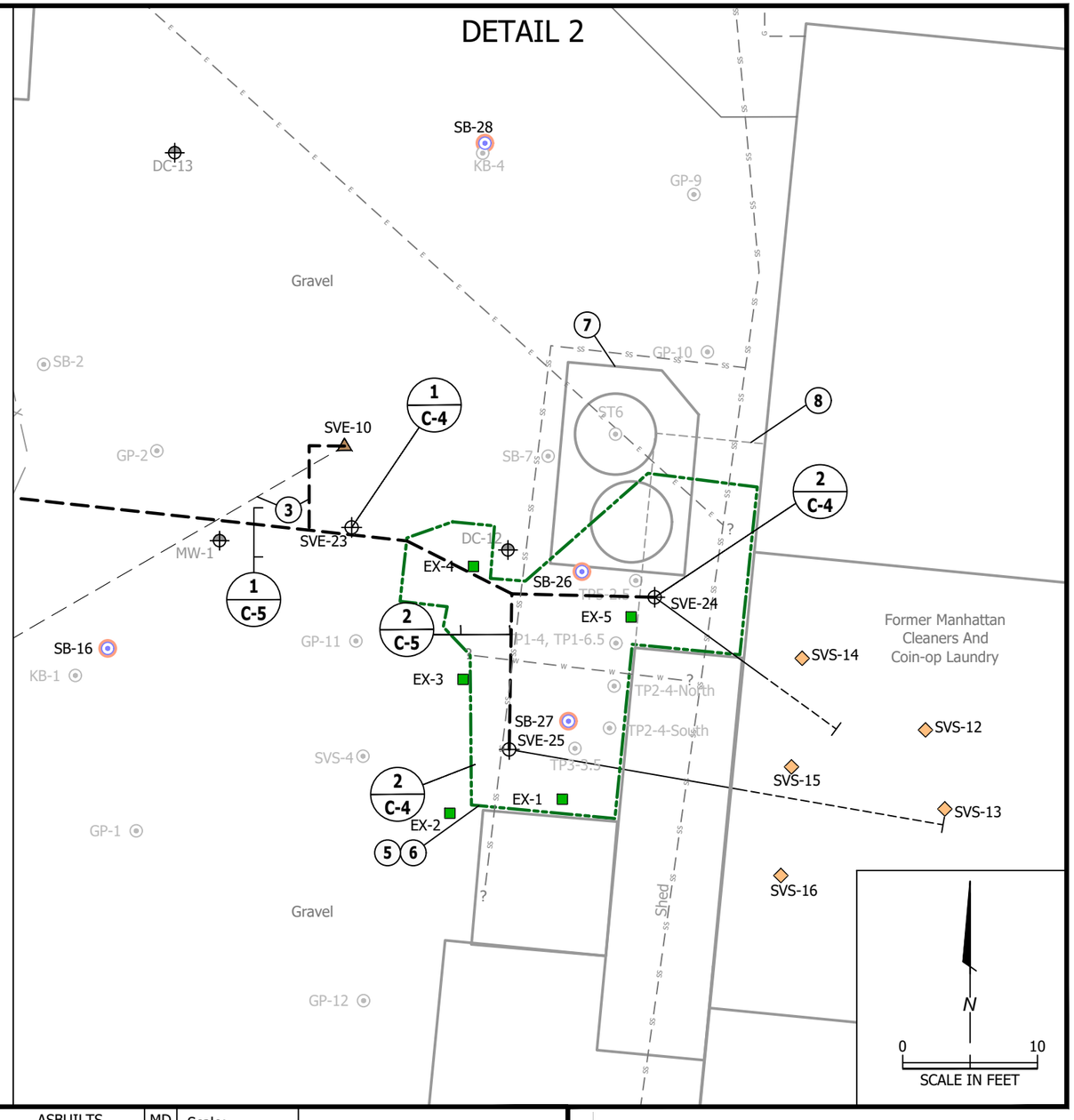
Sheet C-2

1358.001.02.016	135800102016_SVEed1_C1-C6	DRAFT	2/22
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

DETAIL 1



DETAIL 2



NOTES:
1. REPLACE 4-INCH HEADER PIPE WITH 6-INCH HEADER AT THE 8-INCH TEE. SECURE THE NEW HEADER PIPE TO THE RETAINING WALL. TIE-IN LATERALS FOR SVE-4 THROUGH SVE-10 AND SVE-20 THROUGH SVE-25.
2. INSTALL NEW ABOVE GROUND LATERAL TO SVE-22 AND REPLACE THE EXISTING 2-INCH ABOVE GROUND LATERALS TO SVE-4 THROUGH SVE-8. SLOPE LATERALS AT 1% TOWARDS THE WELLS. SECURE LATERALS TO UNISTRUT PIPE SUPPORTS AS NEEDED TO MAINTAIN SLOPE.
3. DECOMMISSION ABOVE GROUND AND BURIED LATERAL TO SVE-10. REPLACE WITH NEW LATERAL IN COMMON TRENCH WITH SVE-23, SVE-24, AND SVE-25.
4. CONSTRUCT NEW LATERAL TRENCH FOR SVE-10, SVE-23, SVE-24, AND SVE-25. FIELD LOCATE TO AVOID CONFLICTS WITH TREES.
5. MANAGE EXCAVATED SOIL WITHIN APPROXIMATELY 20 FT OF THE BUILDINGS AS ECOLOGY APPROVED CONTAINED-IN WASTE. ASSUME SPOILS GENERATED FROM OUTSIDE OF THESE AREAS IS CLEAN FILL AND MAY BE THIN SPREAD ON THE GROUND INSIDE THE FENCED AREA PENDING SAMPLE CONFIRMATION. ENGINEER APPROVAL REQUIRED FOR USE AS TRENCH BACKFILL.
6. SHALLOW SOIL EXCAVATION AREA. EXCAVATE AND SAMPLE 5 LOCATIONS TO DETERMINE THE EXCAVATION DIMENSIONS. ASSUME 300 SQUARE FT BY 4-FT DEEP. SAMPLE LOCATIONS EX-1 THROUGH EX-5.
7. FORMER SEPTIC TANKS AND 2004 APPROXIMATE EXCAVATION LIMITS.
8. APPROXIMATE LOCATION OF CONCRETE AND ASPHALT PATCH IN GRAVEL PARKING AREA.

No.	Date	Revisions	By
1	2/22	ASBUILTS	MD

Scale: AS NOTED
Designed by: MD
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Checked by: BLO
Approved by: MD

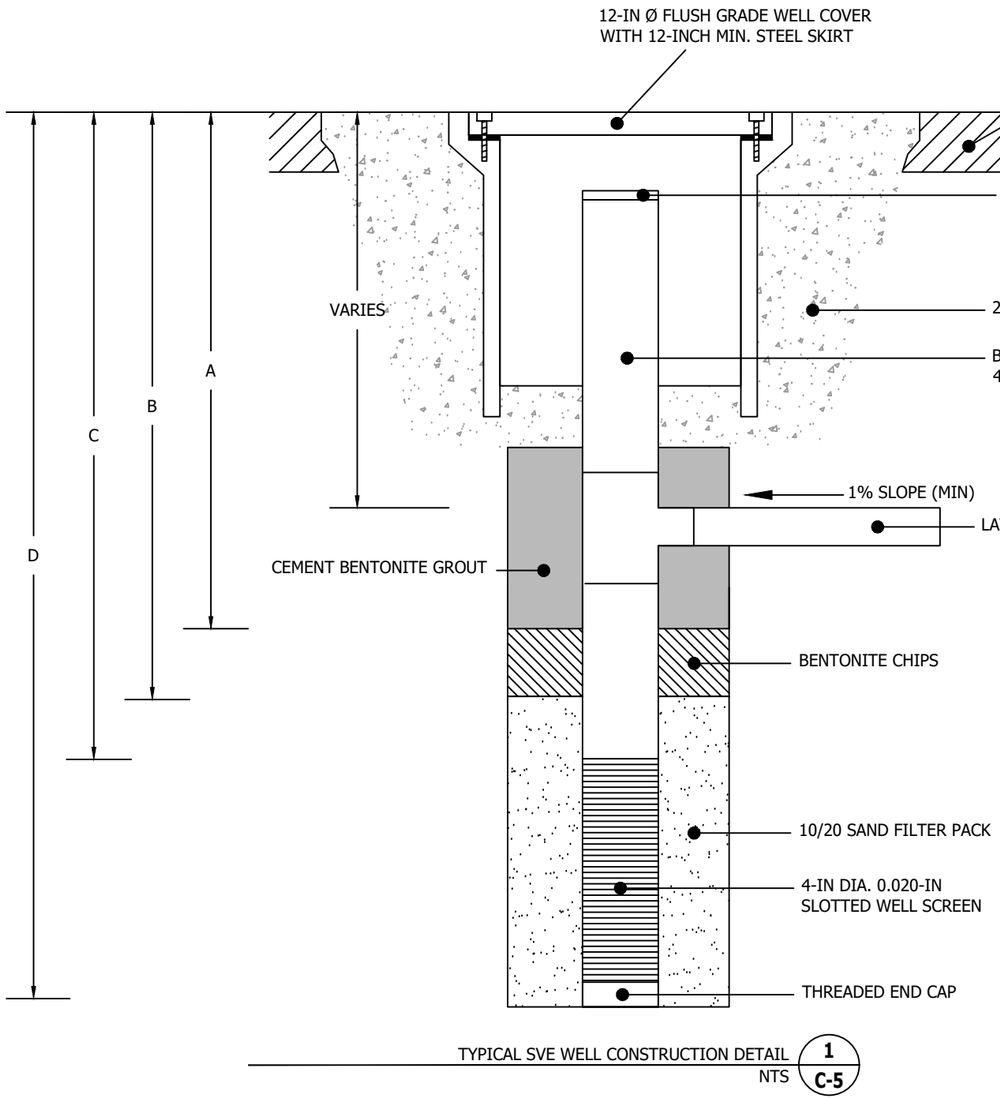
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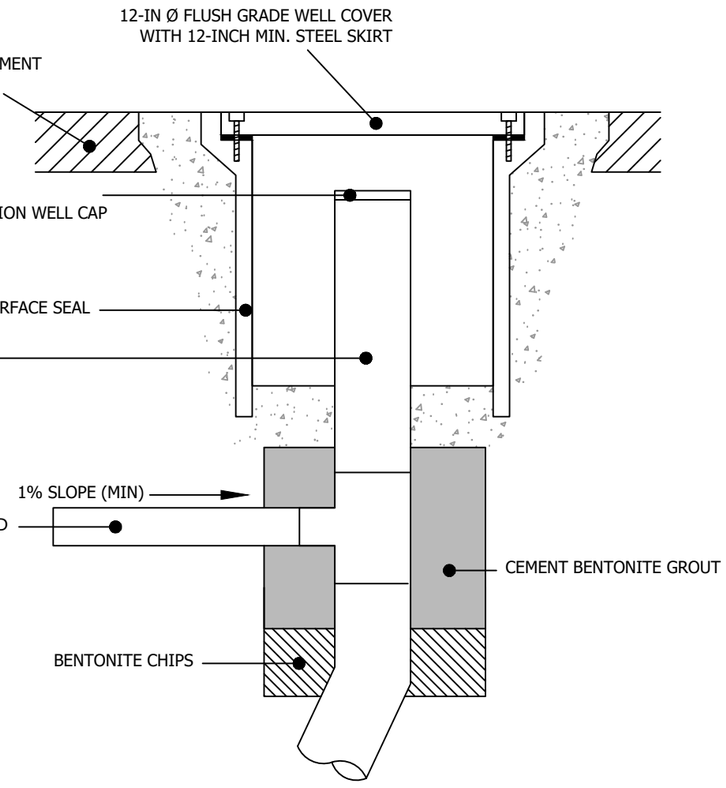
SVE Expansion and Excavation Details
Manhattan Village/Harris Properties
17817, 17825, and 17835 1st Avenue South
Normandy Park, Washington

Sheet C-3

1358.001.02.016	135800102016_SVEed1_C1-C6	DRAFT	2/22
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



TYPICAL SVE WELL CONSTRUCTION DETAIL 1 / C-5
NTS



TYPICAL ANGLE SVE WELL HEAD COMPLETION DETAIL (SEE NOTE 2) 2 / C-5
NTS

EXISTING SVE WELLS (FEET)				
WELL	A	B	C	D
SVE-1	6	8	10	35
SVE-2	6	8	10	35
SVE-3	6	8	10	35
SVE-4	6	8	10	35
SVE-5	6	8	10	35
SVE-7	6	8	10	35
SVE-6	2	4	5	10
SVE-8	6	8	10	35
SVE-9	6	8	10	35
SVE-10	6	8	10	35
SVE-11A	1.5	3	5	20
SVE-11B	2.5	18	20	35
SVE-12A	1.5	3	5	20
SVE-12B	2.5	18	20	35
SVE-13A	1.5	3	5	20
SVE-13B	2.5	18	20	35
SVE-14	16.2	18.3	19.6	34.6
SVE-15	15.9	19.3	20.6	35
SVE-16	16	18	20.5	34.8
SVE-17	16	18	19.9	29.9
SVE-18	16	17.9	19.8	29.8
SVE-19	16	18	20	30

NEW SVE WELLS (FEET)				
WELL	A	B	C	D
SVE-20	6	8	10.3	25.4
SVE-21	21	23	25.7	37.7
SVE-22	16	18	20.6	35.6
SVE-23	16	18	20.3	35.3
SVE-24	6	8	10.3	22.6
SVE-25	16	18	22.8	35.7

(SEE NOTES 1, 2, 3, AND 4)

NOTES:
1. VERTICAL WELLS: SVE-20, SVE-21, SVE-22, AND SVE-23.
2. ANGLED WELLS: SVE-24, AND SVE-25.
3. SVE WELL TABLE DEPTHS ARE IN VERTICAL FEET. TABLE DIMENSIONS FOR ANGLED WELLS SVE-24 AND SVE-25 SHOULD BE MULTIPLIED BY 1.41 TO CALCULATE ACTUAL DIMESIONS ALONG THE WELL CASING.
4. ANGLE WELL CONSTRUCTION WILL BE CONSISTENT WITH THE VERTICAL WELL CONSTRUCTION DEPICTED ON DETAIL 1.
5. SLOPE ALL LATERALS 1% MINIMUM TOWARD THE WELL
6. THE LATERAL PIPE FOR SVE-22 WILL BE ROUTED TO THE MANIFOLD ABOVE GROUND.

No.	Date	Revisions	By
1	2/22	ASBUILTS	MD

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Approved by: MD

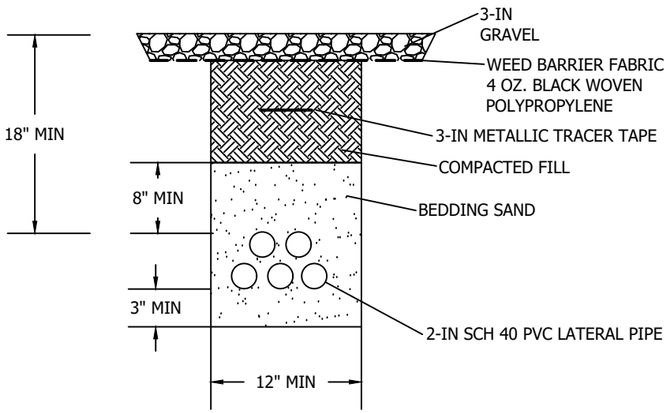
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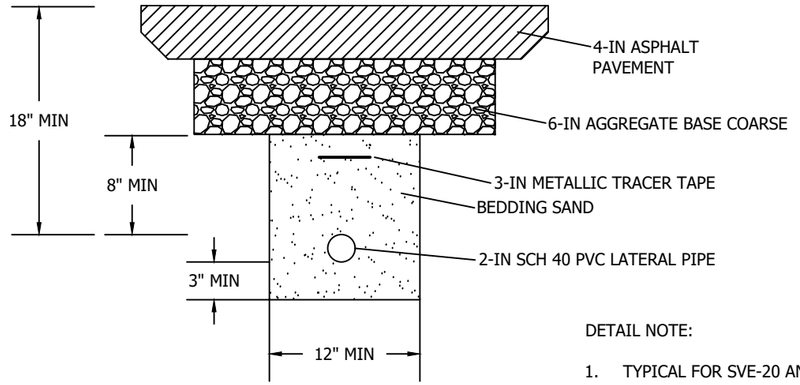
Well Construction Details
Manhattan Village/Harris Properties
17817, 17825, and 17835 1st Avenue South
Normandy Park, Washington

Sheet C-4

1358.001.02.016	135800102016_SVEed1_C1-C6	DRAFT	2/22
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



LATERAL TRENCH - UNPAVED 1 C-3
NTS



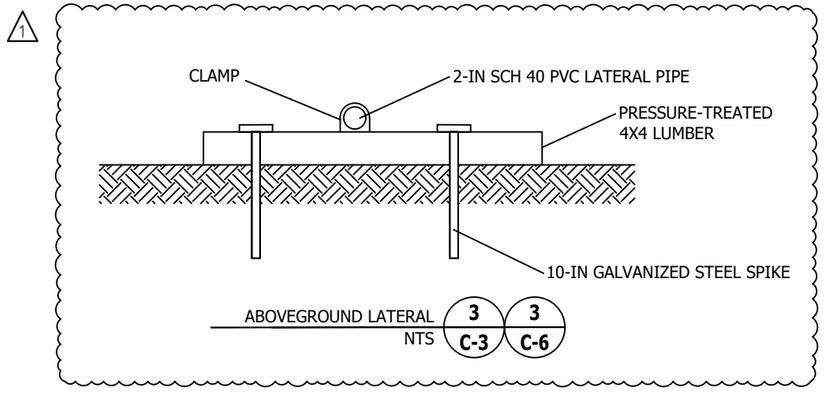
LATERAL TRENCH - PAVED 2 C-3
NTS

DETAIL NOTE:

1. TYPICAL FOR SVE-20 AND SVE-21.

NOTES:

1. TRENCH DEPTH AND WIDTH WILL VARY BY LOCATION.
2. MULTIPLE PIPES: MAINTAIN 1-IN MIN. SAND AROUND ALL PIPES.
3. BACKFILL TRENCHES WITH BEDDING SAND WITH A MAXIMUM LOOSE LIFT OF 8-INCHES BEFORE COMPACTION.
4. COMPACT ABOVE THE PIPE ZONE TO PREVENT SETTLEMENT.
5. SLOPE LATERAL PIPES 1% MIN TOWARDS WELL.



ABOVEGROUND LATERAL 3 C-3 3 C-6
NTS

DETAIL NOTE:

1. TYPICAL FOR SVE-4, SVE-5, SVE-7, SVE-8, AND SVE-22.
2. MANIFOLD FOR SVE-10, SVE-23, SVE-24, SVE-25 AND SPARE.

No.	Date	Revisions	By
1	2/22	ASBUILTS	MD

Scale: AS NOTED
Designed by: MD
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Checked by: BLO
Approved by: MD

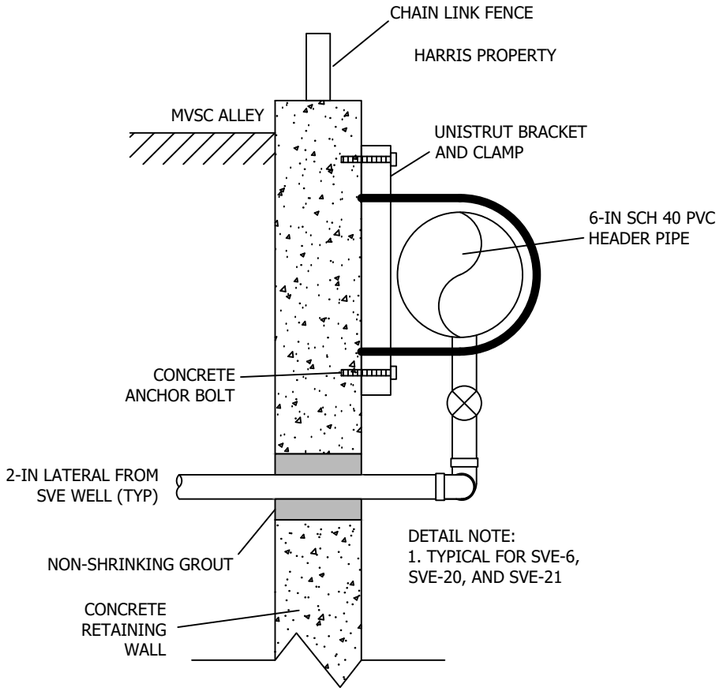
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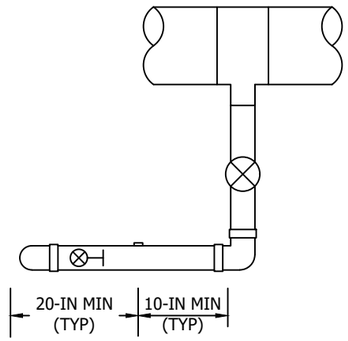
Trench and Lateral Sections
Manhattan Village/Harris Properties
17817, 17825, and 17835 1st Avenue South
Normandy Park, Washington

Sheet C-5

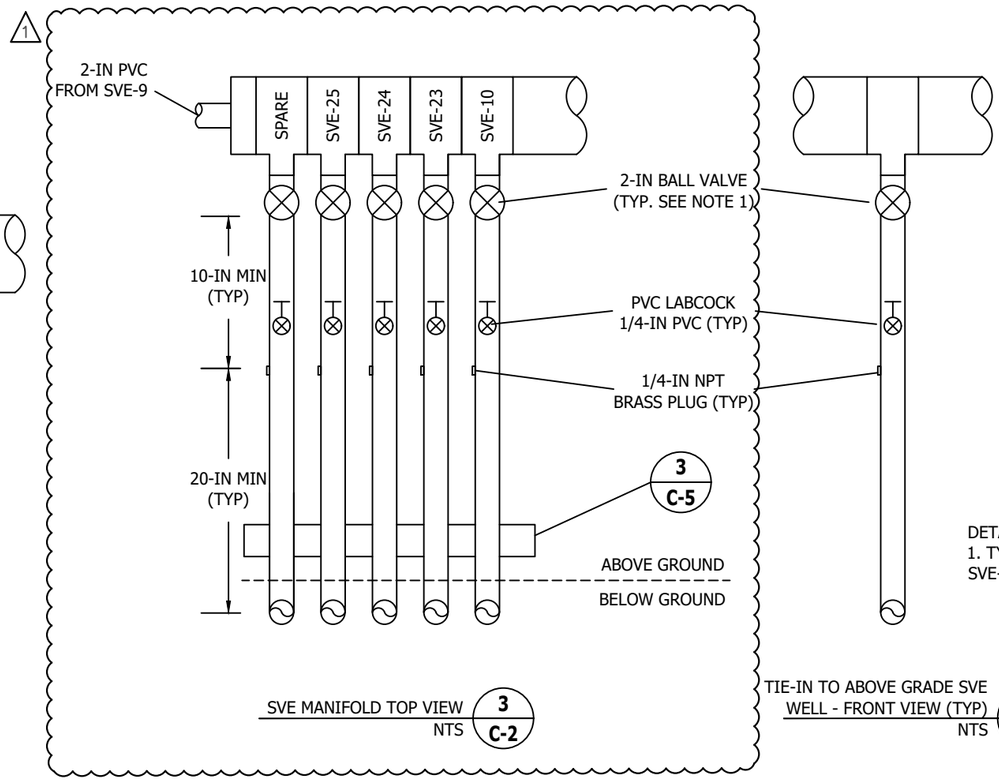
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE
1358.001.02.016	135800102016_SVEed1_C1-C6	DRAFT	2/22



TIE-IN TO SVE WELL ON MVSC PROPERTY - SIDE VIEW (TYP) — 1 / C-3
NTS



TIE-IN TO SVE WELL ON MVSC PROPERTY - FRONT VIEW (TYP) — 2 / C-3
NTS



SVE MANIFOLD TOP VIEW — 3 / C-2
NTS

TIE-IN TO ABOVE GRADE SVE WELL - FRONT VIEW (TYP) — 4 / C-3
NTS

NOTES:
1. FLOW CONTROL BALL VALVE: 2-IN PVC SPEARS COMPACT MODEL 2000 WITH TEFLON SEAT.
2. SVE MANIFOLD PIPE AND FITTING MATERIALS: SCHEDULE 40 PVC.
3. SECURE SVE LATERAL PENETRATIONS, SVE MANIFOLD PIPES, AND SVE HEADER PIPES TO RETAINING WALL USING UNISTRUT BRACKETS AND CLAMPS. 5 FT MIN. SPACING BETWEEN PIPE SUPPORTS.
4. INSTALL ONE SPARE 2-IN PVC LATERAL PIPE FROM NEAR SVE-25 WELLHEAD AND TERMINATE ABOVE GROUND AT THE MANIFOLD.
5. SLOPE 6-IN SVE HEADER PIPE 1% MINIMUM TOWARD WELLS.
1. 6. MANIFOLD REQUIRED TO BE INSTALLED HORIZONTALLY TO MAINTAIN 1% MINIMUM SLOPE.

No.	Date	Revisions	By
1	2/22	ASBUILTS	MD

Scale: AS NOTED
Designed by: MD
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Checked by: BLO
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SVE Manifold Details
Manhattan Village/Harris Properties
17817, 17825, and 17835 1st Avenue South
Normandy Park, Washington

Sheet C-6

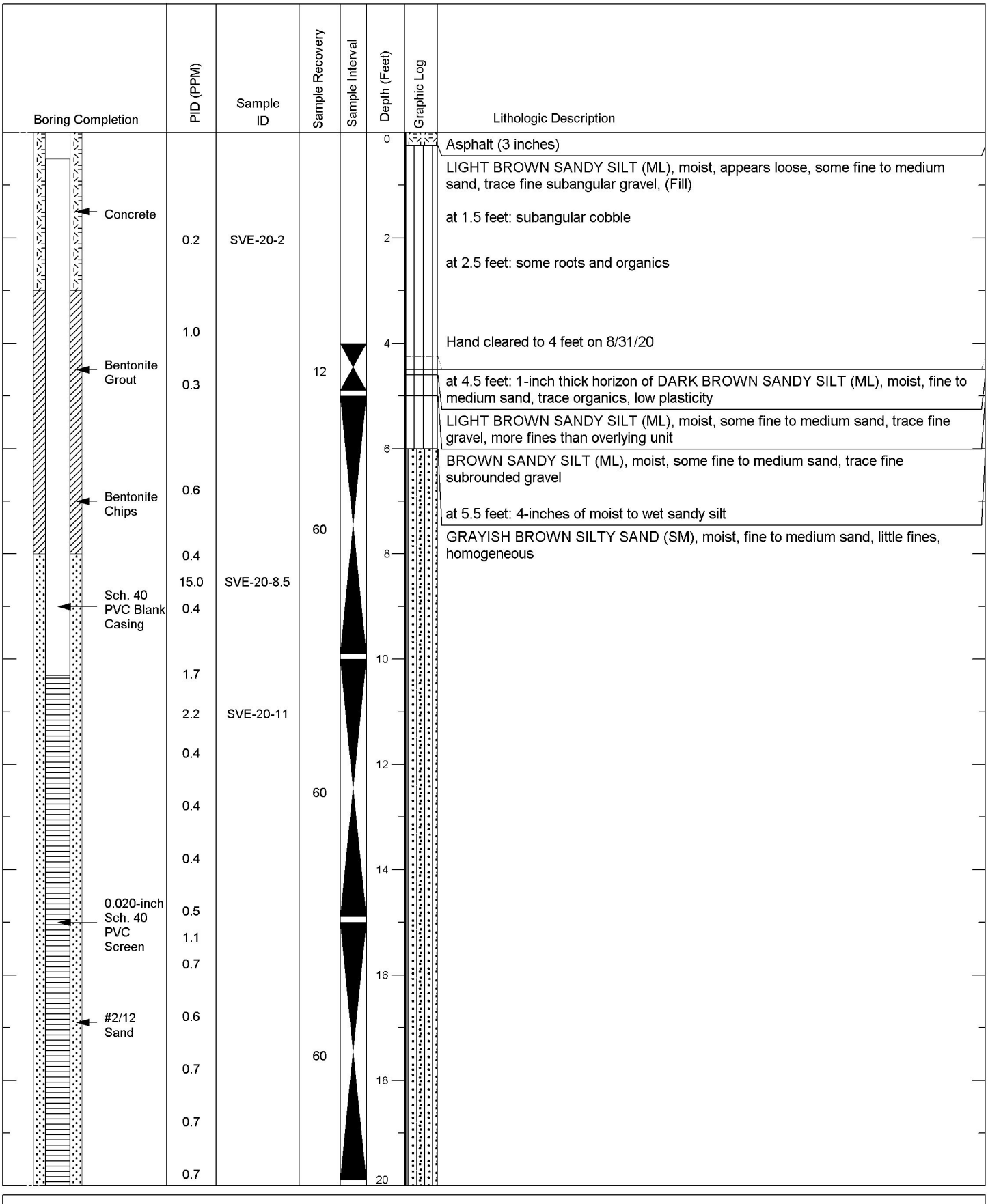
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE
1358.001.02.016	135800102016_SVEed1_C1-C6	DRAFT	2/22

ATTACHMENT B

BORING AND WELL LOGS

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING: SVE-20



Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 286

Total Drilled Depth: 30 feet
Diameter of Boring: 8-inches
Drill Date: 8/31/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary

PES Environmental, Inc.
Engineering & Environmental Services

LOG OF BORING: SVE-20

Boring Completion	PID (PPM)	Sample ID	Sample Recovery	Sample Interval	Depth (Feet)	Graphic Log	Lithologic Description
#2/12 Sand; 0.020-inch Sch. 40 PVC Screen; End Cap	0.6						
	0.4				22		GRAYISH BROWN SANDY SILT (ML), moist, little fine to medium sand
	0.6		60				GRAYISH BROWN SILTY SAND (SM), moist, fine to medium sand, little fines
	0.6				24		GRAYISH BROWN GRAVEL WITH SAND AND SILT (GM), moist, fine subrounded to subangular gravel, little fine to coarse sand
	0.5						
	0.5				26		
			0				
					28		
					30		Bottom of boring at 30 feet Boring was overdrilled to 30 feet and backfilled with native material before setting well Well Completion Details: Well constructed with 4-inch Schedule 40 PVC pipe and a 0.020-inch machine slotted screen with #2/12 Silica Sand Total Well Depth: 25.8 feet Well Sump: 25.41 to 25.8 feet Well Screen: 10.3 to 25.4 feet Well Blank: 0.5 to 10.3 feet Filter Pack: 8 to 25 feet Well Seal: 6 to 8 feet (hydrated bentonite chips) 3 to 6 feet (bentonite grout) Surface Seal: 0 to 3 feet sand Well Monument: 12-inch flush mount monument to be set in concrete at a future date
					32		
					34		
					36		
					38		
					40		

Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 286

Total Drilled Depth: 30 feet
Diameter of Boring: 8-inches
Drill Date: 8/31/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary

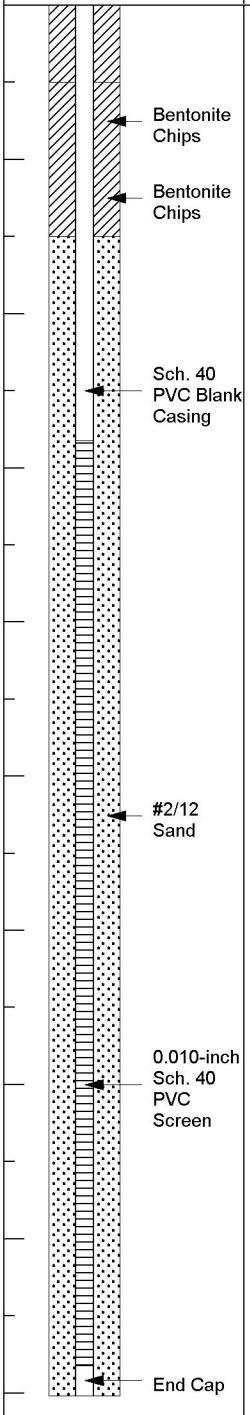
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LOG OF BORING: SVE-21

Boring Completion	PID (PPM)	Sample ID	Sample Recovery	Sample Interval	Depth (Feet)	Graphic Log	Lithologic Description
					0		Asphalt (3 inches)
							BROWN SILTY SAND (SM), moist, loose, fine to medium to medium sand, some fines
Concrete	1.2	SVE-21-2			2		at 2 feet: roots
					4		Hand cleared to 4 feet on 8/31/2020
							BROWN SILT WITH SAND (ML), moist to wet, little fine to medium sand, trace dark soil chunks, trace orange mottling, trace organics, low plasticity
	0.2				6		
	0.6						
	0.8		44		8		at 7.5 feet: gradually decreasing fines with depth
	0.7						BROWN SANDY SILT (ML), moist, fine to medium sand, some fines
					10		
	1.2						BROWN SILTY SAND (SM); moist, loose, fine to medium sand, little fines, trace orange mottling, homogeneous
Bentonite Grout	1.7	SVE-21-12			12		
	0.7		60				
	0.7						
	0.6				14		at 14 feet: trace silty clumps approximately 1-inch in diameter
Sch. 40 PVC Blank Casing	0.6						at 15 feet: grayish brown, fewer fines than above
	0.8				16		
	0.4						
	0.5		60		18		
	0.4						
	0.5				20		

Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 287

Total Drilled Depth: 38 feet
Diameter of Boring: 8-inches
Drill Date: 8/31/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary



Boring Completion	PID (PPM)	Sample ID	Sample Recovery	Sample Interval	Depth (Feet)	Graphic Log	Lithologic Description
	0.2						
	0.1				22		at 21.5 feet: coarser than above
	0.9		60				
	1.2				24		BROWNISH GRAY GRAVELY SAND WITH GRAVEL AND SILT (SM), moist, fine to medium sand, little subrounded to subangular fine to coarse gravel, few fines
	1.6						
	2.2	SVE-21-25					BROWN SILTY SAND (SM), moist, appears loose, fine to medium sand, little fines
	1.4				26		
	1.5						
	1.2		60		28		
	1.5						
	2.0				30		at 29.5 feet: trace gravel
	1.1						
	1.3						GRAYISH BROWN SAND WITH GRAVEL (SM), moist, fine to coarse sand, little fine subrounded gravel, trace fines
	1.4		60		32		GRAYISH BROWN SAND WITH GRAVEL (SM), moist, fine to medium, trace fines
	1.4				34		at 34 feet: trace fine to coarse subrounded to subangular gravel
	2.5	SVE-21-35					BROWNISH GRAY SAND WITH SILT AND GRAVEL (SM), moist, fine to medium sand, little subrounded to subangular fine gravel, few fines, trace coarse sand
	1.9		24		36		
	2.3						
					38		
					40		

Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 287

Total Drilled Depth: 38 feet
Diameter of Boring: 8-inches
Drill Date: 8/31/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary

Boring Completion	PID (PPM)	Sample ID	Sample Recovery	Sample Interval	Depth (Feet)	Graphic Log	Lithologic Description
							Bottom of boring at 38 feet Well Completion Details: Well constructed with 4-inch Schedule 40 PVC pipe and a 0.020-inch machine slotted screen with #2/12 Silica Sand Total Well Depth: 38.0 feet Well Sump: 37.7 to 38.0 feet Well Screen: 25.7 to 37.7 feet Well Blank: 0.5 to 25.7 feet Filter Pack: 23 to 38 feet Well Seal: 21 to 23 feet (hydrated bentonite chips), 3 to 21 feet bentonite grout Surface Seal: 0 to 3 feet sand Well Monument: 12-inch flush mount monument to be set in concrete at a future date
					42		
					44		
					46		
					48		
					50		
					52		
					54		
					56		
					58		
					60		

Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 287

Total Drilled Depth: 38 feet
Diameter of Boring: 8-inches
Drill Date: 8/31/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary

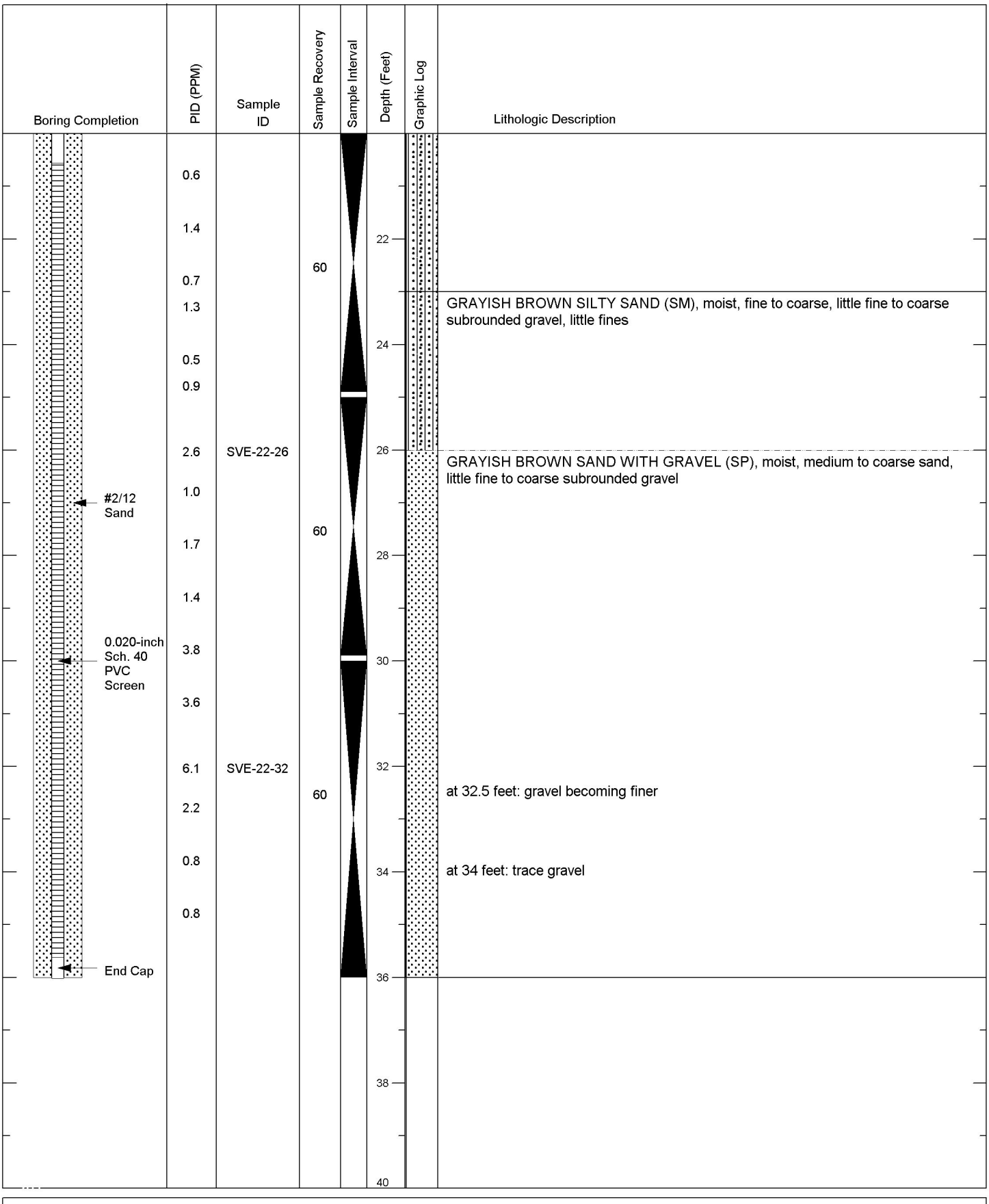
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Engineering & Environmental Services

LOG OF BORING: SVE-22

Boring Completion	PID (PPM)	Sample ID	Sample Recovery	Sample Interval	Depth (Feet)	Graphic Log	Lithologic Description
					0		BROWN SILTY SAND (SM), moist, fine to medium sand, trace coarse sand, organics
Sand	0.4	SVE-22-2			2		
	0.7						BROWN SILT (ML), moist, appears medium stiff, fine, trace sand
	0.7				4		Hand cleared to 4 feet on 8/31/2020
	0.4						
	0.2				6		
			72				
	0.2				8		
Bentonite Grout							
	0.3				10		GRAYISH BROWN SILTY SAND (SM), moist, appears loose, fine to medium sand, some fines, homogeneous
	0.5						
	0.3						
	0.5		24		12		
					14		
Sch. 40 PVC Blank Casing	0.2						
	0.5				16		
Bentonite Chips							
	0.5		60		18		
#2/12 Sand	0.6						
	0.6				20		

Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 288

Total Drilled Depth: 35 feet
Diameter of Boring: 8-inches
Drill Date: 9/1/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary



Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 288

Total Drilled Depth: 35 feet
Diameter of Boring: 8-inches
Drill Date: 9/1/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary

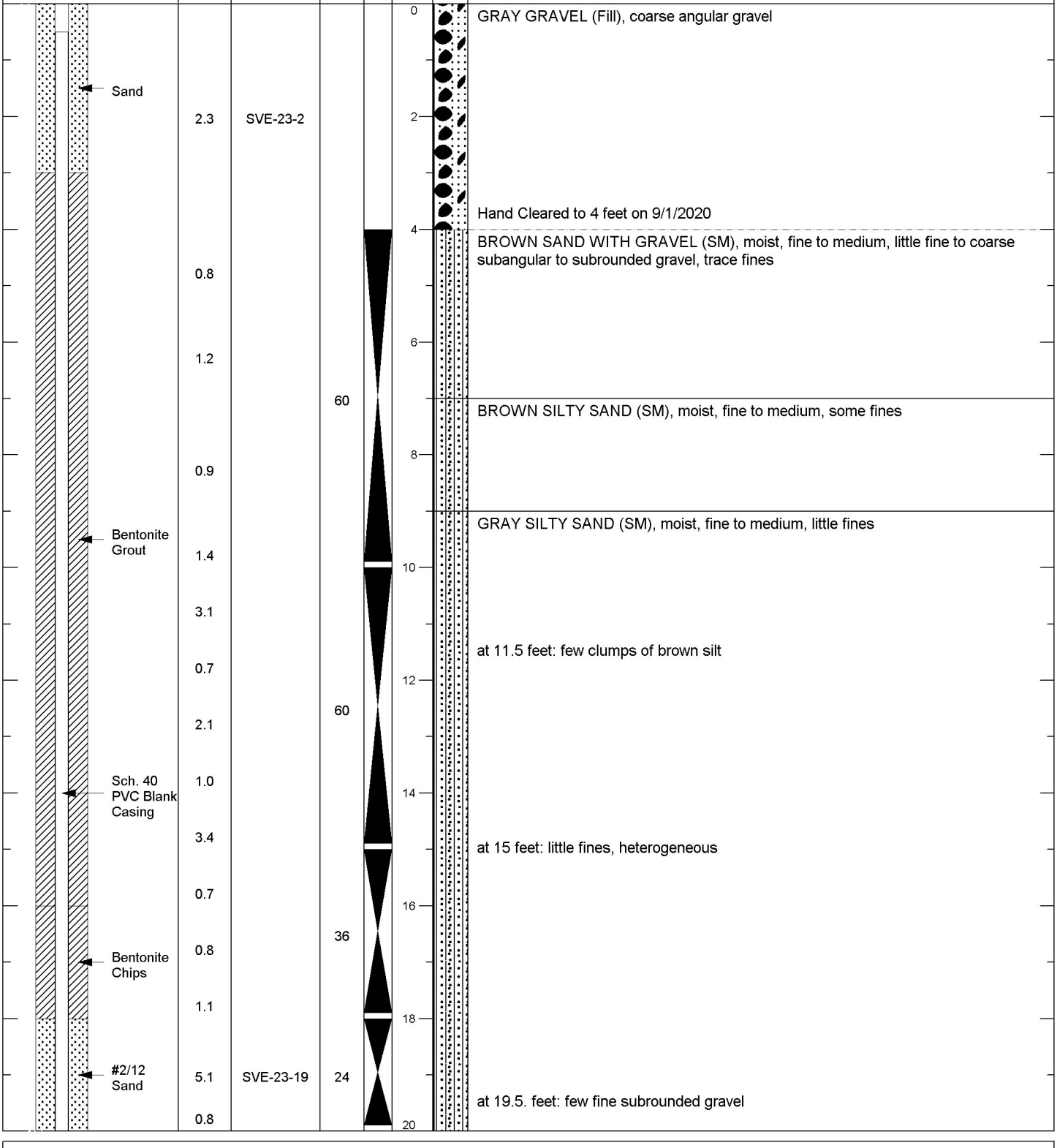
Boring Completion	PID (PPM)	Sample ID	Sample Recovery	Sample Interval	Depth (Feet)	Graphic Log	Lithologic Description
							Bottom of boring at 36 feet Well Completion Details: Well constructed with 4-inch Schedule 40 PVC pipe and a 0.020-inch machine slotted screen with #2/12 Silica Sand Total Well Depth: 36.0 feet Well Sump: 35.6 to 36.0 feet Well Screen: 20.6 to 35.6 feet Well Blank: 0.5 to 20.6 feet Filter Pack: 18 to 35 feet Well Seal: 16 to 18 feet (hydrated bentonite chips), 3 to 16 feet bentonite grout Surface Seal: 0 to 3 feet sand Well Monument: 12-inch flush mount monument to be set in concrete at a future date
					42		
					44		
					46		
					48		
					50		
					52		
					54		
					56		
					58		
					60		

Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 288

Total Drilled Depth: 35 feet
Diameter of Boring: 8-inches
Drill Date: 9/1/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary

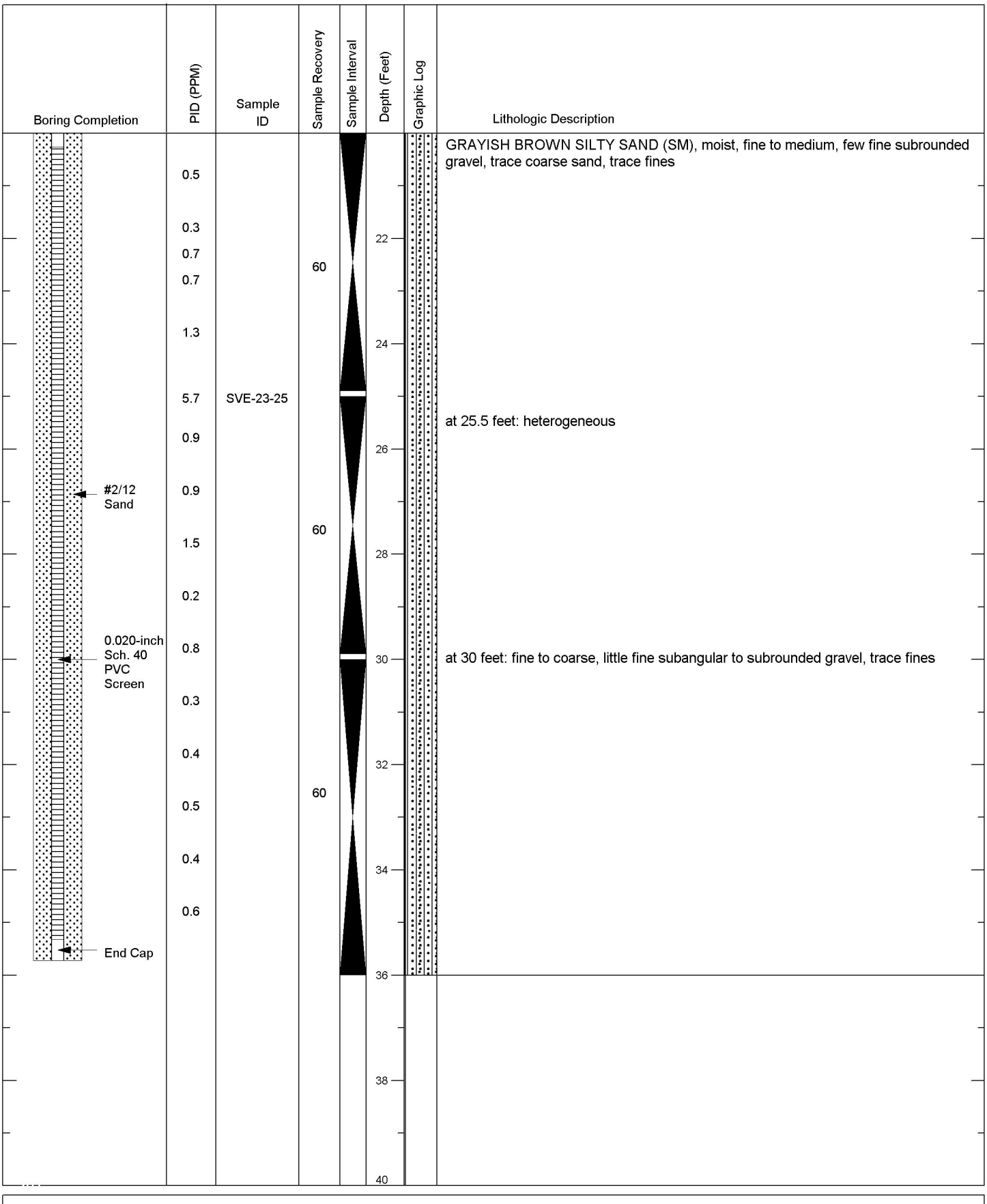
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Engineering & Environmental Services

LOG OF BORING: SVE-23



Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 289

Total Drilled Depth: 35.7 feet
Diameter of Boring: 8-inches
Drill Date: 9/1/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary



Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 289

Total Drilled Depth: 35.7 feet
Diameter of Boring: 8-inches
Drill Date: 9/1/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary

Boring Completion	PID (PPM)	Sample ID	Sample Recovery	Sample Interval	Depth (Feet)	Graphic Log	Lithologic Description
							Bottom of boring at 35.7 feet Well Completion Details: Well constructed with 4-inch Schedule 40 PVC pipe and a 0.020-inch machine slotted screen with #2/12 Silica Sand Total Well Depth: 35.7 feet Well Sump: 35.3 to 35.7 feet Well Screen: 20.3 to 35.3 feet Well Blank: 0.5 to 20.3 feet Filter Pack: 18 to 35 feet Well Seal: 16 to 18 feet (hydrated bentonite chips) 3 to 16 feet bentonite grout Surface Seal: 0 to 3 feet sand Well Monument: 12-inch flush mount monument to be set in concrete at future date
					42		
					44		
					46		
					48		
					50		
					52		
					54		
					56		
					58		
					60		

Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 289

Total Drilled Depth: 35.7 feet
Diameter of Boring: 8-inches
Drill Date: 9/1/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary

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LOG OF BORING: SVE-24

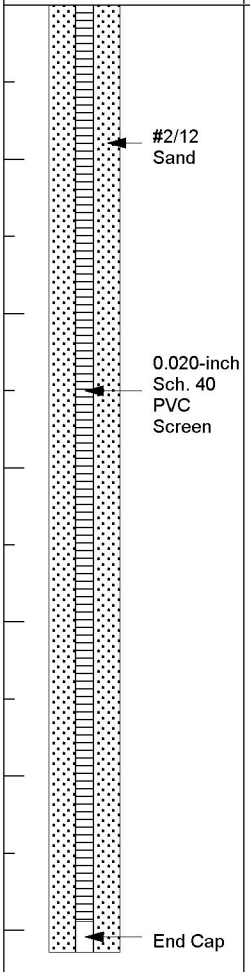
Boring Completion	PID (PPM)	Sample ID	Sample Recovery	Sample Interval	Depth (Feet)	Graphic Log	Lithologic Description
	2.5				0		BROWN SILTY SAND WITH GRAVEL (SM), moist, fine to medium sand, some fine to coarse subrounded gravel up to 4-inches diameter, little fines (Fill)
Sand							
	2.0				2		GRAVEL WITH SILT AND BROWN SAND (GP), moist, fine to coarse subrounded gravel, few fine sand (Fill)
		SVE-24-3					
	4.0						
	2.9		96		4		
Bentonite Grout	4.9				6		BLACKISH BROWN SILTY SAND (SM), moist, fine to medium, organic layer mixed in with soil for 6-inches
							BROWN SILTY SAND (SM), moist, fine to coarse
	18.3	SVE-24-8			8		
	0.6						at 8.5 feet: percent fines decreases,trace fine subrounded to subangular gravel
Bentonite Chips	1.8				10		at 10 feet: percent gravel decreases
	1.2		60				
Sch. 40 PVC Blank Casing	1.0				12		BROWN SILTY SAND (SM), moist, fine to coarse, sand clumps, little fines
	3.2						
	4.3						
	10.6	SVE-24-12					BROWN SILTY SAND (SM), moist, appears loose, fine to medium, little fines
	5.4	(SVE-24-12 taken from 13.5 feet)			14		
	1.5		60				
	0.7				16		
0.020-inch Sch. 40 PVC Screen	4.4						BROWN SILTY SAND (SM), moist, appears loose, fine to coarse sand, little fines, trace fine subrounded gravel
	2.8				18		
	0.5						
	0.1						BROWN SAND WITH SILT (SP), moist, fine to medium, few fines, heterogeneous sand grains
	0.8						
	0.6				20		

Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 290

Total Drilled Depth: 32.5 feet
Diameter of Boring: 8-inches
Drill Date: 9/1/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary

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LOG OF BORING: SVE-24



PID (PPM)	Sample ID	Sample Recovery	Depth (Feet)	Lithologic Description
0.1		48		
0.9				
0.5				
0.4			22	
2.1				
1.2		36		
1.2			24	
0.5				
0.7				
0.7			26	
1.2				
1.4			28	
0.8		60		
1.0			30	
1.3				at 30.5 feet: few fine subrounded to subangular gravel
0.9			32	
				Well drilled at 45-degree angle to surface All depths given as length along shaft from surface Bottom of boring at 32.5 feet (22.5 feet below surface grade) Well Completion Details: Well constructed with 4-inch Schedule 40 PVC pipe and a 0.020-inch machine slotted screen with #2/12 Silica Sand Total Well Depth: 32.3 feet Well Sump: 31.9 to 32.3 feet Well Screen: 14.5 to 31.9 feet Well Blank: 0.5 to 14.5 feet Filter Pack: 11.3 to 32 feet Well Seal: 8.5 to 11.3 feet (hydrated bentonite chips) 3 to 8.5 feet bentonite grout Surface Seal: 0 to 3 feet sand Well Monument: 12-inch flush mount monument to be set in concrete at a future date
			34	
			36	
			38	
			40	

Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 290

Total Drilled Depth: 32.5 feet
Diameter of Boring: 8-inches
Drill Date: 9/1/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary

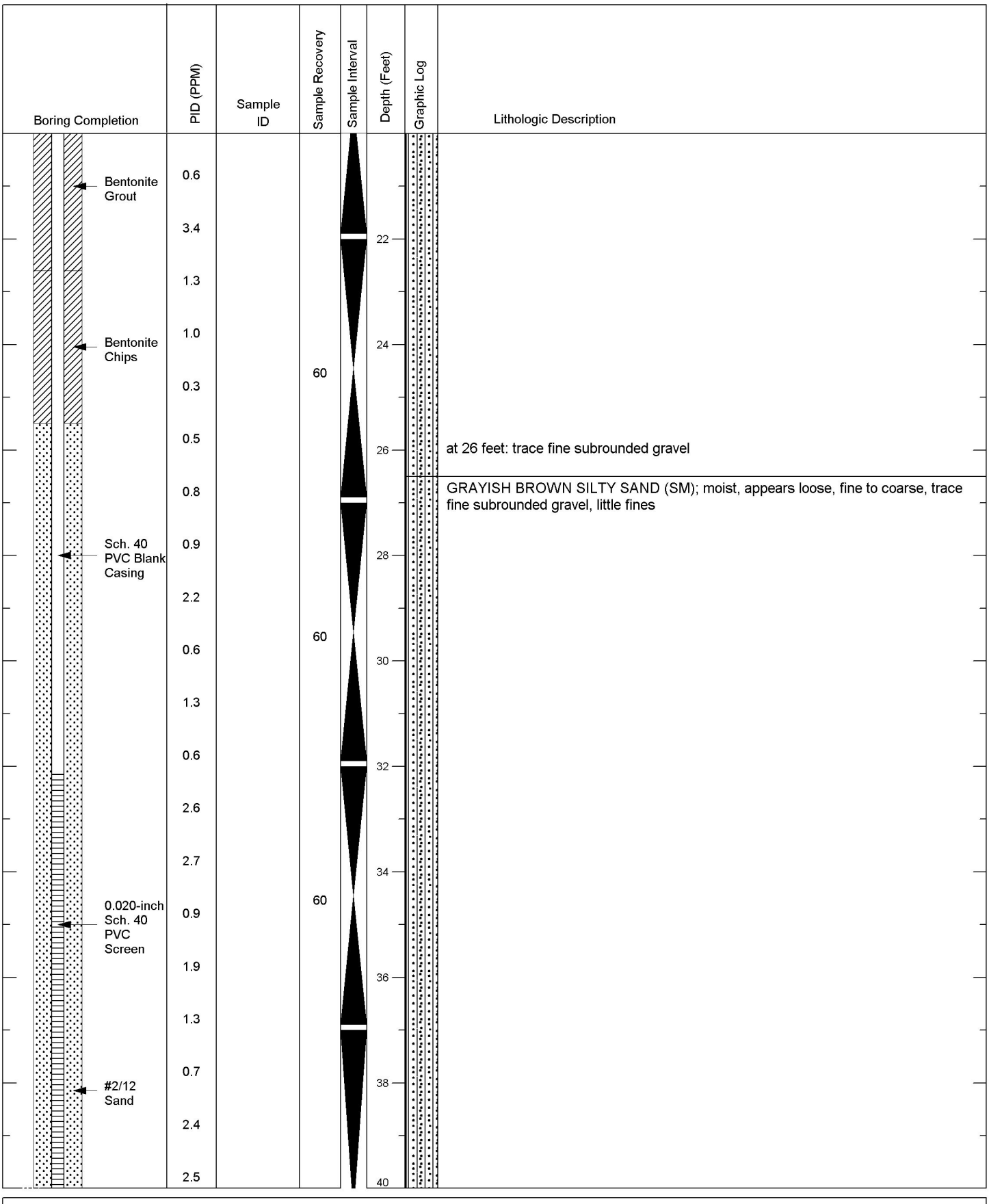
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LOG OF BORING: SVE-25

Boring Completion	PID (PPM)	Sample ID	Sample Recovery	Depth (Feet)	Lithologic Description
				0	GRAYISH BROWN SANDY GRAVEL (GP), moist, fine subrounded to subangular gravel, little fine to medium sand, trace fines
Sand	1.2	SVE-25-2		2	GRAYISH BROWN SILTY SAND (SM), moist, appears loose, fine to medium, little fines, trace fine subrounded to subangular gravel at 1.5 feet: no gravel
	1.6				
	1.4		12	4	Hand cleared to 4 feet on 9/1/2020
	0.8			6	
	1.1		60		
	0.9			8	
	0.8				GRAYISH BROWN SILTY SAND (SM), moist, appears medium dense, fine to medium, some fines
	0.1			10	GRAYISH BROWN SILTY SAND (SM), moist, appears loose, fine to medium, some fines
	4.5				GRAYISH BROWN SILTY SAND (SM), moist, little fines, few fine subrounded to subangular gravel, light odor
	12.7	SVE-25-11.5			
	5.5			12	GRAYISH BROWN SAND (SP); moist, appears loose, fine to medium, trace fines, odorless
	5.1				
Bentonite Grout	4.6		60		
	2.6			14	
	0.9				
	1.8			16	GRAYISH BROWN SAND WITH SILT (SP); moist, appears loose, fine to medium, few fine subrounded gravel, few fines
	0.7				at 17.5 feet: trace fine subrounded gravel
Sch. 40 PVC Blank Casing	0.4			18	GRAYISH BROWN SILTY SAND (SM); moist, appears loose, fine to medium sand, little fines
	1.5				
	1.7		60	20	

Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 285

Total Drilled Depth: 52 feet
Diameter of Boring: 8-inches
Drill Date: 9/2/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary

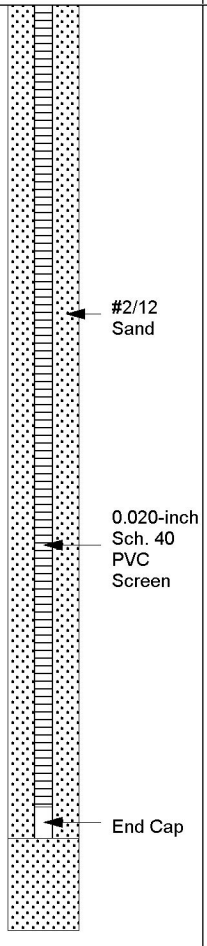


Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 285

Total Drilled Depth: 52 feet
Diameter of Boring: 8-inches
Drill Date: 9/2/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary

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LOG OF BORING: SVE-25



PID (PPM)	Sample ID	Sample Recovery	Depth (Feet)	Lithologic Description
1.3		60		
1.9			42	
3.0				GRAYISH BROWN SAND WITH GRAVEL (SP); moist, fine to coarse, little gravel, trace fines
7.5	SVE-25-43.5			
5.1			44	
1.0				at 45 feet: increasing coarse sand with depth
1.3			46	
2.1		60		
0.7			48	
1.9	SVE-25-49			
1.8			50	
		6		
			52	Well drilled at 45-degree angle to surface All depths given as length along shaft from surface Overdrilled to 52 ft Well Completion Details: Well constructed with 4-inch Schedule 40 PVC pipe and a 0.020-inch machine slotted screen with #2/12 Lapis Lustre Sand Total Well Depth: 50.8 feet Well Sump: 50.4 to 50.8 feet Well Screen: 32.14 to 50.4 feet Well Blank: 0.5 to 32.14 feet Filter Pack: 25.5 to 52 feet Well Seal: 22.6 to 25.5 feet (hydrated bentonite chips), 3 to 22.6 feet bentonite grout Surface Seal: 0 to 3 feet sand Well Monument: 12-inch flush mount monument to be set in concrete at a future date
			54	
			56	
			58	
			60	

Project: MVSC - Harris
Project Number: 1358.001.02.012
Site Location: Normandy Park
Logged By: Ben Hecht
Ecology Well Tag: BLZ 285

Total Drilled Depth: 52 feet
Diameter of Boring: 8-inches
Drill Date: 9/2/2020
Drilled By: Cascade Drilling
Drill Method: Sonic Rotary

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FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 9/17/20 Page: 1 of 1

Job Number: 1358.001.02.012

Project: MVSC

Project Manager: M. Dahl

Logged by: CSD

Contractor: Cascade

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

BORING NO: Ex-1

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (Inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
								COLOR, SOIL TYPE (SYMBOL) Munsell Number, Moisture, Consistency, Grain Size, Estimated Percentages (% gravel, % sand, % fines), Other (Angularity, Shape, Odor, Structure. Strength, Dilatancy, Toughness, Plasticity, etc.)
	1.9					1		0-0.8': Brown SILTY SAND (SM), moist, f-m, few c sand to 1.5'0, (10, 50, 40) (FILL)
@ Ex-1-1.5' 0845	1.9			48"		2		0.8-2.8': DARK BROWN SAND~~Y SILT (ML)~~, moist, f-m, some Brick, trace f sand SILTY SAND (SM), 0, 55, 45
	0.6					3		orange at top 3" Brown SAND/SILT (SP), moist, f few Coal (0, 90, 10)
Ex-1-4 0850	0.3					4		
						5		
						6		
						7		
						8		
						9		
						0		
						1		
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						0		

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FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 1/12/20 Page: 1 of 1

Job Number: 1358.001.02.012

Project: MUSL

Project Manager: M. Dahl

BORING NO: Ex-2

Logged by: CJD

Contractor: Cascade

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (Inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
						1		0-0.9': GRAY GRAVELLY SAND (SP), gravel FINE to coarse grained, 3"
Ex-2-1 0855	2.0			48"		2		0.9-1.9': Brown SAND (SM), moist, fine-grained, (10, 70, 15)
	1.6							
	0.6					3		DARK BROWN at top color grading to orange-brown then brown, 1.5-2.6" DARK Brown (SM) trace fine grained
	0.3							
Ex-2-4 0900	0.4					4		grades to LIGHT BROWN SAND (SP) (0, 80, 20) fine sand, non-plastic, dry (0, 30, 70)
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

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FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 9/17/18 Page: 1 of 1

Job Number: 1358.006.02.012

Project: MVSL

Project Manager: M. Dahl

Logged by: CJD

Contractor: Cascade

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

BORING NO: Ex-3

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (Inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
								COLOR, SOIL TYPE (SYMBOL) Munsell Number, Moisture, Consistency, Grain Size, Estimated Percentages (% gravel, % sand, % fines), Other (Angularity, Shape, Odor, Structure. Strength, Dilatancy, Toughness, Plasticity, etc.)
								See Ex-2 same except top unit is SILTY SAND (SM), dark to mid, F-C, F-C sa grand (30, 50, 20)
	1.7					1		
	3.0			48"		2		
	4.1							
						3		@ 3'
Ex-3-3	6.1							
0910	5.0					4		
Ex-3-4								
0915						5		
						6		
						7		
						8		
						9		
						0		
						1		
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						0		

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FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 9/17/20 Page: 1 of 1

Job Number: 1358.001.02.012

Project: MVSC

Project Manager: M. Dahl

BORING NO: Ex-4

Logged by: CJD

Contractor: Cascade

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
								COLOR, SOIL TYPE (SYMBOL) Munsell Number, Moisture, Consistency, Grain Size, Estimated Percentages (% gravel, % sand, % fines), Other (Angularity, Shape, Odor, Structure. Strength, Dilatancy, Toughness, Plasticity, etc.)
								0-0.5 GRAVEL ROAD SURFACE
	0.0					1		
	0.4							BROWN SILTY SAND w/ GRAVEL (SM), moist, f-c, f-c gravel (30, 50, 20)
				46"		2		DARK BROWN SILTY SAND (SM), moist, f-m, trace f gravel (5, 70, 25)
Ex-4-2 0935	0.8					3		BROWN/GRAY SILT (ML), dry, fm sandy, low-plasticity (0, 30, 70)
	0.7							
	0.8							
Ex-4-4 940	4.0					4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

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FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 9/13/20 Page: 1 of 1

Job Number: 1358.001.02.012

Project: MUSC

Project Manager: M. Dahl

Logged by: CJJ

Contractor: Cascade

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

BORING NO: Ex-5

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
								COLOR, SOIL TYPE (SYMBOL) Munsell Number, Moisture, Consistency, Grain Size, Estimated Percentages (% gravel, % sand, % fines), Other (Angularity, Shape, Odor, Structure. Strength, Dilatancy, Toughness, Plasticity, etc.)
	1.8					1		0-1.5': Dark Brown SILTY SAND w/GRAVEL (SM), moist, f-c
	1.8							f-c sand, (25 [illegible])
Ex-5-2 930	2.0			47"		2		
	1.4					3		
~~Ex-5-4~~ 0925	~~bM~~					4		
						5		
						6		
						7		
						8		
						9		
						0		
						1		
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						0		

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FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 9/17/20 Page: 1 of 1

Job Number: 1358.001.02.012

Project: MVSL

Project Manager: M. Dahl

BORING NO: Ex-6

Logged by: CJD

Contractor: Cascade

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (Inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
								COLOR, SOIL TYPE (SYMBOL) Munsell Number, Moisture, Consistency, Grain Size, Estimated Percentages (% gravel, % sand, % fines), Other (Angularity, Shape, Odor, Structure. Strength, Dilatancy, Toughness, Plasticity, etc.)
								GRAVEL 6"
	0.8					1		BROWN SAND w/SILT + GRAVEL (SP), moist, f-c gravel (20, 20, 10)
	0.8							1-1.7: DARK BROWN SILTY SAND (SM), moist, f-a gravel
	0.9					2		SANDY (5, 20, 25)
	1.1							BROWN SILT (ML), moist, f-m sand, (0, 35, 65)
Ex-6-3 0955	1.7			40"		3		
						4		
						5		
						6		
						7		
						8		
						9		
						0		
						1		
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						0		

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FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 9/17/20 Page: 1 of 1

Job Number: 1358.001.02.012

Project: MVSL

Project Manager: M. Dahl

Logged by: CJD

Contractor: Cascade

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

BORING NO: Ex-7

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (Inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
								COLOR, SOIL TYPE (SYMBOL) Munsell Number, Moisture, Consistency, Grain Size, Estimated Percentages (% gravel, % sand, % fines), Other (Angularity, Shape, Odor, Structure. Strength, Dilatancy, Toughness, Plasticity, etc.)
						1		see Ex-6 log (same)
	1.0							
	3.5					2		
Ex-7-2	3.6							
1005	3.2					3		
				44"				
	1.3					4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

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FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 1/17/20 Page: 1 of 1

Job Number: 1358.001.02.012

Project: MUSC

Project Manager: M. Dahl

Logged by: CJD

Contractor: Cascade

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

BORING NO: Ex-8

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (Inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
								COLOR, SOIL TYPE (SYMBOL) Munsell Number, Moisture, Consistency, Grain Size, Estimated Percentages (% gravel, % sand, % fines), Other (Angularity, Shape, Odor, Structure. Strength, Dilatancy, Toughness, Plasticity, etc.)
								See Ex-9 log
	0.7					1		
Ex-8-1.5	1.1							
1016	0.8					2		
	0.0							
	0.0			46"		3		
						4		
						5		
						6		
						7		
						8		
						9		
						0		
						1		
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						0		

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FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 9/7/20 Page: 1 of 1

Job Number: 1398.001.02.012

Project: MVSC

Project Manager: M. Dahl

BORING NO: Ex-9

Logged by: COD

Contractor: Cascade

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG
						1	
	0.0						
						2	
	0.0						
						3	
Ex-9-3 1025	0.0			58			
						4	
	0.0						
	0.0					5	
						6	
						7	
						8	
						9	
						0	
						1	
						2	
						3	
						4	
						5	
						6	
						7	
						8	
						9	
						0	

LITHOLOGIC DESCRIPTION

COLOR, SOIL TYPE (SYMBOL) Munsell Number, Moisture, Consistency, Grain Size, Estimated Percentages (% gravel, % sand, % fines), Other (Angularity, Shape, Odor, Structure, Strength, Dilatancy, Toughness, Plasticity, etc.)

DARK BROWN SILTY SAND (SM), moist, f-m roots, few f gravel (10 @ 30)

light BROWN SILTY SAND (SM), dry, f-m sand sa gravel (10, 55, 35) silt layer at top of unit.

LOGGED BY: EDITED BY:

PES Environmental, Inc.

FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 9/7/20 Page: 1 of 1

Job Number: 1358.001.02.012

Project: MUSC

Project Manager: M. Dahl

Logged by: CSD

Contractor: Cascade

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

BORING NO: Ex-10

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (Inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG
						1	
	0.0					2	
	0.0			60		3	
Ex-10-3	0.0					4	
1030						5	
	0.0					6	
						7	
						8	
						9	
						10	
						11	
						12	
						13	
						14	
						15	
						16	
						17	
						18	
						19	
						20	

LITHOLOGIC DESCRIPTION

COLOR, SOIL TYPE (SYMBOL) Munsell Number, Moisture, Consistency, Grain Size, Estimated Percentages (% gravel, % sand, % fines), Other (Angularity, Shape, Odor, Structure. Strength, Dilatancy, Toughness, Plasticity, etc.)

DARK BROWN SILTY SAND WGRAVEL (SM), moist, F-c, little f-c gravel, (15, 60, 25)

Light BROWN SANDY SILT (ML), moist, firm, low plasticity (0, 40, 60)

PES Environmental, Inc.

FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 9/17/20 Page: 1 of 1

Job Number: 1358.001.02.012

Project: MUSL

Project Manager: M. Dahl

Logged by: CJD

Contractor: Cascade

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

BORING NO: Ex-11

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (Inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG
	0.0						
						1	
	0.0						
						2	
Ex-11-3	0.0						
1115	0.0			33"		3	
	~~0.0~~						
						4	
						5	
						6	
						7	
						8	
						9	
						0	
						1	
						2	
						3	
						4	
						5	
						6	
						7	
						8	
						9	
						0	

LITHOLOGIC DESCRIPTION

COLOR, SOIL TYPE (SYMBOL) Munsell Number, Moisture, Consistency, Grain Size, Estimated Percentages (% gravel, % sand, % fines), Other (Angularity, Shape, Odor, Structure. Strength, Dilatancy, Toughness, Plasticity, etc.)

DARK BROWN SILTY SAND (SM), moist, ↑ f-c, few fragments
LT BROWN SANDY SILT (ML) moist, ↑, f-m, (10, 70, 20)
low to no plasticity (0, 20, 70)

rocks in bottom of bag

PES Environmental, Inc.

FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 9/17/18 Page: 1 of 1

Job Number: 1358.001.02.017

Project: MUSC

Project Manager: M. Dahl

Logged by: CJD

Contractor: Cascade

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

BORING NO: Ex-12

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (Inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
								COLOR, SOIL TYPE (SYMBOL) Munsell Number, Moisture, Consistency, Grain Size, Estimated Percentages (% gravel, % sand, % fines), Other (Angularity, Shape, Odor, Structure. Strength, Dilatancy, Toughness, Plasticity, etc.)
	0.0					1		DARK BROWN SILTY SAND (SM), moist, f-m, few fine gravel (10, 60, 30)
	0.1							0.6-1.8' BROWN SILTY SAND (SM), moist, f-m, few f-c gravel (5, 80, 15)
Ex-12-2	0.3			46"		2		
1110	0.0					3		LIGHT BROWN SANDY SILT (ML), moist, f-m, low-no plasticity (0, 30, 70) orange staining top
	0.0					4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		

PES Environmental, Inc.

FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 9/17/20 Page: 1 of 1

Job Number: 1358.001.02.012

Project: MVSL

Project Manager: M. Dahl

Logged by: GJ

Contractor: Cascade Drilling

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

BORING NO: Ex-13

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (Inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
	0.0							Same as Ex-14
						1		
	0.0							
						2		
Ex13-2	0.0							
1105	0.0			46"		3		
	0.0					4		
						5		
						6		
						7		
						8		
						9		
						0		
						1		
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						0		

PES Environmental, Inc.

FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 9-17-20 Page: 1 of 1

Job Number: 1358.001.02.012

Project: MVSC

Project Manager: M. Dahl

Logged by: COD

Contractor: Cascade

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

BORING NO: Ex-14

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (Inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
								COLOR, SOIL TYPE (SYMBOL) Munsell Number, Moisture, Consistency, Grain Size, Estimated Percentages (% gravel, % sand, % fines), Other (Angularity, Shape, Odor, Structure. Strength, Dilatancy, Toughness, Plasticity, etc.)
	0.0					1		DARK BROWN SILTY SAND w/GRAVEL (sm), moist, f-c, f-c sa-gr gravel, rocks (15, 60, 25)
	0.0					2		light BROWN SANDY SILT (ml), dry, f-m sand non to low plastic (0, 35, 65)
Ex-14-2	0.0			60				
1055						3		
	0.0							
						4		
						5		
						6		
						7		
						8		
						9		
						0		
						1		
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						0		

PES Environmental, Inc.

FIELD LITHOLOGIC LOG

LOCATION SKETCH SCALE 1' =

Date: 5/17/20 Page: 1 of 1

Job Number: 1358.001.02.012

Project: MUSC

Project Manager: M. Dahl

Logged by: CJD

Contractor: Cascade

Drilling Equipment:

Borehole Diameter:

Total Depth of Boring: / Backfill Method:

Sampling Method:

Surface Conditions:

Comments:

BORING NO: Ex-15

SAMPLE ID (Date/Time)	PID (PPM)	SOIL DRIVE INTERVAL	BLOWS /6INCHES	SAMPLE RECOVERED (Inches)	GW DEPTH	DEPTH (FEET)	GRAPHIC LOG
						1	
	0.0					2	
Ex-15-2 1050	0.1			48		3	
	0.0					4	
	0.1					5	
						6	
						7	
						8	
						9	
						0	
						1	
						2	
						3	
						4	
						5	
						6	
						7	
						8	
						9	
						0	

LITHOLOGIC DESCRIPTION

COLOR, SOIL TYPE (SYMBOL) Munsell Number, Moisture, Consistency, Grain Size, Estimated Percentages (% gravel, % sand, % fines), Other (Angularity, Shape, Odor, Structure, Strength, Dilatancy, Toughness, Plasticity, etc.)

Brown SILTY SAND (SM), moist, f-m, cemented gravel (5, 65, 30)

Light Brown SANDY SILT (ML), dry, f-m sand, (0, 30, 60)

@4.5' grades to 3" sandier strata

add' orange stains

0.5ft: 12in GRAY-Brown SILTY SAND (SM), dry, f-m, (0, 20, 80)

abundant orange stains

LOGGED BY: _____ EDITED BY: _____

ATTACHMENT C

WELL COMPLETION DETAILS AND HISTORICAL DATA

- Table C1 – Well Completion Details
- Table C2 – Historical Summary of Groundwater Elevations (1999-2021)
- Table C3 – Historical Summary of Groundwater Analytical Results (1999-2021)
- Table C4 – Historical Summary of Soil Analytical Results (1998 – 2021)
- Table C5 - Soil Vapor Results - March 11 and June 3, 2019
- Survey Data – March 19, 2021

Table C1
Well Completion and Boring Details
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Well	Ecology Well Tag Number	Date Installed	Drilling Method	Location (feet NAD 83/91) Northing	Location (feet NAD 83/91) Easting	Elevation (feet NAVD 88) Monitoring Point	Elevation (feet NAVD 88) Surface Casing Rim	Elevation (feet NAVD 88) Ground Surface	Survey Notes	29.80-39.80 Monument Type	Boring Depth (feet)	Well Diameter (inches)	Screen Depth (ft bgs) Below Ground	Screen Depth (ft bgs) Below Top of Casing	Slot Size (inch)	Filter Pack (ft bgs)	Seal (ft bgs)
Shallow Monitoring Wells																	
MW-1		12/9/99	HSA	165,180.1	1,268,830.5	310.63	310.89	310.81	SCS, 1999 (converted); PES 03/2021	Flush	44	2	34-44	--	0.020	est. 32-44	0-est. 32
MW-2		12/9/99	HSA	165,149.8	1,268,724.6	308.34	309.13	309.12	PES, 08/2015	Flush	43	2	33-43	32.22-42.22	0.020	est. 31-43	0-est. 31
MW-3		4/8/08	HSA	164,857.2	1,268,511.5	311.41	311.76	311.74	PES, 08/2015	Flush	47	2	36-46	35.67-45.67	0.010	34-46	0-34
MW-4		4/8/08	HSA	164,968.5	1,268,493.6	310.47	311.03	311.02	PES, 08/2015	Flush	44	2	34-44	33.45-43.45	0.010	32-44	0-32
MW-5		4/8/08	HSA	165,331.6	1,268,938.6	310.38	310.84	--	PES, 02/2013	Flush	46	2	36-46	35.6-45.6	0.010	34-46	0-34
MW-6		4/9/08	HSA	165,615.5	1,268,908.5	304.14	304.71	304.68	PES, 02/2013; PES, 08/2015	Flush	45	2	35-45	34.46-44.46	0.010	33-45	0-35
MW-7		4/9/08	HSA	165,652.2	1,268,684.8	302.64	303.18	303.17	PES, 02/2013; PES, 08/2015	Flush	45	2	35-45	34.47-44.47	0.010	33-45	0-35
MW-8		8/18/08	HSA	165,681.2	1,268,349.8	280.68	281.05	280.97	PES, 02/2013; PES, 08/2015	Flush	26	2	13-23	12.71-22.71	0.010	11-23	0-11
MW-9		8/18/08	HSA	166,019.8	1,268,663.9	284.97	285.35	285.37	PES, 02/2013; PES, 08/2015	Flush	55	2	32-42	31.6-41.6	0.010	30-42	0-30
MW-10		2/3/11	HSA	165,132.3	1,268,522.8	306.71	307.20	307.19	PES, 02/2013; PES, 08/2015	Flush	42	2	32-42	31.52-41.52	0.010	30-42	0-30
MW-11		2/3/11	HSA	165,122.2	1,268,582.9	307.62	308.13	308.06	PES, 02/2013; PES, 08/2015	Flush	42	2	32-42	31.56-41.56	0.010	30-42	0-30
MW-12		3/28/12	HSA	164,825.0	1,268,516.1	312.80	313.12	313.10	PES, 02/2013; PES, 08/2015	Flush	46.5	2	36-46	35.7-45.7	0.010	34-46.5	0-34
MW-13		3/29/12	HSA	165,036.5	1,268,459.8	308.75	309.16	309.17	PES, 02/2013; PES, 08/2015	Flush	46.5	2	35-45	34.58-44.58	0.010	33-45	0-33
MW-14		3/27/12	HSA	165,261.1	1,268,564.6	303.82	304.24	--	PES, 02/2013	Flush	38	2	28-38	27.6-37.6	0.010	26-38	0-26
MW-15		3/28/12	HSA	165,103.9	1,268,678.7	312.44	312.81	310.30	PES, 02/2013	AG	46.5	2	35-45	37.14-47.14	0.010	33-45.5	0-33
MW-16	BHV646	5/16/13	HSA	165,164.5	1,268,613.3	310.37	311.21	307.92	PES, 05/2013	AG	43	2	27.2-42.2	29.45-44.65	0.020	25-43	0-25
MW-17	BLI196	3/1/19	HSA	165,371.0	1,268,609.7	303.01	303.56	303.60	PES, 03/2019; PES, 10/2019	Flush	39.5	2	28.2-38.2	27.61-37.61	0.010	26-39.5	0-26
MW-18	BLI195	2/28/19	HSA	165,386.9	1,268,688.3	305.26	305.74	305.70	PES, 03/2019; PES, 10/2019	Flush	41.5	2	30.3-40.3	29.86-39.86	0.010	27.5-41.5	0-27.5
MW-20	BLK428	10/24/19	HSA	165,343.4	1,268,662.1	305.51	305.86	306.10	PES, 10/2019	Flush	46	2	30.0-45.0	29.41-44.41	0.010	28-46	0-28
DC-1		10/12/98	HSA	164,940.2	1,268,698.6	312.82	313.34	--	PES, 02/2013	Flush	47	2	40-45	39.5-44.5	0.020	37-47	0-37
DC-2		10/13/98	HSA	165,055.6	1,268,655.1	312.92	313.61	313.70	PES, 02/2013; PES, 08/2015	Flush	50	2	42-47	41.22-46.22	0.020	40-50	0-40
DC-3		10/13/98	HSA	165,056.4	1,268,607.7	313.11	313.68	313.79	PES, 02/2013; PES, 08/2015	Flush	48	2	43-48	42.32-47.32	0.020	41-48	0-41
DC-4		10/13/98	HSA	165,058.1	1,268,537.4	312.35	312.96	312.99	PES, 02/2013; PES, 08/2015	Flush	49	2	44-49	43.36-48.36	0.020	41-49	0-41
DC-6		1/22/99	HSA	--	--	308.46	--	--	SCS, 1999 (converted)	Flush	45	2	40-45	--	0.020	37-45	0-37
DC-7		1/18/99	HSA	165,318.1	1,268,514.4	302.61	303.30	303.26	PES, 02/2013; PES, 08/2015	Flush	40	2	35-40	34.35-39.35	0.020	33-40	0-33
DC-8		1/18/99	HSA	165,328.8	1,268,685.4	306.23	306.70	306.59	PES, 02/2013; PES, 08/2015	Flush	42	2	37-42	36.64-41.64	0.020	34-42	0-34
DC-9A		4/6/99	HSA	165,124.7	1,268,587.3	308.02	--	--	ERM, 08/2008	Flush	38	2	33-38	32.6-37.6	0.020	31-38	0-31
DC-10A		4/5/99	HSA	165,117.2	1,268,497.2	307.73	307.83	307.72	PES, 02/2013; PES, 08/2015	Flush	37	2	32-37	32.01-37.01	0.020	30-37	0-30
DC-11		4/19/07	HSA	165,078.5	1,268,816.1	311.25	311.66	--	PES, 02/2013	Flush	42	2	32-42	31.6-41.6	0.010	30-42	0-30
DC-12		4/18/07	HSA	165,179.8	1,268,852.1	311.22	311.81	311.73	PES, 02/2013; PES 03/2021	Flush	42	2	32-42	31.7-41.7	0.010	30-42	0-30
DC-13		4/19/07	HSA	165,208.9	1,268,827.2	310.20	310.52	--	PES, 02/2013	Flush	42	2	32-42	31.7-41.7	0.010	30-42	0-30
DC-14		4/17/07	HSA	165,355.0	1,268,812.6	308.94	309.49	--	PES, 02/2013	Flush	45	2	35-45	34.4-44.4	0.010	33-45	0-33
DC-15		4/16/07	HSA	165,267.1	1,268,705.9	307.89	308.20	--	PES, 02/2013	Flush	42	2	31-41	30.7-40.7	0.010	29-41	0-29
DC-17		4/16/07	HSA	165,194.2	1,268,528.6	305.16	305.58	305.35	PES, 05/2013	Flush	40	2	30-40	29.81-39.81	0.010	28-40	0-28
DC-18		4/18/07	HSA	165,197.1	1,268,765.0	309.51	309.95	309.93	PES, 02/2013; PES, 08/2015	Flush	42	2	32-42	31.58-41.58	0.010	30-42	0-30
DC-19		6/1/07	HSA	165,039.3	1,268,829.6	313.62	313.82	--	PES, 02/2013	Flush	47	2	37-47	36.8-46.8	0.010	35-47	0-35
DC-20		5/28/08	HSA	165,237.2	1,268,854.8	310.92	311.13	--	PES, 02/2013	Flush	44	2	34-44	33.8-43.8	0.020	32-44	0-32
KMW-1		7/25/05	HSA	165,245.9	1,268,892.6	311.59	311.82	--	PES, 02/2013; PES, 08/2015	Flush	52	2	37-52	36.8-51.8	0.010	34-52	0-34
KMW-2		5/1/06	HSA	165,111.7	1,268,531.0	307.04	307.27	307.13	PES, 02/2013; PES, 08/2015	Flush	50	6	30-40	29.91-39.91	0.010	8-40	0-8
KMW-3		5/1/06	HSA	165,357.4	1,268,462.5	296.99	297.77	297.70	Farallon, 05/2007; PES, 10/2019	Flush	40	2	25.18-35.18	24.47-34.47	0.010	8-35	0-8
KMW-4		3/28/07	HSA	165,175.7	1,268,369.8	299.57	299.84	299.78	Farallon, 05/2007; PES, 08/2015	Flush	34	2	24-34	23.79-33.79	0.020	22-34	0-22
KMW-5		3/28/07	HSA	165,267.7	1,268,380.4	297.22	297.58	297.56	Farallon, 05/2007; PES, 08/2015	Flush	34	2	24-34	23.66-33.66	0.020	22-34	0-22
KMW-6	APS-343	3/27/07	HSA	165,391.1	1,268,399.1	294.80	295.27	295.20	Farallon, 05/2007; PES, 08/2015; PES, 10/2019	Flush	42.5	2	26.18-41.18	25.78-40.78	0.020	22-41	0-22
KMW-7		3/25/07	HSA	165,389.7	1,268,563.6	301.42	302.02	302.00	Farallon, 05/2007; PES, 08/2015; PES, 10/2019	Flush	44	2	29.35-44.35	28.77-43.77	0.020	27-44	0-27

Table C1
Well Completion and Boring Details
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Well	Ecology Well Tag Number	Date Installed	Drilling Method	Location (feet NAD 83/91) Northing	Location (feet NAD 83/91) Easting	Elevation (feet NAVD 88) Monitoring Point	Elevation (feet NAVD 88) Surface Casing Rim	Elevation (feet NAVD 88) Ground Surface	Survey Notes	29.80-39.80 Monument Type	Boring Depth (feet)	Well Diameter (inches)	Screen Depth (ft bgs) Below Ground	Screen Depth (ft bgs) Below Top of Casing	Slot Size (inch)	Filter Pack (ft bgs)	Seal (ft bgs)
KMW-8	APS-341	3/26/07	HSA	165,386.2	1,268,800.7	308.16	308.73	308.70	Farallon, 05/2007; PES, 08/2015; PES, 10/2019	Flush	44	2	29.24-44.24	28.70-43.70	0.020	27-44	0-29
KMW-9		3/27/07	HSA	165,079.0	1,268,726.3	310.33	310.83	310.83	PES, 02/2013; PES, 08/2015	Flush	44	2	34-44	33.5-43.5	0.020	32-44	0-32
Deep Monitoring Wells																	
MW-19	BLK427	10/24/19	HSA	165,346.1	1,268,663.1	305.35	305.77	305.90	PES, 10/2019	Flush	55.5	2	43.9-53.9	43.35-53.35	0.010	42-55	0-42
DC-5		1/22/99	HSA	165,166.5	1,268,526.9	306.03	306.28	306.24	PES, 02/2013; PES, 08/2015	Flush	58.5	2	41-46	40.79-45.79	0.020	39-47	0-39
DC-9B		4/5/99	HSA	165,122.8	1,268,589.4	308.16	--	--	ERM, 08/2008	Flush	60	2	53-58	--	0.020	50.5-58	0-50.5
DC-10B		4/6/99	HSA	165,120.4	1,268,497.5	307.80	308.29	307.89	PES, 02/2013; PES, 08/2015	Flush	56	2	45-50	44.91-49.91	0.020	43-50	0-43
DC-16		4/18/07	HSA	165,169.7	1,268,611.5	307.12	307.79	--	Farallon, 05/2007; PES, 02/2013	Flush	61.5	2	50-60	49.3-59.3	0.010	50-60	0-50
KMW-5D		3/28/07	HSA	165,276.5	1,268,382.0	297.04	297.35	297.32	Farallon, 05/2007; PES, 08/2015	Flush	46	2	41-46	40.72-45.72	0.020	41-46	0-41
Former SCS Soil Vapor Extraction Wells (1999)																	
VES-1 (B1)		1999	--	--	--	--	--	--	PES, 02/2013; PES, 08/2015	Flush	11.5	2	3-11	--	0.020	2.5-11.5	1.5-2.5
VES-2A		1999	--	--	--	--	--	--	PES, 02/2013; PES, 08/2015	Flush	6.5	2	3-6	--	0.020	2.5-6.5	1.5-2.5
VES-2B		1999	--	--	--	--	--	--	PES, 02/2013	Flush	36	2	11.5-35.5	--	0.020	7.5-36	1.5-2.5/6.5-7.5
VES-3 (BH-15)		1999	--	--	--	--	--	--	PES, 02/2013	Flush	6.5	2	3-6	--	0.020	2.5-6.5	1.5-2.5
VES-4 (BH-16)		1999	--	--	--	--	--	--	PES, 02/2013	Flush	6.5	2	3-6	--	0.020	2.5-6.5	1.5-2.5
VES-5 (BH-17)		1999	--	--	--	--	--	--	PES, 02/2013	Flush	6.5	2	3-6	--	0.010	2.5-6.5	1.5-2.5
VES-6A (BH-1)		1999	--	--	--	--	--	--	PES, 02/2013	Flush	6.5	2	3-6	--	0.020	2.5-6.5	1.5-2.5
VES-6B (BH-1)		1999	--	--	--	--	--	--	PES, 02/2013	Flush	36	2	11.5-35.5	--	0.020	7.5-36	1.5-2.5/6.5-7.5
VES-7		1999	--	--	--	--	--	--	PES, 02/2013	Flush	6.5	2	3-6	--	0.020	2.5-6.5	1.5-2.5
Soil Vapor Extraction Wells																	
SVE-1		6/29/09	HSA	164,943.5	1,268,516.2	311.85	312.02	--	PES, 02/2013; PES, 08/2015	Flush	35.5	2	10-35	9.7-34.7	0.020	8-35.5	0-8
SVE-2		6/29/09	HSA	165,000.3	1,268,522.6	312.41	312.58	--	PES, 02/2013; PES, 08/2015	Flush	35.5	2	10-35	9.6-34.6	0.020	8-35.5	0-8
SVE-3		6/30/09	HSA	165,070.2	1,268,536.4	308.28	--	307.84	PES, 02/2013	Flush	30.5	2	10-30	10.44-30.44	0.020	8-30.5	0-8
SVE-4		6/30/09	HSA	165,069.1	1,268,589.2	308.90	--	308.31	PES, 02/2013	Flush	30.5	2	10-30	10.59-30.59	0.020	8-30.5	0-8
SVE-5		6/30/09	HSA	165,068.8	1,268,655.3	309.91	--	309.31	PES, 02/2013	Flush	30.5	2	10-30	10.6-30.6	0.020	8-30.5	0-8
SVE-6		6/26/09	AKVAC	165,057.5	1,268,693.4	313.03	313.57	--	PES, 02/2013	Flush	10	2	5-10	4.6-9.6	0.010	4-10	0-4
SVE-7		6/30/09	HSA	165,077.5	1,268,704.6	310.71	--	309.95	PES, 02/2013	Flush	30.5	2	10-30	10.76-30.76	0.020	8-30.5	0-8
SVE-8		6/30/09	HSA	165,085.8	1,268,738.3	311.48	--	310.56	PES, 02/2013	Flush	30.5	2	10-30	10.92-30.92	0.020	8-30.5	0-8
SVE-9		6/29/09	HSA	165,060.0	1,268,819.5	313.31	--	312.13	PES, 02/2013	Flush	30.5	2	10-30	11.18-31.18	0.020	8-30.5	0-8
SVE-10		6/30/09	HSA	165,187.7	1,268,841.1	310.69	311.20	311.09	PES, 02/2013; PES 03/2021	Flush	30.5	2	10-30	9.8-29.8	0.020	8-30.5	0-8
SVE-11A	BIE307	11/18/13	HSA	164,824.5	1,268,484.7	--	311.21	--	PES, 08/2015	Flush	20	4	5-19.98	4.6-19.58	0.020	3-20	0-3
SVE-11B	BIE301	11/18/13	HSA	164,831.2	1,268,492.0	--	311.43	--	PES, 08/2015	Flush	57	4	20-35	19.6-34.6	0.020	18-36	0-18
SVE-12A	BIE303	11/19/13	HSA	164,851.6	1,268,512.2	--	312.06	--	PES, 08/2015	Flush	20	4	5-19.98	4.6-19.58	0.020	3-20	0-3
SVE-12B	BIE304	11/20/13	HSA	164,853.8	1,268,506.7	--	311.52	--	PES, 08/2015	Flush	57	4	20-35	19.6-34.6	0.020	18-36	0-18
SVE-13A	BIE306	11/22/13	HSA	164,912.3	1,268,505.4	--	310.95	--	PES, 08/2015	Flush	20	4	5-19.98	4.6-19.58	0.020	3-20	0-3
SVE-13B	BIE305	11/21/13	HSA	164,903.3	1,268,505.6	--	310.99	--	PES, 08/2015	Flush	57.5	4	20-35	19.6-34.6	0.020	18-36	0-18
SVE-14	BID732	10/13/14	HSA	164,945.9	1,268,498.5	--	311.06	--	PES, 08/2015	Flush	36	4	19.63-34.63	19.23-34.23	0.020	18.3-36	3-18.3
SVE-15	BID736	10/15/14	HSA	165,000.5	1,268,503.7	--	311.30	--	PES, 08/2015	Flush	36	4	20.61-34.96	20.21-34.56	0.020	19.3-36	3.5-19.3
SVE-16	BID737	10/15/14	HSA	165,035.5	1,268,501.1	--	310.83	--	PES, 08/2015	Flush	36	4	20.49-34.79	20.09-34.39	0.020	18-36	3.5-18
SVE-17	BID709	9/24/14	HSA	165,071.8	1,268,503.4	--	308.39	--	PES, 08/2015	Flush	31	4	19.91-29.91	19.51-29.51	0.020	18-31	3.3-18
SVE-18	BID708	9/23/14	HSA	165,107.0	1,268,504.1	--	307.34	--	PES, 08/2015	Flush	31	4	19.79-29.79	19.39-29.39	0.020	17.9-31	16-17.9
SVE-19	BID715	9/29/14	HSA	165,091.9	1,268,579.7	--	308.53	--	PES, 08/2015	Flush	31	4	19.99-29.99	19.59-29.59	0.020	18-31	3.5-18

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Normandy Park, Washington

Well	Ecology Well Tag Number	Date Installed	Drilling Method	Location (feet NAD 83/91) Northing	Location (feet NAD 83/91) Easting	Elevation (feet NAVD 88) Monitoring Point	Elevation (feet NAVD 88) Surface Casing Rim	Elevation (feet NAVD 88) Ground Surface	Survey Notes	29.80-39.80 Monument Type	Boring Depth (feet)	Well Diameter (inches)	Screen Depth (ft bgs) Below Ground	Screen Depth (ft bgs) Below Top of Casing	Slot Size (inch)	Filter Pack (ft bgs)	Seal (ft bgs)
SVE-20	BLZ 286	8/30/21	HSA	165,057.7	1,268,696.8	313.02	313.37	313.42	PES, 03/2021	Flush	30	4	10.3-25.4	9.9-25	0.020	8-25	3-8
SVE-21	BLZ 287	8/30/21	HSA	165,057.2	1,268,703.5	313.04	313.47	313.51	PES, 03/2021	Flush	38	4	25.7-37.7	25.3-37.3	0.020	23-38	3-23
SVE-22	BLZ 288	9/1/21	HSA	165,085.5	1,268,715.6	309.90	310.27	310.20	PES, 03/2021	Flush	36	4	20.6-35.6	20.2-35.2	0.020	18-36	3-18
SVE-23	BLZ 289	9/1/21	HSA	165,180.7	1,268,839.9	310.71	311.22	311.16	PES, 03/2021	Flush	35.7	4	20.3-35.3	19.9-34.9	0.020	18-36	3-18
SVE-24	BLZ 290	9/1/21	HSA	165,175.9	1,268,862.8	312.20	312.53	312.50	PES, 03/2021	Flush	23	4	10.3-22.6	9.9-22.2	0.020	8-23	3-8
SVE-25	BLZ 285	9/2/21	HSA	165,164.6	1,268,852.0	311.32	311.86	311.77	PES, 03/2021	Flush	36.9	4	22.8-35.7	22.4-35.3	0.020	18-37	3-18
Vapor Monitoring Probes																	
VMP-1 (B-5)		3/26/08	DP	164,828.0	1,268,482.4	310.91	311.01	--	PES, 02/2013; PES, 08/2015	Flush	30	0.75	10-15	9.7-14.7	0.010	7-30	0-7
VMP-2 (B-7)		3/25/08	DP	164,964.6	1,268,493.8	310.97	311.04	--	PES, 02/2013; PES, 08/2015	Flush	30	0.75	10-15	9.8-14.8	0.010	7-30	0-7
VMP-3 (B-9)		3/25/08	DP	165,028.4	1,268,497.6	310.58	310.71	--	PES, 02/2013	Flush	30	0.75	10-15	9.9-14.9	0.010	7-30	0-7
VMP-4 (B-11)		3/27/08	DP	165,079.0	1,268,533.8	307.67	308.00	--	PES, 02/2013	Flush	30	0.75	10-15	9.7-14.7	0.010	7-30	0-7
VMP-5 (B-12)		3/27/08	DP	165,083.7	1,268,602.8	308.22	308.48	--	PES, 02/2013	Flush	25	0.75	10-15	9.7-14.7	0.010	7-25	0-7
VMP-6 (B-13)		3/27/08	DP	165,071.2	1,268,674.9	308.95	309.18	--	PES, 02/2013	Flush	26	0.75	10-15	9.8-14.8	0.010	7-26	0-7
Recirculation Well																	
TW-1		5/2/06	HSA	165,114.8	1,268,571.3	--	--	--	PES, 02/2013	AG	50	6	25-35/45-50	--	0.010	22-35/40-	0-22/35-40
Pilot Test Injection Well																	
IW-1		--	--	--	--	--	--	--	--	AG	38	--	--	--	--	--	--
Air Sparging Wells																	
AS-1	BHV647	5/17/13	HSA	165,116.9	1,268,511.0	--	307.23	307.34	PES, 05/2013; PES, 08/2015	Flush	48	1	43.8-45.8	43.4-45.4	0.010	43.5-48	0-43.5
AS-2	BID714	9/29/14	HSA	165,093.2	1,268,557.0	--	308.30	--	PES, 08/2015	Flush	53	2	48.08-51.13	47.68-50.73	0.020	48-53	3.0-48
AS-3	BID718	10/1/14	HSA	165,091.7	1,268,574.0	--	308.44	--	PES, 08/2015	Flush	51	2	48.14-50.14	47.74-49.74	0.020	46-51	3.6-46
AS-4	BID717	9/30/14	HSA	165,073.3	1,268,590.4	--	308.25	--	PES, 08/2015	Flush	51	2	48.82-50.80	48.42-50.4	0.020	47.3-51	3.3-47.3
AS-5	BID716	9/30/14	HSA	165,073.7	1,268,566.0	--	307.97	--	PES, 08/2015	Flush	52	2	48.77-50.79	48.37-50.39	0.020	47.5-52	3.5-47.5
AS-6	BID713	9/26/14	HSA	165,073.2	1,268,541.5	--	307.89	--	PES, 08/2015	Flush	52	2	48.91-50.92	48.51-50.52	0.020	47.6-52	3.5-47.6
AS-7	BID710	9/24/14	HSA	165,080.3	1,268,521.9	--	308.01	--	PES, 08/2015	Flush	50.5	2	46.93-48.91	46.53-48.51	0.020	46-50.5	3.5-43
AS-8	BID740	10/17/14	HSA	165,058.0	1,268,525.1	--	312.52	--	PES, 08/2015	Flush	54	2	52.10-54.14	51.7-53.74	0.020	51-54.31	3.5-51
AS-9	BID739	10/16/14	HSA	165,029.5	1,268,522.9	--	312.52	--	PES, 08/2015	Flush	54	2	51.09-53.11	50.69-52.71	0.020	50-54	4-50
AS-10	BID733	10/14/14	HSA	165,004.5	1,268,521.9	--	312.52	--	PES, 08/2015	Flush	56	2	52.78-54.80	52.38-54.4	0.020	52-56	3.9-52
AS-11	BID731	10/13/14	HSA	164,976.2	1,268,521.3	--	312.57	--	PES, 08/2015	Flush	54.5	2	52.27-54.27	51.87-53.87	0.020	50.51-54.5	3-50.5
AS-12	BID729	10/10/14	HSA	164,948.4	1,268,520.9	--	312.34	--	PES, 08/2015	Flush	54.24	2	52.06-54.07	51.66-53.67	0.020	50.7-54.24	3.5-50.7
AS-13	BID728	10/9/14	HSA	164,920.9	1,268,520.2	--	311.72	--	PES, 08/2015	Flush	54	2	51.64-53.67	51.24-53.27	0.020	50.7-54	3.5-50.7
AS-14	BID726	10/8/14	HSA	164,891.0	1,268,520.2	--	311.93	--	PES, 08/2015	Flush	54.09	2	51.88-53.92	51.48-53.52	0.020	50.9-54.09	3.3-50.09
AS-15	BID723	10/6/14	HSA	164,865.7	1,268,520.3	--	312.35	--	PES, 08/2015	Flush	54	2	50.89-52.87	50.49-52.47	0.020	50-54	3.5-50
AS-16	BID724	10/7/14	HSA	164,841.0	1,268,511.9	--	312.37	--	PES, 08/2015	Flush	54	2	51.89-53.97	51.49-53.57	0.020	51-54.04	3.3-51
AS-17	BID721	10/3/14	HSA	164,821.9	1,268,488.3	--	311.44	--	PES, 08/2015	Flush	54.02	2	51.87-53.85	51.47-53.45	0.020	50.5-54.02	3.3-50.5
AS-18	BID719	10/2/14	HSA	164,810.9	1,268,465.6	--	310.51	--	PES, 08/2015	Flush	54.5	2	50.37-52.35	49.97-51.95	0.020	49.5-54.5	3.6-49.5
AS-19	BID720	10/3/14	HSA	164,834.5	1,268,474.4	--	310.67	--	PES, 08/2015	Flush	54.08	2	51.94-53.91	51.54-53.51	0.020	50.7-54.08	3.0-54.08
AS-20	BID722	10/6/14	HSA	164,852.1	1,268,491.4	--	311.00	--	PES, 08/2015	Flush	54	2	50.96-52.94	50.56-52.54	0.020	49.6-54	3.5-49.6
AS-21	BID725	10/7/14	HSA	164,879.0	1,268,495.8	--	310.98	--	PES, 08/2015	Flush	55	2	51.92-53.92	51.52-53.52	0.020	50.7-55	3.5-50.7
AS-22	BID727	10/8/14	HSA	164,907.4	1,268,496.1	--	310.72	--	PES, 08/2015	Flush	55	2	52.38-54.40	51.98-54	0.020	51.5-55	3.5-51.5
AS-23	BID730	10/10/14	HSA	164,935.3	1,268,497.1	--	310.88	--	PES, 08/2015	Flush	55	2	52.72-54.76	52.32-54.36	0.020	52-55	3.7-55
AS-24	BID734	10/14/14	HSA	164,963.7	1,268,494.9	--	311.08	--	PES, 08/2015	Flush	55	2	52.68-54.74	52.28-54.34	0.020	52-55	3.5-52
AS-25	BID735	10/15/14	HSA	164,993.3	1,268,503.1	--	311.33	--	PES, 08/2015	Flush	56	2	53.35-55.36	52.95-54.96	0.020	51.9-56	3.5-51.9
AS-26	BID738	10/16/14	HSA	165,018.0	1,268,497.2	--	310.75	--	PES, 08/2015	Flush	55.5	2	53.10-54.14	52.7-53.74	0.020	52-55.5	4-52
AS-27	BID741	10/17/14	HSA	165,047.3	1,268,497.3	--	310.99	--	PES, 08/2015	Flush	55.5	2	53.10-55.14	52.7-54.74	0.020	52-55.5	4-52
AS-28	BID706	9/22/14	HSA	165,077.4	1,268,498.9	--	308.11	--	PES, 08/2015	Flush	50.5	2	47.94-49.88	47.54-49.48	0.020	47.5-50.5	3.5-47.5

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Well	Ecology Well Tag Number	Date Installed	Drilling Method	Location (feet NAD 83/91) Northing	Location (feet NAD 83/91) Easting	Elevation (feet NAVD 88) Monitoring Point	Elevation (feet NAVD 88) Surface Casing Rim	Elevation (feet NAVD 88) Ground Surface	Survey Notes	29.80-39.80 Monument Type	Boring Depth (feet)	Well Diameter (inches)	Screen Depth (ft bgs) Below Ground	Screen Depth (ft bgs) Below Top of Casing	Slot Size (inch)	Filter Pack (ft bgs)	Seal (ft bgs)
AS-29	BID707	9/23/14	HSA	165,098.0	1,268,498.4	--	307.74	--	PES, 08/2015	Flush	51	2	48.10-50.08	47.7-49.68	0.020	47-51	3.3-47
AS-30	BID711	9/25/14	HSA	165,100.2	1,268,516.2	--	307.36	--	PES, 08/2015	Flush	52	2	48.24-50.24	47.84-49.84	0.020	46.8-52	3.8-46.8
AS-31	BID712	9/26/14	HSA	165,098.2	1,268,535.6	--	308.10	--	PES, 08/2015	Flush	52.5	2	48.86-50.89	48.46-50.49	0.020	47.6-52.5	3.5-47.6
Supplemental Investigation Borings																	
SB-10	--	4/16/18	DP	164,837.8	1,268,523.0	--	--	313.30	PES, 05/2018	--	11	2.25	--	--	--	--	--
SB-11	--	4/16/18	DP	164,831.3	1,268,470.8	--	--	310.59	PES, 05/2018	--	15	2.25	--	--	--	--	--
SB-12	--	4/16/18	DP	164,812.7	1,268,480.9	--	--	311.18	PES, 05/2018	--	11	2.25	--	--	--	--	--
SB-13	--	4/16/18	DP	165,056.3	1,268,696.8	--	--	313.34	PES, 05/2018	--	29	2.25	--	--	--	--	--
SB-13A	--	4/25/18	DP	165,055.2	1,268,697.2	--	--	313.38	PES, 05/2018	--	33	2.25	--	--	--	--	--
SB-13B	--	4/25/18	DP	165,067.3	1,268,697.4	--	--	309.32	PES, 05/2018	--	40	2.25	--	--	--	--	--
SB-14	--	4/16/18	DP	165,056.3	1,268,717.0	--	--	313.60	PES, 05/2018	--	31.5	2.25	--	--	--	--	--
SB-14A	--	4/25/18	DP	165,056.2	1,268,717.8	--	--	313.60	PES, 05/2018	--	40	2.25	--	--	--	--	--
SB-15	--	4/17/18	DP	165,078.3	1,268,721.7	--	--	310.28	PES, 05/2018	--	40	2.25	--	--	--	--	--
SB-16	--	4/17/18	DP	165,172.1	1,268,822.2	--	--	310.61	PES, 05/2018	--	40	2.25	--	--	--	--	--
SB-17	--	4/18/18	DP	165,175.7	1,268,798.0	--	--	310.03	PES, 05/2018	--	40	2.25	--	--	--	--	--
SB-18	--	4/18/18	DP	165,201.4	1,268,799.7	--	--	309.93	PES, 05/2018	--	40	2.25	--	--	--	--	--
SB-19	--	4/19/18	DP	165,132.6	1,268,649.4	--	--	308.76	PES, 05/2018	--	40	2.25	36-40	--	0.004	--	--
SB-20	--	4/19/18	DP	165,154.5	1,268,680.2	--	--	309.00	PES, 05/2018	--	40	2.25	36-40	--	0.004	--	--
SB-21	--	4/19/18	DP	165,187.4	1,268,742.4	--	--	309.65	PES, 05/2018	--	40	2.25	36-40	--	0.004	--	--
SB-22	--	4/20/18	DP	165,173.0	1,268,709.8	--	--	309.07	PES, 05/2018	--	40	2.25	36-40	--	0.004	--	--
SB-23	--	4/20/18	DP	165,109.3	1,268,725.1	--	--	309.76	PES, 05/2018	--	40	2.25	36-40	--	0.004	--	--
SB-24	--	4/23/18	DP	165,113.2	1,268,695.3	--	--	310.24	PES, 05/2018	--	40	2.25	36-40	--	0.004	--	--
SB-25	--	4/23/18	DP	165,107.6	1,268,755.1	--	--	310.27	PES, 05/2018	--	40	2.25	36-40	--	0.004	--	--
SB-26	--	4/24/18	DP	165,177.8	1,268,857.4	--	--	312.30	PES, 05/2018	--	40	2.25	--	--	--	--	--
SB-27	--	4/24/18	DP	165,166.7	1,268,856.4	--	--	311.62	PES, 05/2018	--	40	2.25	--	--	--	--	--
SB-28	--	4/24/18	DP	165,209.6	1,268,850.2	--	--	310.94	PES, 05/2018	--	40	2.25	--	--	--	--	--
SB-29	--	4/24/18	DP	165,116.8	1,268,669.9	--	--	309.39	PES, 05/2018	--	40	2.25	36-40	--	0.004	--	--
SB-30	--	4/25/18	DP	165,196.5	1,268,529.1	--	--	304.82	PES, 05/2018	--	40	2.25	--	--	--	--	--
Soil Vapor Sampling Probes																	
SVS-10	--	11/5/03	HA	--	--	--	--	--	--	Flush	1.0	1.0	0.96-1.00	--	Mesh	0.5-1.0	0-0.5
SVS-11	--	4/16/18	HA	--	--	--	--	--	--	Flush	1.3	0.63	1.27-1.30	--	Mesh	0.5-1.0	0-0.5
SVS-12	--	4/16/18	HA	--	--	--	--	--	--	Flush	1.3	0.63	1.27-1.30	--	Mesh	0.5-1.0	0-0.5
SVS-13	--	4/16/18	HA	--	--	--	--	--	--	Flush	1.2	0.63	1.27-1.30	--	Mesh	0.5-1.0	0-0.5
SVS-14	--	4/25/18	HA	--	--	--	--	--	--	Flush	1.3	0.63	1.27-1.30	--	Mesh	0.5-1.0	0-0.5
SVS-15	--	4/25/18	HA	--	--	--	--	--	--	Flush	1.3	0.63	1.27-1.30	--	Mesh	0.5-1.0	0-0.5
SVS-16	--	4/25/18	HA	--	--	--	--	--	--	Flush	1.3	0.63	1.27-1.30	--	Mesh	0.5-1.0	0-0.5
SVS-17	--	4/16/18	HA	--	--	--	--	--	--	Flush	5.0	2.25	4.5-5.0	--	Mesh	4-5	0-4

Table C1
Well Completion and Boring Details
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Well	Ecology Well Tag Number	Date Installed	Drilling Method	Location (feet NAD 83/91) Northing	Location (feet NAD 83/91) Easting	Elevation (feet NAVD 88) Monitoring Point	Elevation (feet NAVD 88) Surface Casing Rim	Elevation (feet NAVD 88) Ground Surface	Survey Notes	29.80-39.80 Monument Type	Boring Depth (feet)	Well Diameter (inches)	Screen Depth (ft bgs) Below Ground	Screen Depth (ft bgs) Below Top of Casing	Slot Size (inch)	Filter Pack (ft bgs)	Seal (ft bgs)

Notes:
1. Northing and easting in feet relative to the Washington State Plane System North Zone (NAD 83/91)
2. Elevations in feet relative to the North American Vertical Datum (NAVD 88)
3. Monitoring point = top of the PVC well casing
4. All depths shown in feet below ground surface (ft bgs)
5. All wells completed with Schedule 40 PVC with the exception of AS-1 (Schdedule 80 PVC)
6. Drilling methods include hollow stem auger (HSA), direct push (DP), vacuum truck with air knife (AKVAC), and hand augered (HA)
7. '-- = not documented or unknown
8. Surface elevations for the direct push borings represents ground surface adjacent to the boring
9. Screened intervals are documented on boring logs and are typically based on a field measurements relative to ground surface at the time of drilling. Screened intervals relative to top of casing are estimated using well field construction measurements, surveyed top of casing elevations, surveyed ground surface elevations, and in some cases surveyed monument rim elevations. If ground or rim elevations are not surveyed, then top of casing is assumed to be 0.4 ft depth.
10. Monitoring wells MW-1, DC-6, DC-9A, DC-9B are missing or destroyed. The 1999 SCS VES wells have been decommissioned.
11. Temporary well screens consisting of Geoprobe SP22 stainless steel slotted tooling were deployed in direct push borings SB-19 through SB-25 and SB-29.
12. Soil vapor sampling probe screens are constructed of fine metal mesh.
13. Soil vapor extraction wells SVE-24 and SVE-25 were installed at a 45 degree angle. The wells were cut off 4 feet below ground surface and the casings extended vertically. Depth intervals have been converted from length along the boring by dividing by 1.41.

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
MW-1	12/10/1999	309.97	37.44	272.53
MW-1	2/9/2005	309.97	39.52	270.45
MW-1	4/11/2006	309.97	37.78	272.19
MW-1	10/26/2006	309.97	39.22	270.75
MW-1	4/24/2007	309.97	36.61	273.36
MW-1	8/21/2008	309.97	37.32	272.65
MW-2	12/10/1999	307.69	35.60	272.09
MW-2	11/5/2010	307.69	37.03	270.66
MW-2	2/11/2011	307.69	35.81	271.88
MW-2	5/30/2011	307.69	34.40	273.29
MW-2	7/19/2011	307.69	34.71	272.98
MW-2	10/17/2011	307.69	35.80	271.89
MW-2	4/2/2012	307.69	36.11	271.58
MW-2	5/28/2013	308.56	35.73	272.83
MW-2	4/14/2014	308.56	36.17	272.39
MW-2	10/21/2014	308.34	36.48	271.86
MW-2	12/11/2015	308.34	36.89	271.45
MW-2	12/13/2016	308.34	36.09	272.25
MW-2	3/13/2017	308.34	34.93	273.41
MW-2	7/17/2017	308.34	33.97	274.37
MW-2	10/20/2017	308.34	35.45	272.89
MW-2	1/24/2018	308.34	35.61	272.73
MW-2	4/17/2018	308.34	34.93	273.41
MW-2	7/18/2018	308.34	35.12	273.22
MW-2	10/15/2018	308.34	36.26	272.08
MW-2	10/24/2019	308.34	37.20	271.14
MW-2	12/7/2021	308.34	37.05	271.29
MW-3	8/21/2008	311.49	39.77	271.72
MW-3	11/5/2010	311.49	39.43	272.06
MW-3	2/11/2011	311.49	38.10	273.39
MW-3	5/30/2011	311.49	36.66	274.83
MW-3	7/19/2011	311.49	37.03	274.46
MW-3	10/17/2011	311.49	38.18	273.31
MW-3	4/2/2012	311.49	38.39	273.10
MW-3	5/28/2013	311.62	38.09	273.53
MW-3	10/21/2014	311.41	38.91	272.50
MW-3	12/9/2015	311.41	39.28	272.13
MW-3	12/13/2016	311.41	38.44	272.97
MW-3	3/13/2017	311.41	37.09	274.32
MW-3	7/17/2017	311.41	36.21	275.20
MW-3	10/20/2017	311.41	37.61	273.80
MW-3	1/24/2018	311.41	37.73	273.68
MW-3	4/17/2018	311.41	37.24	274.17
MW-3	7/18/2018	311.41	37.52	273.89
MW-3	10/15/2018	311.41	38.68	272.73
MW-3	10/24/2019	311.41	39.68	271.73

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
MW-3	12/7/2021	311.41	39.34	272.07
MW-4	11/5/2010	310.54	38.74	271.80
MW-4	2/11/2011	310.54	37.41	273.13
MW-4	5/30/2011	310.54	35.99	274.55
MW-4	7/19/2011	310.54	36.37	274.17
MW-4	10/17/2011	310.54	37.50	273.04
MW-4	4/2/2012	310.54	37.67	272.87
MW-4	5/28/2013	310.68	37.40	273.28
MW-4	10/21/2014	310.47	38.13	272.34
MW-4	12/9/2015	310.47	38.60	271.87
MW-4	12/13/2016	310.47	37.36	273.11
MW-4	3/13/2017	310.47	36.42	274.05
MW-4	7/17/2017	310.47	35.59	274.88
MW-4	10/20/2017	310.47	37.17	273.30
MW-4	1/24/2018	310.47	37.04	273.43
MW-4	4/17/2018	310.47	36.59	273.88
MW-4	7/18/2018	310.47	36.86	273.61
MW-4	10/15/2018	310.47	38.01	272.46
MW-4	10/24/2019	310.47	39.00	271.47
MW-4	12/7/2021	310.47	38.84	271.63
MW-5	8/21/2008	310.28	39.96	270.32
MW-5	11/5/2010	310.28	39.73	270.55
MW-5	2/11/2011	310.28	38.60	271.68
MW-5	5/30/2011	310.28	37.24	273.04
MW-5	7/19/2011	310.28	37.51	272.77
MW-5	10/17/2011	310.28	38.54	271.74
MW-5	4/2/2012	310.28	38.90	271.38
MW-5	10/21/2014	310.38	39.17	271.21
MW-5	12/9/2015	310.38	39.69	270.69
MW-5	12/13/2016	310.38	38.80	271.58
MW-5	3/13/2017	310.38	37.80	272.58
MW-5	7/17/2017	310.38	36.80	273.58
MW-5	10/20/2017	310.38	38.17	272.21
MW-5	1/24/2018	310.38	38.60	271.78
MW-5	4/17/2018	310.38	37.71	272.67
MW-5	7/18/2018	310.38	37.89	272.49
MW-5	10/15/2018	310.38	38.92	271.46
MW-5	10/24/2019	310.38	39.85	270.53
MW-6	8/21/2008	304.27	37.46	266.81
MW-6	11/5/2010	304.27	37.25	267.02
MW-6	2/11/2011	304.27	36.30	267.97
MW-6	5/30/2011	304.27	35.50	268.77
MW-6	7/19/2011	304.27	35.38	268.89
MW-6	10/17/2011	304.27	36.24	268.03
MW-6	4/2/2012	304.27	36.53	267.74

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
MW-6	10/21/2014	304.14	37.79	266.35
MW-6	12/9/2015	304.14	37.22	266.92
MW-6	12/13/2016	304.14	36.49	267.65
MW-6	3/13/2017	304.14	35.68	268.46
MW-6	7/17/2017	304.14	34.79	269.35
MW-6	10/20/2017	304.14	38.24	265.90
MW-6	1/24/2018	304.14	36.08	268.06
MW-6	4/17/2018	304.14	35.61	268.53
MW-6	7/18/2018	304.14	35.71	268.43
MW-6	10/15/2018	304.14	36.58	267.56
MW-6	10/25/2019	304.14	37.37	266.77
MW-7	8/21/2008	302.76	39.00	263.76
MW-7	11/5/2010	302.76	38.74	264.02
MW-7	2/11/2011	302.76	37.61	265.15
MW-7	5/30/2011	302.76	36.09	266.67
MW-7	7/19/2011	302.76	36.43	266.33
MW-7	10/17/2011	302.76	37.43	265.33
MW-7	4/2/2012	302.76	37.52	265.24
MW-7	5/28/2013	302.76	37.48	265.28
MW-7	10/30/2014	302.64	35.80	266.84
MW-7	12/9/2015	302.64	38.75	263.89
MW-7	12/13/2016	302.64	37.79	264.85
MW-7	3/13/2017	302.64	36.79	265.85
MW-7	7/17/2017	302.64	35.75	266.89
MW-7	10/20/2017	302.64	37.16	265.48
MW-7	1/24/2018	302.64	37.33	265.31
MW-7	4/17/2018	302.64	36.79	265.85
MW-7	7/18/2018	302.64	37.00	265.64
MW-7	10/23/2018	302.64	38.15	264.49
MW-7	10/25/2019	302.64	39.04	263.60
MW-7	12/7/2021	302.64	38.78	263.86
MW-8	8/21/2008	280.08	12.78	267.30
MW-8	2/11/2011	280.08	11.11	268.97
MW-8	5/30/2011	280.08	10.20	269.88
MW-8	7/19/2011	280.08	10.66	269.42
MW-8	10/17/2011	280.08	11.52	268.56
MW-8	4/2/2012	280.08	11.09	268.99
MW-8	10/21/2014	280.68	12.12	268.56
MW-8	12/9/2015	280.68	11.81	268.87
MW-8	12/13/2016	280.68	11.40	269.28
MW-8	3/13/2017	280.68	10.30	270.38
MW-8	7/17/2017	280.68	10.26	270.42
MW-8	10/20/2017	280.68	10.25	270.43
MW-8	1/24/2018	280.68	10.80	269.88
MW-8	4/17/2018	280.68	10.50	270.18
MW-8	7/18/2018	280.68	11.22	269.46

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
MW-8	10/16/2018	280.68	12.09	268.59
MW-8	10/25/2019	280.68	12.74	267.94
MW-9	8/21/2008	285.11	32.24	252.87
MW-9	11/5/2010	285.11	31.98	253.13
MW-9	2/11/2011	285.11	30.93	254.18
MW-9	5/30/2011	285.11	29.76	255.35
MW-9	7/19/2011	285.11	30.12	254.99
MW-9	10/17/2011	285.11	31.04	254.07
MW-9	4/2/2012	285.11	31.05	254.06
MW-9	10/21/2014	284.97	31.68	253.29
MW-9	12/9/2015	284.97	32.06	252.91
MW-9	12/13/2016	284.97	31.24	253.73
MW-9	3/13/2017	284.97	30.20	254.77
MW-9	7/17/2017	284.97	29.59	255.38
MW-9	10/20/2017	284.97	30.75	254.22
MW-9	1/24/2018	284.97	30.84	254.13
MW-9	4/17/2018	284.97	30.43	254.54
MW-9	7/18/2018	284.97	30.60	254.37
MW-9	10/16/2018	284.97	31.40	253.57
MW-9	10/25/2019	284.97	32.22	252.75
MW-9	12/7/2021	284.97	32.11	252.86
MW-10	2/11/2011	306.70	34.04	272.66
MW-10	5/30/2011	306.70	32.69	274.01
MW-10	7/19/2011	306.70	33.05	273.65
MW-10	10/17/2011	306.70	34.13	272.57
MW-10	4/2/2012	306.70	34.31	272.39
MW-10	5/28/2013	306.91	34.03	272.88
MW-10	10/21/2014	306.71	34.81	271.90
MW-10	12/9/2015	306.71	35.22	271.49
MW-10	12/13/2016	306.71	34.41	272.30
MW-10	3/13/2017	306.71	33.15	273.56
MW-10	7/17/2017	306.71	32.34	274.37
MW-10	10/20/2017	306.71	33.82	272.89
MW-10	1/24/2018	306.71	33.82	272.89
MW-10	4/17/2018	306.71	33.30	273.41
MW-10	7/18/2018	306.71	33.55	273.16
MW-10	10/15/2018	306.71	34.66	272.05
MW-10	5/21/2019	306.71	34.62	272.09
MW-10	10/24/2019	306.71	35.62	271.09
MW-10	12/7/2021	306.71	35.32	271.39
MW-11	2/11/2011	307.63	35.01	272.62
MW-11	5/30/2011	307.63	33.63	274.00
MW-11	7/19/2011	307.63	33.97	273.66
MW-11	10/17/2011	307.63	35.05	272.58
MW-11	4/2/2012	307.63	35.29	272.34

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
MW-11	5/28/2013	307.85	34.98	272.87
MW-11	10/21/2014	307.62	35.78	271.84
MW-11	12/9/2015	307.62	36.16	271.46
MW-11	12/13/2016	307.62	35.33	272.29
MW-11	3/13/2017	307.62	34.11	273.51
MW-11	7/17/2017	307.62	33.25	274.37
MW-11	10/20/2017	307.62	34.74	272.88
MW-11	1/24/2018	307.62	34.77	272.85
MW-11	4/17/2018	307.62	34.21	273.41
MW-11	7/18/2018	307.62	34.45	273.17
MW-11	10/19/2018	307.62	35.61	272.01
MW-11	5/21/2019	307.62	35.55	272.07
MW-11	10/24/2019	307.62	36.53	271.09
MW-11	12/7/2021	307.62	36.27	271.35
MW-12	4/2/2012	312.92	39.69	273.23
MW-12	5/28/2013	312.95	39.40	273.55
MW-12	10/21/2014	312.80	40.20	272.60
MW-12	12/9/2015	312.80	40.59	272.21
MW-12	12/13/2016	312.80	39.70	273.10
MW-12	3/13/2017	312.80	38.39	274.41
MW-12	7/17/2017	312.80	37.47	275.33
MW-12	10/20/2017	312.80	39.01	273.79
MW-12	1/24/2018	312.80	39.01	273.79
MW-12	4/17/2018	312.80	38.49	274.31
MW-12	7/18/2018	312.80	38.75	274.05
MW-12	10/15/2018	312.80	39.94	272.86
MW-12	10/24/2019	312.80	40.96	271.84
MW-13	4/2/2012	308.88	36.04	272.84
MW-13	5/28/2013	308.90	35.82	273.08
MW-13	10/21/2014	308.75	36.66	272.09
MW-13	12/9/2015	308.75	37.00	271.75
MW-13	12/13/2016	308.75	36.13	272.62
MW-13	3/13/2017	308.75	34.78	273.97
MW-13	7/17/2017	308.75	33.99	274.76
MW-13	10/20/2017	308.75	35.45	273.30
MW-13	1/24/2018	308.75	35.45	273.30
MW-13	4/17/2018	308.75	34.98	273.77
MW-13	7/18/2018	308.75	35.24	273.51
MW-13	10/15/2018	308.75	36.40	272.35
MW-13	10/24/2019	308.75	38.40	270.35
MW-14	4/2/2012	303.78	31.84	271.94
MW-14	5/28/2013	303.82	31.57	272.25
MW-14	10/21/2014	303.82	32.34	271.48
MW-14	12/11/2015	303.82	32.65	271.17
MW-14	12/13/2016	303.82	31.90	271.92

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
MW-14	3/13/2017	303.82	30.73	273.09
MW-14	7/17/2017	303.82	29.94	273.88
MW-14	10/20/2017	303.82	31.36	272.46
MW-14	1/24/2018	303.82	31.33	272.49
MW-14	4/17/2018	303.82	30.84	272.98
MW-14	10/15/2018	303.82	32.14	271.68
MW-14	10/24/2019	303.82	33.08	270.74
MW-15	4/2/2012	312.40	39.92	272.48
MW-15	5/28/2013	312.44	39.55	272.89
MW-15	4/14/2014	312.44	39.97	272.47
MW-15	10/21/2014	312.44	40.31	272.13
MW-15	12/9/2015	312.44	40.77	271.67
MW-15	12/13/2016	312.44	39.90	272.54
MW-15	3/13/2017	312.44	38.72	273.72
MW-15	7/17/2017	312.44	37.77	274.67
MW-15	10/20/2017	312.44	39.25	273.19
MW-15	1/24/2018	312.44	39.31	273.13
MW-15	4/17/2018	312.44	38.75	273.69
MW-15	7/18/2018	312.44	38.99	273.45
MW-15	10/15/2018	312.44	40.08	272.36
MW-15	10/24/2019	312.44	41.05	271.39
MW-16	5/28/2013	310.37	37.78	272.59
MW-16	10/21/2014	310.37	38.52	271.85
MW-16	12/9/2015	310.37	38.96	271.41
MW-16	12/13/2016	310.37	38.12	272.25
MW-16	3/13/2017	310.37	36.92	273.45
MW-16	7/17/2017	310.37	36.04	274.33
MW-16	10/20/2017	310.37	37.50	272.87
MW-16	1/24/2018	310.37	37.53	272.84
MW-16	4/17/2018	310.37	36.99	273.38
MW-16	7/18/2018	310.37	37.20	273.17
MW-16	10/15/2018	310.37	38.31	272.06
MW-16	10/24/2019	310.37	39.20	271.17
MW-17	3/6/2019	303.00	32.33	270.67
MW-17	10/24/2019	303.01	33.10	269.91
MW-17	6/3/2020	303.01	31.88	271.13
MW-17	12/10/2021	303.01	32.78	270.23
MW-18	3/6/2019	305.26	34.55	270.71
MW-18	10/24/2019	305.26	35.25	270.01
MW-18	12/10/2021	305.26	35.01	270.25
MW-19	10/24/2019	305.35	35.09	270.26
MW-19	12/4/2019	305.35	35.36	269.99

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
MW-20	10/24/2019	305.51	35.22	270.29
MW-20	12/4/2019	305.51	35.49	270.02
MW-20	6/3/2020	305.51	34.02	271.49
MW-20	12/8/2021	305.51	34.98	270.53
DC-1	11/14/2000	312.46	40.29	272.17
DC-1	3/6/2001	312.46	41.11	271.35
DC-1	6/20/2001	312.46	41.46	271.00
DC-1	9/17/2001	312.46	41.78	270.68
DC-1	12/20/2001	312.46	41.43	271.03
DC-1	3/13/2002	312.46	39.75	272.71
DC-1	9/17/2002	312.46	39.75	272.71
DC-1	12/10/2002	312.46	40.69	271.77
DC-1	3/31/2003	312.46	40.33	272.13
DC-1	9/3/2003	312.46	40.69	271.77
DC-1	3/16/2004	312.46	39.77	272.69
DC-1	9/7/2004	312.46	40.57	271.89
DC-1	2/9/2005	312.46	41.31	271.15
DC-1	4/24/2007	312.46	38.29	274.17
DC-1	8/21/2008	312.72	40.93	271.79
DC-1	11/5/2010	312.72	40.64	272.08
DC-1	2/11/2011	312.72	39.37	273.35
DC-1	5/30/2011	312.72	37.91	274.81
DC-1	7/19/2011	312.72	38.21	274.51
DC-1	10/17/2011	312.72	39.37	273.35
DC-1	4/2/2012	312.72	39.72	273.00
DC-1	5/28/2013	312.82	39.30	273.52
DC-1	10/21/2014	312.82	40.05	272.77
DC-1	12/9/2015	312.82	40.51	272.31
DC-1	12/13/2016	312.82	39.63	273.19
DC-1	3/13/2017	312.82	38.46	274.36
DC-1	7/17/2017	312.82	37.40	275.42
DC-1	10/20/2017	312.82	39.26	273.56
DC-1	1/24/2018	312.82	39.02	273.80
DC-1	4/17/2018	312.82	38.43	274.39
DC-1	10/15/2018	312.82	39.80	273.02
DC-1	10/24/2019	312.82	40.84	271.98
DC-2	2/3/1999	312.80	39.04	273.76
DC-2	4/16/1999	312.80	36.90	275.90
DC-2	12/8/1999	312.80	39.88	272.92
DC-2	4/26/2000	312.80	39.11	273.69
DC-2	8/3/2000	312.80	39.85	272.95
DC-2	11/14/2000	312.80	41.04	271.76
DC-2	3/6/2001	312.80	41.82	270.98
DC-2	6/20/2001	312.80	42.18	270.62
DC-2	9/17/2001	312.80	42.50	270.30
DC-2	12/20/2001	312.80	42.12	270.68

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
DC-2	3/13/2002	312.80	40.45	272.35
DC-2	6/13/2002	312.80	39.64	273.16
DC-2	9/17/2002	312.80	40.50	272.30
DC-2	12/10/2002	312.80	41.42	271.38
DC-2	3/31/2003	312.80	41.03	271.77
DC-2	9/3/2003	312.80	41.41	271.39
DC-2	3/16/2004	312.80	40.51	272.29
DC-2	9/7/2004	312.80	41.30	271.50
DC-2	2/9/2005	312.80	41.99	270.81
DC-2	4/24/2007	312.80	39.03	273.77
DC-2	8/21/2008	313.04	41.65	271.39
DC-2	11/5/2010	313.04	41.34	271.70
DC-2	2/11/2011	313.04	40.08	272.96
DC-2	5/30/2011	313.04	38.67	274.37
DC-2	7/19/2011	313.04	38.98	274.06
DC-2	10/17/2011	313.04	40.08	272.96
DC-2	4/2/2012	313.04	40.41	272.63
DC-2	10/21/2014	312.92	40.78	272.14
DC-2	12/9/2015	312.92	41.22	271.70
DC-2	12/13/2016	312.92	40.36	272.56
DC-2	3/13/2017	312.92	39.19	273.73
DC-2	7/17/2017	312.92	38.20	274.72
DC-2	10/20/2017	312.92	39.71	273.21
DC-2	1/24/2018	312.92	39.76	273.16
DC-2	4/17/2018	312.92	39.20	273.72
DC-2	7/18/2018	312.92	39.42	273.50
DC-2	10/15/2018	312.92	40.53	272.39
DC-2	10/24/2019	312.92	41.53	271.39
DC-3	10/21/1998	312.98	39.68	273.30
DC-3	2/3/1999	312.98	39.22	273.76
DC-3	4/16/1999	312.98	37.13	275.85
DC-3	12/8/1999	312.98	40.10	272.88
DC-3	4/26/2000	312.98	39.33	273.65
DC-3	8/3/2000	312.98	40.08	272.90
DC-3	11/14/2000	312.98	41.27	271.71
DC-3	3/6/2001	312.98	42.05	270.93
DC-3	6/20/2001	312.98	42.37	270.61
DC-3	9/17/2001	312.98	42.73	270.25
DC-3	12/20/2001	312.98	42.30	270.68
DC-3	3/13/2002	312.98	40.66	272.32
DC-3	6/13/2002	312.98	39.87	273.11
DC-3	9/17/2002	312.98	40.75	272.23
DC-3	12/10/2002	312.98	41.65	271.33
DC-3	3/31/2003	312.98	41.25	271.73
DC-3	9/3/2003	312.98	41.65	271.33
DC-3	3/16/2004	312.98	40.71	272.27
DC-3	9/7/2004	312.98	41.54	271.44

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
DC-3	2/9/2005	312.98	42.21	270.77
DC-3	4/24/2007	312.98	39.26	273.72
DC-3	8/21/2008	313.23	41.89	271.34
DC-3	11/5/2010	313.23	41.58	271.65
DC-3	2/11/2011	313.23	40.30	272.93
DC-3	5/30/2011	313.23	38.89	274.34
DC-3	7/19/2011	313.23	39.22	274.01
DC-3	10/17/2011	313.23	40.34	272.89
DC-3	4/2/2012	313.23	40.62	272.61
DC-3	10/21/2014	313.11	41.07	272.04
DC-3	12/9/2015	313.11	41.47	271.64
DC-3	12/13/2016	313.11	40.59	272.52
DC-3	3/13/2017	313.11	39.39	273.72
DC-3	7/17/2017	313.11	38.44	274.67
DC-3	10/20/2017	313.11	39.94	273.17
DC-3	1/24/2018	313.11	39.98	273.13
DC-3	4/17/2018	313.11	39.47	273.64
DC-3	7/18/2018	313.11	39.67	273.44
DC-3	10/15/2018	313.11	40.80	272.31
DC-3	10/24/2019	313.11	41.78	271.33
DC-4	10/21/1998	312.20	39.96	272.24
DC-4	2/3/1999	312.20	38.37	273.83
DC-4	4/16/1999	312.20	36.34	275.86
DC-4	12/8/1999	312.20	39.32	272.88
DC-4	4/26/2000	312.20	38.55	273.65
DC-4	8/3/2000	312.20	39.33	272.87
DC-4	11/14/2000	312.20	40.52	271.68
DC-4	3/6/2001	312.20	41.29	270.91
DC-4	6/20/2001	312.20	41.60	270.60
DC-4	9/17/2001	312.20	41.89	270.31
DC-4	12/20/2001	312.20	41.49	270.71
DC-4	3/13/2002	312.20	39.86	272.34
DC-4	6/13/2002	312.20	39.11	273.09
DC-4	9/17/2002	312.20	40.00	272.20
DC-4	12/10/2002	312.20	40.92	271.28
DC-4	3/31/2003	312.20	40.44	271.76
DC-4	9/3/2003	312.20	40.88	271.32
DC-4	3/16/2004	312.20	39.94	272.26
DC-4	9/7/2004	312.20	40.81	271.39
DC-4	2/9/2005	312.20	41.42	270.78
DC-4	4/24/2007	312.20	38.50	273.70
DC-4	8/21/2008	312.12	41.13	270.99
DC-4	11/5/2010	312.12	40.81	271.31
DC-4	2/11/2011	312.12	39.51	272.61
DC-4	5/30/2011	312.12	38.13	273.99
DC-4	7/19/2011	312.12	38.48	273.64
DC-4	10/17/2011	312.12	39.57	272.55

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
DC-4	4/2/2012	312.12	38.82	273.30
DC-4	5/28/2013	312.56	39.50	273.06
DC-4	10/21/2014	312.35	40.34	272.01
DC-4	12/9/2015	312.35	40.34	272.01
DC-4	12/13/2016	312.35	39.84	272.51
DC-4	3/13/2017	312.35	38.59	273.76
DC-4	7/17/2017	312.35	37.70	274.65
DC-4	10/20/2017	312.35	39.50	272.85
DC-4	1/24/2018	312.35	39.21	273.14
DC-4	4/18/2018	312.35	38.61	273.74
DC-4	7/18/2018	312.35	38.95	273.40
DC-4	10/15/2018	312.35	40.16	272.19
DC-4	10/24/2019	312.35	41.05	271.30
DC-4	12/7/2021	312.35	40.76	271.59
DC-5	2/3/1999	305.86	32.48	273.38
DC-5	4/16/1999	305.86	30.46	275.40
DC-5	4/11/2006	305.86	33.74	272.12
DC-5	4/24/2007	306.10	32.56	273.54
DC-5	8/21/2008	306.10	35.15	270.95
DC-5	11/5/2010	306.10	34.86	271.24
DC-5	2/11/2011	306.10	33.59	272.51
DC-5	5/30/2011	306.10	32.23	273.87
DC-5	7/19/2011	306.10	32.58	273.52
DC-5	10/17/2011	306.10	33.65	272.45
DC-5	4/2/2012	306.10	33.86	272.24
DC-5	5/28/2013	306.25	33.60	272.65
DC-5	10/15/2018	306.25	34.15	272.10
DC-6	2/3/1999	308.46	35.03	273.43
DC-6	4/16/1999	308.46	32.92	275.54
DC-7	2/3/1999	302.50	29.89	272.61
DC-7	4/16/1999	302.50	28.05	274.45
DC-7	12/8/1999	302.50	30.76	271.74
DC-7	4/26/2000	302.50	30.12	272.38
DC-7	8/3/2000	302.50	30.84	271.66
DC-7	11/14/2000	302.50	31.90	270.60
DC-7	3/6/2001	302.50	32.60	269.90
DC-7	6/20/2001	302.50	32.91	269.59
DC-7	9/17/2001	302.50	33.25	269.25
DC-7	12/20/2001	302.50	32.75	269.75
DC-7	3/13/2002	302.50	31.22	271.28
DC-7	6/13/2002	302.50	30.57	271.93
DC-7	9/17/2002	302.50	31.44	271.06
DC-7	12/10/2002	302.50	32.27	270.23
DC-7	3/31/2003	302.50	31.78	270.72
DC-7	9/3/2003	302.50	32.26	270.24

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
DC-7	2/9/2005	302.50	32.67	269.83
DC-7	4/11/2006	302.50	31.05	271.45
DC-7	10/26/2006	302.50	32.58	269.92
DC-7	4/24/2007	302.50	29.96	272.54
DC-7	8/21/2008	302.78	32.48	270.30
DC-7	11/5/2010	302.78	32.15	270.63
DC-7	2/11/2011	302.78	30.91	271.87
DC-7	5/30/2011	302.78	29.68	273.10
DC-7	7/19/2011	302.78	30.03	272.75
DC-7	10/17/2011	302.78	31.04	271.74
DC-7	4/2/2012	302.78	31.12	271.66
DC-7	5/28/2013	302.88	30.94	271.94
DC-7	10/21/2014	302.61	31.71	270.90
DC-7	12/16/2015	302.61	31.79	270.82
DC-7	12/13/2016	302.61	31.19	271.42
DC-7	3/13/2017	302.61	30.03	272.58
DC-7	7/17/2017	302.61	29.37	273.24
DC-7	10/20/2017	302.61	30.51	272.10
DC-7	1/24/2018	302.61	30.69	271.92
DC-7	4/17/2018	302.61	30.19	272.42
DC-7	7/18/2018	302.61	30.48	272.13
DC-7	10/15/2018	302.61	31.52	271.09
DC-7	10/24/2019	302.61	32.42	270.19
DC-7	5/11/2021	302.61	31.15	271.46
DC-7	12/8/2021	302.61	32.07	270.54
DC-8	2/3/1999	306.09	33.45	272.64
DC-8	4/16/1999	306.09	31.43	274.66
DC-8	12/8/1999	306.09	34.27	271.82
DC-8	4/26/2000	306.09	33.55	272.54
DC-8	8/3/2000	306.09	34.26	271.83
DC-8	11/14/2000	306.09	35.37	270.72
DC-8	3/6/2001	306.09	36.11	269.98
DC-8	6/20/2001	306.09	36.45	269.64
DC-8	9/17/2001	306.09	36.75	269.34
DC-8	12/20/2001	306.09	36.40	269.69
DC-8	3/13/2002	306.09	34.82	271.27
DC-8	6/13/2002	306.09	34.05	272.04
DC-8	9/17/2002	306.09	34.85	271.24
DC-8	12/10/2002	306.09	35.74	270.35
DC-8	3/31/2003	306.09	35.71	270.38
DC-8	9/3/2003	306.09	35.73	270.36
DC-8	2/9/2005	306.09	36.26	269.83
DC-8	4/11/2006	306.09	34.60	271.49
DC-8	10/26/2006	306.09	36.00	270.09
DC-8	4/24/2007	306.11	33.47	272.64
DC-8	11/5/2010	306.38	35.69	270.69
DC-8	2/11/2011	306.38	34.49	271.89

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
DC-8	5/30/2011	306.38	33.15	273.23
DC-8	7/19/2011	306.38	33.46	272.92
DC-8	10/17/2011	306.38	34.51	271.87
DC-8	4/2/2012	306.38	34.77	271.61
DC-8	5/28/2013	306.46	34.45	272.01
DC-8	10/21/2014	306.46	35.17	271.29
DC-8	12/9/2015	306.23	35.58	270.65
DC-8	12/13/2016	306.23	34.71	271.52
DC-8	3/13/2017	306.23	33.65	272.58
DC-8	7/17/2017	306.23	32.75	273.48
DC-8	10/20/2017	306.23	34.14	272.09
DC-8	1/24/2018	306.23	34.21	272.02
DC-8	4/17/2018	306.23	33.64	272.59
DC-8	7/18/2018	306.23	33.92	272.31
DC-8	10/15/2018	306.23	34.94	271.29
DC-8	10/29/2019	306.23	36.03	270.20
DC-8	12/8/2021	306.23	35.69	270.54
DC-9A	4/16/1999	307.76	32.19	275.57
DC-9A	12/8/1999	307.76	35.03	272.73
DC-9A	4/26/2000	307.76	34.35	273.41
DC-9A	8/3/2000	307.76	35.11	272.65
DC-9A	11/14/2000	307.76	36.30	271.46
DC-9A	4/11/2006	307.76	35.45	272.31
DC-9A	8/8/2006	307.76	36.25	271.51
DC-9A	11/2/2006	307.76	36.90	270.86
DC-9A	4/24/2007	307.75	34.30	273.45
DC-9A	8/21/2008	308.02	36.92	271.10
DC-9B	4/16/1999	307.91	32.34	275.57
DC-9B	3/6/2001	307.91	37.22	270.69
DC-9B	6/20/2001	307.91	37.52	270.39
DC-9B	9/17/2001	307.91	37.87	270.04
DC-9B	12/20/2001	307.91	37.45	270.46
DC-9B	4/11/2006	307.91	35.65	272.26
DC-9B	8/8/2006	307.91	36.40	271.51
DC-9B	10/26/2006	307.91	37.15	270.76
DC-9B	4/24/2007	307.94	34.45	273.49
DC-9B	8/21/2008	308.16	37.05	271.11
DC-10A	4/16/1999	307.59	31.85	275.74
DC-10A	12/8/1999	307.59	34.82	272.77
DC-10A	4/26/2000	307.59	34.05	273.54
DC-10A	8/3/2000	307.59	34.86	272.73
DC-10A	11/14/2000	307.59	36.05	271.54
DC-10A	2/11/2011	307.72	34.99	272.73
DC-10A	5/30/2011	307.72	33.65	274.07
DC-10A	7/19/2011	307.72	34.07	273.65

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
DC-10A	10/17/2011	307.72	35.12	272.60
DC-10A	4/2/2012	307.72	35.23	272.49
DC-10A	5/28/2013	307.93	35.04	272.89
DC-10A	10/21/2014	307.73	35.83	271.90
DC-10A	12/9/2015	307.73	36.19	271.54
DC-10A	12/13/2016	307.73	35.35	272.38
DC-10A	3/13/2017	307.73	34.09	273.64
DC-10A	7/17/2017	307.73	33.29	274.44
DC-10A	10/20/2017	307.73	34.79	272.94
DC-10A	1/24/2018	307.73	34.72	273.01
DC-10A	4/17/2018	307.73	34.23	273.50
DC-10A	4/17/2018	307.73	34.23	273.50
DC-10A	7/18/2018	307.73	34.50	273.23
DC-10A	10/15/2018	307.73	36.12	271.61
DC-10A	10/24/2019	307.73	36.48	271.25
DC-10A	12/7/2021	307.73	36.26	271.47
DC-10B	4/16/1999	307.66	31.92	275.74
DC-10B	3/6/2001	307.66	36.89	270.77
DC-10B	6/20/2001	307.66	37.46	270.20
DC-10B	9/17/2001	307.66	37.55	270.11
DC-10B	12/20/2001	307.66	37.03	270.63
DC-10B	2/9/2005	307.66	36.98	270.68
DC-10B	4/11/2006	307.66	35.24	272.42
DC-10B	4/24/2007	307.66	34.08	273.58
DC-10B	8/21/2008	307.89	36.74	271.15
DC-10B	11/5/2010	307.89	36.40	271.49
DC-10B	2/11/2011	307.89	35.06	272.83
DC-10B	5/30/2011	307.89	33.72	274.17
DC-10B	7/19/2011	307.89	34.09	273.80
DC-10B	10/17/2011	307.89	35.15	272.74
DC-10B	4/2/2012	307.89	35.34	272.55
DC-10B	12/13/2016	307.89	35.45	272.44
DC-10B	10/15/2018	307.89	35.70	272.19
DC-11	4/24/2007	311.02	37.29	273.73
DC-11	11/5/2010	311.02	39.59	271.43
DC-11	2/11/2011	311.02	38.36	272.66
DC-11	5/30/2011	311.02	36.91	274.11
DC-11	4/2/2012	311.02	38.67	272.35
DC-11	4/14/2014	311.25	38.73	272.52
DC-11	10/21/2014	311.25	39.00	272.25
DC-11	12/9/2015	311.25	39.48	271.77
DC-11	12/13/2016	311.25	38.56	272.69
DC-11	3/13/2017	311.25	37.49	273.76
DC-11	7/17/2017	311.25	36.43	274.82
DC-11	10/20/2017	311.25	37.66	273.59
DC-11	1/24/2018	311.25	38.00	273.25

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
DC-11	4/17/2018	311.25	37.40	273.85
DC-11	7/18/2018	311.25	37.63	273.62
DC-11	10/15/2018	311.25	38.74	272.51
DC-11	10/24/2019	311.25	39.73	271.52
DC-12	4/24/2007	310.90	37.54	273.36
DC-12	8/21/2008	310.90	40.05	270.85
DC-12	11/5/2010	310.90	39.79	271.11
DC-12	2/11/2011	310.90	38.60	272.30
DC-12	5/30/2011	310.90	37.17	273.73
DC-12	7/19/2011	310.90	37.45	273.45
DC-12	10/17/2011	310.90	38.54	272.36
DC-12	4/2/2012	310.90	38.91	271.99
DC-12	5/28/2013	311.25	38.50	272.75
DC-12	4/14/2014	311.25	38.93	272.32
DC-12	10/27/2014	311.25	39.23	272.02
DC-12	12/9/2015	311.25	39.70	271.55
DC-12	12/13/2016	311.25	38.80	272.45
DC-12	3/13/2017	311.25	37.72	273.53
DC-12	7/17/2017	311.25	36.71	274.54
DC-12	10/20/2017	311.25	38.20	273.05
DC-12	1/24/2018	311.25	38.24	273.01
DC-12	4/17/2018	311.25	37.67	273.58
DC-12	7/19/2018	311.25	37.90	273.35
DC-12	10/15/2018	311.25	38.94	272.31
DC-12	10/25/2019	311.25	39.95	271.30
DC-13	4/24/2007	310.85	36.64	274.21
DC-13	8/21/2008	310.85	39.13	271.72
DC-13	11/5/2010	310.85	38.88	271.97
DC-13	2/11/2011	310.85	37.68	273.17
DC-13	5/30/2011	310.85	36.28	274.57
DC-13	7/19/2011	310.85	36.57	274.28
DC-13	10/17/2011	310.85	37.65	273.20
DC-13	4/2/2012	310.85	38.01	272.84
DC-13	5/28/2013	310.20	37.61	272.59
DC-13	4/14/2014	310.20	38.02	272.18
DC-13	10/27/2014	310.20	38.37	271.83
DC-13	12/9/2015	310.20	38.37	271.83
DC-13	12/13/2016	310.20	37.89	272.31
DC-13	3/13/2017	310.20	36.82	273.38
DC-13	7/17/2017	310.20	37.82	272.38
DC-13	10/20/2017	310.20	37.26	272.94
DC-13	1/24/2018	310.20	37.33	272.87
DC-13	4/17/2018	310.20	36.77	273.43
DC-13	7/18/2018	310.20	36.97	273.23
DC-13	10/15/2018	310.20	38.06	272.14
DC-13	10/24/2019	310.20	39.05	271.15

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
DC-14	4/24/2007	308.60	36.15	272.45
DC-14	8/21/2008	308.60	38.59	270.01
DC-14	11/5/2010	308.60	38.34	270.26
DC-14	2/11/2011	308.60	37.18	271.42
DC-14	5/30/2011	308.60	35.83	272.77
DC-14	7/19/2011	308.60	36.12	272.48
DC-14	10/17/2011	308.60	37.14	271.46
DC-14	4/2/2012	308.60	37.49	271.11
DC-14	5/28/2013	308.94	37.10	271.84
DC-14	10/21/2014	308.94	37.77	271.17
DC-14	12/9/2015	308.94	38.23	270.71
DC-14	12/13/2016	308.94	37.40	271.54
DC-14	3/13/2017	308.94	36.38	272.56
DC-14	7/17/2017	308.94	35.40	273.54
DC-14	10/20/2017	308.94	36.78	272.16
DC-14	1/24/2018	308.94	36.84	272.10
DC-14	4/17/2018	308.94	36.31	272.63
DC-14	7/18/2018	308.94	36.51	272.43
DC-14	10/15/2018	308.94	Well Missing	Decomissioned 3/2019
DC-15	4/24/2007	307.54	34.64	272.90
DC-15	11/5/2010	307.54	36.93	270.61
DC-15	2/11/2011	307.54	35.68	271.86
DC-15	5/30/2011	307.54	34.32	273.22
DC-15	7/19/2011	307.54	34.62	272.92
DC-15	10/17/2011	307.54	35.68	271.86
DC-15	4/2/2012	307.54	35.94	271.60
DC-15	5/28/2013	307.89	35.61	272.28
DC-15	4/14/2014	307.89	36.02	271.87
DC-15	10/21/2014	307.89	36.35	271.54
DC-15	12/9/2015	307.89	36.79	271.10
DC-15	12/13/2016	307.89	35.91	271.98
DC-15	3/13/2017	307.89	34.82	273.07
DC-15	7/17/2017	307.89	33.91	273.98
DC-15	10/20/2017	307.89	34.31	273.58
DC-15	1/24/2018	307.89	35.40	272.49
DC-15	4/17/2018	307.89	34.81	273.08
DC-15	7/18/2018	307.89	35.08	272.81
DC-15	10/16/2018	307.89	36.12	271.77
DC-15	10/24/2019	307.89	37.10	270.79
DC-15	12/8/2021	307.89	36.90	270.99
DC-16	4/24/2007	307.12	33.81	273.31
DC-16	8/21/2008	307.12	36.41	270.71
DC-16	11/5/2010	307.12	36.10	271.02
DC-16	2/11/2011	307.12	34.85	272.27
DC-16	5/30/2011	307.12	33.48	273.64

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
DC-16	7/19/2011	307.12	33.83	273.29
DC-16	10/17/2011	307.12	34.91	272.21
DC-16	4/2/2012	307.12	35.14	271.98
DC-16	12/13/2016	307.12	35.15	271.97
DC-16	3/13/2017	307.12	34.80	272.32
DC-16	10/15/2018	307.12	35.37	271.75
DC-17	4/24/2007	304.89	31.65	273.24
DC-17	5/28/2013	305.16	32.65	272.51
DC-17	10/21/2014	305.16	33.44	271.72
DC-17	12/16/2015	305.16	33.58	271.58
DC-17	3/13/2017	305.16	31.80	273.36
DC-17	7/17/2017	305.16	--	--
DC-17	10/20/2017	305.16	32.51	272.65
DC-17	1/24/2018	305.16	32.42	272.74
DC-17	4/17/2018	305.16	31.94	273.22
DC-17	7/18/2018	305.16	32.18	272.98
DC-17	10/15/2018	305.16	33.24	271.92
DC-17	5/21/2019	305.16	33.21	271.95
DC-17	10/24/2019	305.16	34.20	270.96
DC-17	12/8/2021	305.16	33.98	271.18
DC-18	4/24/2007	309.37	36.10	273.27
DC-18	5/28/2013	309.64	37.05	272.59
DC-18	10/21/2014	309.51	37.81	271.70
DC-18	12/9/2015	309.51	38.26	271.25
DC-18	12/13/2016	309.51	37.35	272.16
DC-18	3/13/2017	309.51	36.26	273.25
DC-18	7/17/2017	309.51	35.28	274.23
DC-18	10/20/2017	309.51	36.73	272.78
DC-18	1/24/2018	309.51	36.81	272.70
DC-18	4/17/2018	309.51	36.24	273.27
DC-18	7/18/2018	309.51	36.46	273.05
DC-18	10/15/2018	309.51	37.54	271.97
DC-18	10/24/2019	309.51	38.52	270.99
DC-18	12/7/2021	309.51	38.36	271.15
DC-19	8/21/2008	313.53	42.02	271.51
DC-19	11/5/2010	313.53	41.75	271.78
DC-19	2/11/2011	313.53	40.52	273.01
DC-19	5/30/2011	313.53	39.06	274.47
DC-19	7/19/2011	313.53	39.36	274.17
DC-19	10/17/2011	313.53	40.47	273.06
DC-19	4/2/2012	313.53	40.85	272.68
DC-19	5/28/2013	313.62	40.40	273.22
DC-19	12/9/2015	313.62	41.66	271.96
DC-19	12/13/2016	313.62	40.73	272.89
DC-19	3/13/2017	313.62	39.65	273.97

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
DC-19	7/17/2017	313.62	38.57	275.05
DC-19	10/20/2017	313.62	40.07	273.55
DC-19	1/24/2018	313.62	40.16	273.46
DC-19	4/17/2018	313.62	39.57	274.05
DC-19	7/18/2018	313.62	39.78	273.84
DC-19	10/15/2018	313.62	40.90	272.72
DC-19	10/29/2019	313.62	42.03	271.59
DC-20	6/2/2008	--	39.46	--
DC-20	5/28/2013	310.92	38.42	272.50
DC-20	4/14/2014	310.92	38.86	272.06
DC-20	10/21/2014	310.92	39.12	271.80
DC-20	12/15/2015	310.92	39.44	271.48
DC-20	12/13/2016	310.92	38.69	272.23
DC-20	3/13/2017	310.92	37.65	273.27
DC-20	7/17/2017	310.92	36.64	274.28
DC-20	10/20/2017	310.92	38.08	272.84
DC-20	1/24/2018	310.92	38.17	272.75
DC-20	4/17/2018	310.92	37.59	273.33
DC-20	10/15/2018	310.92	38.87	272.05
DC-20	10/25/2019	310.92	39.85	271.07
DC-20	12/7/2021	310.92	39.71	271.21
KMW-1	4/24/2007	311.21	38.15	273.06
KMW-1	8/21/2008	311.21	40.60	270.61
KMW-1	11/5/2010	311.21	40.37	270.84
KMW-1	2/11/2011	311.21	39.19	272.02
KMW-1	5/30/2011	311.21	37.79	273.42
KMW-1	7/19/2011	311.21	38.06	273.15
KMW-1	10/17/2011	311.21	39.13	272.08
KMW-1	4/2/2012	311.21	39.50	271.71
KMW-1	5/28/2013	311.59	39.08	272.51
KMW-1	10/21/2014	311.59	39.81	271.78
KMW-1	12/9/2015	311.59	40.29	271.30
KMW-1	12/13/2016	311.59	39.36	272.23
KMW-1	3/13/2017	311.59	38.34	273.25
KMW-1	7/17/2017	311.59	37.31	274.28
KMW-1	10/20/2017	311.59	38.85	272.74
KMW-1	1/24/2018	311.59	38.83	272.76
KMW-1	4/17/2018	311.59	38.27	273.32
KMW-1	7/18/2018	311.59	38.47	273.12
KMW-1	10/15/2018	311.59	39.55	272.04
KMW-1	10/24/2019	311.59	40.55	271.04
KMW-2	4/24/2007	306.90	33.33	273.57
KMW-2	8/21/2008	306.90	35.96	270.94
KMW-2	11/5/2010	306.90	34.59	272.31
KMW-2	2/11/2011	306.90	34.32	272.58

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
KMW-2	5/30/2011	306.90	32.96	273.94
KMW-2	7/19/2011	306.90	33.30	273.60
KMW-2	10/17/2011	306.90	34.39	272.51
KMW-2	4/2/2012	306.90	34.59	272.31
KMW-2	5/28/2013	307.25	34.30	272.95
KMW-2	10/21/2014	307.04	35.14	271.90
KMW-2	12/9/2015	307.04	35.51	271.53
KMW-2	12/13/2016	307.04	34.70	272.34
KMW-2	3/13/2017	307.04	33.42	273.62
KMW-2	7/17/2017	307.04	32.60	274.44
KMW-2	10/20/2017	307.04	34.02	273.02
KMW-2	1/24/2018	307.04	34.11	272.93
KMW-2	4/17/2018	307.04	33.56	273.48
KMW-2	7/18/2018	307.04	33.80	273.24
KMW-2	10/15/2018	307.04	34.92	272.12
KMW-2	10/24/2019	307.04	35.90	271.14
KMW-2	12/7/2021	307.04	35.61	271.43
KMW-3	4/24/2007	296.92	24.51	272.41
KMW-3	8/21/2008	296.92	27.01	269.91
KMW-3	11/5/2010	296.92	26.37	270.55
KMW-3	5/30/2011	296.92	24.22	272.70
KMW-3	7/19/2011	296.92	24.61	272.31
KMW-3	10/17/2011	296.92	25.58	271.34
KMW-3	4/2/2012	296.92	25.59	271.33
KMW-3	10/21/2014	296.92	26.25	270.67
KMW-3	12/13/2016	296.92	25.69	271.23
KMW-3	3/13/2017	296.92	24.33	272.59
KMW-3	7/17/2017	296.92	23.99	272.93
KMW-3	10/20/2017	296.92	25.35	271.57
KMW-3	1/24/2018	296.92	25.16	271.76
KMW-3	4/17/2018	296.92	24.69	272.23
KMW-3	7/18/2018	296.92	25.04	271.88
KMW-3	10/15/2018	296.92	26.09	270.83
KMW-3	10/25/2019	296.99	26.96	270.03
KMW-3	12/9/2021	296.99	26.53	270.46
KMW-4	4/24/2007	299.45	25.95	273.50
KMW-4	8/21/2008	299.45	28.62	270.83
KMW-4	11/5/2010	299.45	28.22	271.23
KMW-4	2/11/2011	299.45	26.87	272.58
KMW-4	5/30/2011	299.45	25.59	273.86
KMW-4	7/19/2011	299.45	25.99	273.46
KMW-4	10/17/2011	299.45	27.07	272.38
KMW-4	4/2/2012	299.45	27.10	272.35
KMW-4	10/21/2014	299.57	27.80	271.77
KMW-4	12/9/2015	299.57	28.08	271.49
KMW-4	12/13/2016	299.57	27.24	272.33

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
KMW-4	3/13/2017	299.57	25.90	273.67
KMW-4	7/17/2017	299.57	25.25	274.32
KMW-4	10/20/2017	299.57	27.26	272.31
KMW-4	1/24/2018	299.57	26.58	272.99
KMW-4	4/17/2018	299.57	26.13	273.44
KMW-4	7/18/2018	299.57	26.50	273.07
KMW-4	10/15/2018	299.57	27.60	271.97
KMW-4	10/25/2019	299.57	28.57	271.00
KMW-5	4/24/2007	297.10	24.32	272.78
KMW-5	8/21/2008	297.10	26.85	270.25
KMW-5	11/5/2010	297.10	26.49	270.61
KMW-5	2/11/2011	297.10	25.21	271.89
KMW-5	5/30/2011	297.10	24.00	273.10
KMW-5	7/19/2011	297.10	24.41	272.69
KMW-5	10/17/2011	297.10	25.41	271.69
KMW-5	4/2/2012	297.10	25.37	271.73
KMW-5	5/28/2013	297.22	25.30	271.92
KMW-5	10/21/2014	297.22	26.09	271.13
KMW-5	12/9/2015	297.22	26.30	270.92
KMW-5	12/13/2016	297.22	25.52	271.70
KMW-5	3/13/2017	297.22	24.30	272.92
KMW-5	7/17/2017	297.22	24.75	272.47
KMW-5	10/20/2017	297.22	24.82	272.40
KMW-5	1/24/2018	297.22	24.95	272.27
KMW-5	4/17/2018	297.22	24.50	272.72
KMW-5	7/18/2018	297.22	24.87	272.35
KMW-5	10/31/2018	297.22	26.09	271.13
KMW-5	10/25/2019	297.22	27.15	270.07
KMW-5D	4/24/2007	296.94	24.19	272.75
KMW-5D	8/21/2008	296.94	26.72	270.22
KMW-5D	11/5/2010	296.94	26.35	270.59
KMW-5D	2/11/2011	296.94	25.10	271.84
KMW-5D	5/30/2011	296.94	23.89	273.05
KMW-5D	7/19/2011	296.94	24.28	272.66
KMW-5D	10/17/2011	296.94	25.28	271.66
KMW-5D	4/2/2012	296.94	25.19	271.75
KMW-5D	12/13/2016	296.94	25.40	271.54
KMW-5D	3/13/2017	296.94	25.19	271.75
KMW-5D	10/15/2018	296.94	25.79	271.15
KMW-6	4/24/2007	294.70	22.40	272.30
KMW-6	8/21/2008	294.70	24.90	269.80
KMW-6	11/5/2010	294.70	24.51	270.19
KMW-6	2/11/2011	294.70	23.26	271.44
KMW-6	5/30/2011	294.70	22.12	272.58
KMW-6	7/19/2011	294.70	22.52	272.18

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
KMW-6	10/17/2011	294.70	23.48	271.22
KMW-6	4/2/2012	294.70	23.39	271.31
KMW-6	10/21/2014	294.81	21.05	273.76
KMW-6	12/9/2015	294.81	24.31	270.50
KMW-6	12/13/2016	294.81	23.53	271.28
KMW-6	3/13/2017	294.81	22.34	272.47
KMW-6	7/17/2017	294.81	21.90	272.91
KMW-6	10/20/2017	294.81	23.31	271.50
KMW-6	1/24/2018	294.81	23.30	271.51
KMW-6	4/17/2018	294.81	22.54	272.27
KMW-6	7/18/2018	294.81	22.98	271.83
KMW-6	10/15/2018	294.81	23.98	270.83
KMW-6	10/28/2019	294.80	24.80	270.00
KMW-7	4/24/2007	301.32	29.22	272.10
KMW-7	8/21/2008	301.32	31.65	269.67
KMW-7	11/5/2010	301.32	31.36	269.96
KMW-7	2/11/2011	301.32	30.14	271.18
KMW-7	5/30/2011	301.32	28.92	272.40
KMW-7	7/19/2011	301.32	29.27	272.05
KMW-7	10/17/2011	301.32	30.25	271.07
KMW-7	4/2/2012	301.32	30.35	270.97
KMW-7	10/21/2014	301.43	30.88	270.55
KMW-7	12/15/2015	301.43	31.03	270.40
KMW-7	12/13/2016	301.43	30.40	271.03
KMW-7	3/13/2017	301.43	28.98	272.45
KMW-7	7/17/2017	301.43	28.61	272.82
KMW-7	10/20/2017	301.43	30.19	271.24
KMW-7	1/24/2018	301.43	28.66	272.77
KMW-7	4/17/2018	301.43	29.28	272.15
KMW-7	7/18/2018	301.43	29.70	271.73
KMW-7	10/15/2018	301.43	30.87	270.56
KMW-7	10/29/2019	301.42	31.71	269.71
KMW-7	12/10/2021	301.42	31.25	270.17
KMW-8	4/24/2007	308.08	35.73	272.35
KMW-8	8/21/2008	308.08	38.14	269.94
KMW-8	11/5/2010	308.08	37.87	270.21
KMW-8	2/11/2011	308.08	36.72	271.36
KMW-8	5/30/2011	308.08	35.40	272.68
KMW-8	7/19/2011	308.08	35.68	272.40
KMW-8	10/17/2011	308.08	36.71	271.37
KMW-8	4/2/2012	308.08	37.02	271.06
KMW-8	10/21/2014	308.15	37.34	270.81
KMW-8	12/9/2015	308.15	37.76	270.39
KMW-8	12/13/2016	308.15	36.92	271.23
KMW-8	3/13/2017	308.15	35.94	272.21
KMW-8	7/17/2017	308.15	34.98	273.17

Table C2
Historical Summary of Groundwater Elevations (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Location	Date	Well Casing Elevation (feet NAVD88)	Depth to Water (feet below well casing)	Water Level Elevation (feet NAVD88)
KMW-8	10/20/2017	308.15	36.35	271.80
KMW-8	1/24/2018	308.15	36.41	271.74
KMW-8	4/17/2018	308.15	35.87	272.28
KMW-8	7/18/2018	308.15	36.10	272.05
KMW-8	10/15/2018	308.15	37.12	271.03
KMW-8	10/28/2019	308.16	38.06	270.10
KMW-8	12/10/2021	308.16	37.85	270.31
KMW-9	4/24/2007	310.18	36.49	273.69
KMW-9	11/5/2010	310.18	38.78	271.40
KMW-9	2/11/2011	310.18	37.51	272.67
KMW-9	5/30/2011	310.18	36.11	274.07
KMW-9	7/19/2011	310.18	36.49	273.69
KMW-9	10/17/2011	310.18	37.51	272.67
KMW-9	4/2/2012	310.18	37.84	272.34
KMW-9	4/14/2014	310.53	37.91	272.62
KMW-9	10/21/2014	310.33	38.24	272.09
KMW-9	12/9/2015	310.33	38.71	271.62
KMW-9	12/13/2016	310.33	37.79	272.54
KMW-9	3/13/2017	310.33	36.65	273.68
KMW-9	7/17/2017	310.33	35.66	274.67
KMW-9	10/20/2017	310.33	37.16	273.17
KMW-9	1/24/2018	310.33	37.22	273.11
KMW-9	4/17/2018	310.33	36.64	273.69
KMW-9	7/18/2018	310.33	36.87	273.46
KMW-9	10/15/2018	310.33	37.97	272.36
KMW-9	10/24/2019	310.33	39.00	271.33

NOTES:

1. '-- = not measured or not applicable.
2. Well monument types: flush grade monuments and above ground (AG) monuments.
3. Depth to water is measured from top of well casing.
4. Elevations are reported relative to North American Vertical Datum of 1988 (NAVD 88).
5. Top of casing (TOC) elevations were surveyed by D.R. Strong Consulting Engineers, Inc. in February and May 213 and by Lanktree Land Surveying, Inc. in July 215.

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)	Other VOCs detected (µg/l)
Shallow Monitoring Wells			
MW-1	12/10/1999	**21.6**	
MW-1	7/25/2005	**15**	
MW-1	4/11/2006	**14**	
MW-1	10/26/2006	**11**	
MW-1	4/25/2007	**13**	
* Monitoring well cannot be located			
MW-2	12/10/1999	**16.7**	
MW-2	4/5/2012	**7.1**	
MW-2	5/30/2013	**2.4**	
MW-2	4/14/2014	**3.2**	
MW-2	10/24/2014	**1.4**	
MW-2	12/11/2015	1.00 U	
MW-2	3/13/2017	**6.02**	
MW-2	7/18/2017	**2.43**	
MW-2	10/26/2017	**1.55**	
MW-2	4/19/2018	**3.39**	
MW-2	7/17/2018	**1.78**	Chloroform (0.569)
MW-2	10/18/2018	**1.17**	Chloroform (0.843)
MW-2	10/25/2019	**1.20**	Chloroform (1.53)
MW-3	4/14/2008	**2.31**	Chloroform (0.990)
MW-3	11/1/2010	**2.9**	
MW-3	5/31/2011	2.0 U	
MW-3	7/20/2011	2.0 U	
MW-3	10/18/2011	**6.1**	
MW-3	4/4/2012	**5.8**	
MW-3	5/29/2013	**4.0**	
MW-3	10/24/2014	**1.0**	
MW-3	12/10/2015	**1.34**	
MW-3	12/14/2016	1.00 U	
MW-3	3/13/2017	1.00 U	
MW-3	7/18/2017	**1.76**	
MW-3	10/25/2017	**4.21**	
MW-3	4/20/2018	**1.00**	
MW-3	10/16/2018	0.500 U	
MW-4	4/14/2008	**33**	Chloroform (0.780), cis-1,2-DCE (0.320), TCE (0.490)
MW-4	3/9/2010	**7.8**	
MW-4	11/1/2010	**16**	
MW-4	5/31/2011	**10**	
MW-4	7/21/2011	**25**	
MW-4	10/19/2011	**21**	
MW-4	4/4/2012	**11**	
MW-4	5/29/2013	**8.1**	
MW-4	10/29/2014	**7.3**	
MW-4	12/14/2015	**4.89**	

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)		Other VOCs detected (µg/l)
MW-4	12/14/2016	1.00	U	
MW-4	3/14/2017	1.00	U	
MW-4	7/18/2017	**1.40**		
MW-4	10/25/2017	**3.23**		
MW-4	4/20/2018	0.500	U	
MW-4	10/16/2018	0.500	U	
MW-4	12/7/2021	**2.62**		
MW-5	4/11/2008	**0.470**		
MW-5	4/2/2012	2.0	U	
MW-6	4/15/2008	2.0	U	
MW-6	4/2/2012	2.0	U	
MW-7	4/16/2008	**22.4**		
MW-7	4/2/2012	**14**		
MW-7	10/29/2014	**20**		
MW-7	12/15/2015	**7.42**		
MW-7	3/17/2017	**8.08**		
MW-7	7/19/2017	**7.20**		
MW-7	10/25/2017	**7.47**		
MW-7	1/26/2018	**7.73**		
MW-7	4/20/2018	**7.64**		
MW-7	7/19/2018	**6.60**		
MW-7	10/23/2018	**5.79**		
MW-7	10/25/2019	**7.13**		
MW-7	12/7/2021	**8.20**		
MW-8	8/21/2008	**0.20**	J	
MW-8	4/2/2012	2.0	U	
MW-9	8/21/2008	**0.10**	J	
MW-9	4/2/2012	2.0	U	
MW-9	10/24/2014	1.0	U	
MW-9	12/10/2015	1.00	U	
MW-9	3/13/2017	1.00	U	
MW-9	10/23/2017	0.500	U	
MW-9	4/18/2018	0.500	U	
MW-9	10/17/2018	0.500	U	
MW-9	10/25/2019	0.500	U	
MW-9	12/9/2021	0.400	U	
MW-10	2/8/2011	**10**		
MW-10	5/31/2011	2.0	U	
MW-10	7/20/2011	**4.1**		
MW-10	10/18/2011	**4.9**		
MW-10	4/6/2012	**6.7**		
MW-10	5/29/2013	**4.1**		

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)		Other VOCs detected (µg/l)
MW-10	10/24/2014	**1.7**		
MW-10	12/11/2015	1.00	U	TCE (3.22)
MW-10	12/14/2016	**1.13**		
MW-10	3/14/2017	**1.09**		
MW-10	7/18/2017	1.00	U	
MW-10	10/23/2017	0.500	U	
MW-10	4/18/2018	**0.716**		
MW-10	10/18/2018	0.500	U	
MW-10	5/21/2019	**0.630**		
MW-10	10/25/2019	**1.01**		
MW-10	12/9/2021	**1.60**		
MW-11	2/8/2011	**47**		
MW-11	5/31/2011	2.0	U	Acetone (51)
MW-11	7/20/2011	2.0	U	Acetone (154)
MW-11	10/18/2011	2.0	U	Acetone (130)
MW-11	4/6/2012	**29**		
MW-11	5/31/2013	**22**		
MW-11	10/29/2014	**15**		
MW-11	12/14/2015	**11.9**		
MW-11	12/15/2016	**7.99**		
MW-11	3/16/2017	**4.66**		
MW-11	7/19/2017	**2.52**		
MW-11	10/26/2017	**2.15**		
MW-11	1/25/2018	**2.52**		
MW-11	4/19/2018	**2.97**		
MW-11	10/19/2018	**2.44**		
MW-11	5/21/2019	**3.92**		
MW-11	12/9/2021	**5.59**		
MW-12	4/4/2012	2.0	U	
MW-12	5/28/2013	1.0	U	
MW-12	10/23/2014	1.0	U	
MW-12	12/10/2015	1.00	U	
MW-12	12/14/2016	1.00	U	
MW-12	3/13/2017	1.00	U	
MW-12	7/18/2017	1.00	U	
MW-12	10/23/2017	0.500	U	
MW-12	4/18/2018	0.500	U	
MW-12	10/16/2018	0.500	U	
MW-13	4/3/2012	2.0	U	
MW-13	5/30/2013	1.0	U	
MW-13	10/23/2014	1.0	U	
MW-13	12/10/2015	1.00	U	
MW-13	12/13/2016	1.00	U	
MW-13	3/14/2017	1.00	U	
MW-13	7/18/2017	1.00	U	

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)		Other VOCs detected (µg/l)
MW-13	10/23/2017	0.500	U	
MW-13	4/18/2018	0.500	U	
MW-13	10/16/2018	0.500	U	
MW-14	4/5/2012	2.0	U	
MW-14	5/29/2013	1.0	U	
MW-14	10/30/2014	1.0	U	
MW-14	12/11/2015	1.00	U	
MW-14	3/14/2017	1.00	U	
MW-14	10/24/2017	**0.910**		
MW-14	4/20/2018	**1.27**		
MW-14	10/23/2018	0.500	U	
MW-15	4/5/2012	2.0	U	
MW-15	5/28/2013	1.0	U	
MW-15	4/14/2014	1.0	U	
MW-15	10/23/2014	1.0	U	
MW-15	12/10/2015	1.00	U	
MW-15	3/14/2017	1.00	U	
MW-15	10/24/2017	**0.954**		
MW-15	4/19/2018	**1.13**		
MW-15	10/18/2018	0.500	U	
MW-16	5/31/2013	**2.5**		
MW-16	10/23/2014	**1.3**		
MW-16	12/11/2015	**1.20**		
MW-16	12/13/2016	**1.63**		
MW-16	3/16/2017	**1.13**		
MW-16	7/18/2017	1.00	U	
MW-16	10/24/2017	**1.26**		
MW-16	4/19/2018	**1.33**		
MW-16	10/18/2018	**0.912**		Chloroform (0.539)
MW-17	3/6/2019	**6.82**		
MW-17	10/28/2019	**2.85**		
MW-17	6/3/2020	**5.35**		
MW-17	12/10/2021	**4.98**		
MW-18	3/6/2019	**11.4**		
MW-18	10/28/2019	**11.3**		
MW-18	12/10/2021	**9.8**		
MW-20	10/29/2019	0.500	U	Chloroform (0.547)
MW-20	12/4/2019	0.500	U	
MW-20	6/3/2020	1.00	U	
MW-20	12/8/2021	**0.423**		
DC-1	10/21/1998	**0.60**		Toluene (0.8)

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)		Other VOCs detected (µg/l)
DC-1	2/3/1999	0.5	U	
DC-1	4/7/1999	0.5	U	Toluene (8.7)
DC-1	12/8/1999	1.0	U	
DC-1	4/26/2000	1.0	U	
DC-1	8/3/2000	1.0	U	
DC-1	11/14/2000	1.0	U	
DC-1	3/6/2001	1.0	U	
DC-1	6/20/2001	1.0	U	
DC-1	9/17/2001	1.0	U	
DC-1	12/20/2001	1.0	U	
DC-1	3/13/2002	1.0	U	
DC-1	9/17/2002	1.0	U	
DC-1	12/10/2002	1.0	U	
DC-1	3/31/2003	1.0	U	
DC-1	9/3/2003	1.0	U	
DC-1	3/16/2004	1.0	U	
DC-1	9/7/2004	1.0	U	
DC-1	4/25/2007	0.2	U	
DC-1	4/4/2012	2.0	U	
DC-2	10/21/1998	**2.4**		Chloroform (1.8), Toluene (0.6)
DC-2	2/3/1999	**0.7**		
DC-2	4/7/1999	0.5	U	Chloroform (1.4), Toluene (14)
DC-2	12/8/1999	0.5	U	
DC-2	4/26/2000	1.0	U	
DC-2	8/3/2000	1.0	U	
DC-2	11/14/2000	1.0	U	
DC-2	3/6/2001	1.0	U	
DC-2	6/20/2001	1.0	U	
DC-2	9/17/2001	1.0	U	
DC-2	12/20/2001	1.0	U	
DC-2	3/13/2002	**4.0**		
DC-2	6/13/2002	1.0	U	
DC-2	9/17/2002	1.0	U	
DC-2	12/10/2002	**0.50**		
DC-2	3/31/2003	**3.37**		
DC-2	9/3/2003	1.0	U	
DC-2	3/16/2004	**0.74**		
DC-2	9/7/2004	1.0	U	
DC-2	4/26/2007	**1.2**		
DC-2	4/14/2008	**0.340**		Chloroform (1.60)
DC-2	11/3/2010	2.0	U	
DC-2	5/31/2011	2.0	U	
DC-2	7/21/2011	2.0	U	
DC-2	10/18/2011	2.0	U	
DC-2	4/4/2012	2.0	U	
DC-3	10/28/1998	**54**		Chloroform (1.9), Toluene (0.6)

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)		Other VOCs detected (µg/l)
DC-3	2/4/1999	**25**		
DC-3	4/8/1999	**36**		Chloroform (1.2), Toluene (15)
DC-3	12/8/1999	**45**		
DC-3	4/26/2000	**56**		
DC-3	8/3/2000	**25**		
DC-3	11/14/2000	1.0	U	
DC-3	3/6/2001	**4.7**		
DC-3	6/20/2001	**2.8**		
DC-3	9/17/2001	1.0	U	
DC-3	12/20/2001	**9.2**		
DC-3	3/13/2002	**40.0**		
DC-3	6/13/2002	**42.3**		
DC-3	9/17/2002	**33.4**		
DC-3	12/10/2002	**5.40**		
DC-3	3/31/2003	**7.34**		
DC-3	9/3/2003	**2.08**		
DC-3	3/16/2004	1.0	U	
DC-3	9/7/2004	**3.43**		
DC-3	4/26/2007	**42.0**		
DC-3	4/14/2008	**27.8**		Chloroform (1.50)
DC-3	3/9/2010	2.0	U	
DC-3	11/3/2010	2.0	U	
DC-3	5/30/2011	**3.9**		
DC-3	7/20/2011	**12**		
DC-3	10/18/2011	**6.7**		
DC-3	4/4/2012	**2.9**		
DC-3	10/27/2014	**1.4**		
DC-3	12/11/2015	**1.49**		
DC-3	12/14/2016	1.00	U	
DC-3	3/14/2017	**2.11**		
DC-3	7/18/2017	1.00	U	
DC-3	10/24/2017	**0.786**		
DC-3	4/18/2018	**1.23**		
DC-3	10/17/2018	0.500	U	
DC-4	10/28/1998	**227**		Chloroform (0.9), Toluene (0.7)
DC-4	2/4/1999	**144**		
DC-4	4/8/1999	**110**		Toluene (2.6)
DC-4	12/8/1999	**71**		
DC-4	4/26/2000	**120**		
DC-4	8/3/2000	**42**		
DC-4	11/14/2000	**64**		
DC-4	3/6/2001	**52**		TCE (3.0)
DC-4	6/20/2001	**40**		
DC-4	9/17/2001	**23**		
DC-4	12/20/2001	**15**		
DC-4	3/13/2002	**55**		
DC-4	6/13/2002	**17.9**		

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)		Other VOCs detected (µg/l)
DC-4	9/17/2002	**28.8**		
DC-4	12/10/2002	**22.4**		
DC-4	3/31/2003	**12.5**		
DC-4	9/3/2003	**14.1**		
DC-4	3/16/2004	**19.8**		
DC-4	9/7/2004	**18.5**		
DC-4	4/26/2007	**19.0**		
DC-4	4/11/2008	**30.2**		Chloroform (1.2)
DC-4	3/9/2010	**9.2**		
DC-4	11/3/2010	**13**		
DC-4	5/31/2011	2.0	U	Acetone (46)
DC-4	7/20/2011	2.0	U	Acetone (77)
DC-4	10/18/2011	**22**		
DC-4	4/4/2012	**22**		
DC-4	5/30/2013	**11**		
DC-4	10/29/2014	**13**		
DC-4	12/14/2015	**5.49**		
DC-4	12/14/2016	1.00	U	
DC-4	3/14/2017	1.00	U	
DC-4	7/18/2017	1.00	U	
DC-4	10/24/2017	0.500	U	
DC-4	4/18/2018	0.500	U	
DC-4	10/17/2018	0.500	U	
DC-4	12/7/2021	**5.36**		
DC-6	2/4/1999	**5.1**		
DC-6	4/8/1999	**3.7**		Chloroform(1.3), Toluene (2.3)
* Monitoring well cannot be located				
DC-7	2/4/1999	**74**		
DC-7	4/8/1999	**64**		Toluene (1.3)
DC-7	12/8/1999	**107**		
DC-7	4/26/2000	**130**		
DC-7	8/3/2000	**50**		
DC-7	11/14/2000	**130**		
DC-7	3/6/2001	**140**		
DC-7	6/20/2001	**96**		
DC-7	9/17/2001	**81**		
DC-7	12/20/2001	**47**		
DC-7	3/13/2002	**31**		
DC-7	6/13/2002	**41.5**		
DC-7	9/17/2002	**77.7**		
DC-7	12/10/2002	**91.8**		
DC-7	3/31/2003	**40.1**		
DC-7	9/3/2003	**57.4**		
DC-7	7/25/2005	**37.0**		
DC-7	4/11/2006	**23.0**		
DC-7	10/26/2006	**51.0**		
DC-7	4/24/2007	**27.0**		

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)	Other VOCs detected (µg/l)
DC-7	4/16/2008	**50.8**	
DC-7	11/3/2010	**34**	
DC-7	6/1/2011	**15**	
DC-7	7/21/2011	**38**	
DC-7	10/18/2011	**42**	
DC-7	4/5/2012	**18**	
DC-7	5/30/2013	**15**	
DC-7	10/30/2014	**23**	
DC-7	12/16/2015	**13.3**	
DC-7	3/17/2017	**10.4**	
DC-7	10/23/2017	**6.67 J**	
DC-7	1/26/2018	**12.1**	
DC-7	4/20/2018	**12.8**	
DC-7	7/20/2018	**12.3**	
DC-7	10/23/2018	**11.6**	
DC-7	10/30/2019	**17.1**	
DC-7	5/11/2021	**8.35**	
DC-7	12/8/2021	**10.0**	
DC-8	2/4/1999	**56**	
DC-8	4/8/1999	**48**	Toluene (1.2)
DC-8	12/8/1999	**98**	
DC-8	4/26/2000	**87**	
DC-8	8/3/2000	**70**	
DC-8	11/14/2000	**130**	
DC-8	3/6/2001	**82**	
DC-8	6/20/2001	**80**	
DC-8	9/17/2001	**62**	
DC-8	12/20/2001	**50**	
DC-8	3/13/2002	**31**	
DC-8	6/13/2002	**26.6**	
DC-8	9/17/2002	**38.4**	
DC-8	12/10/2002	**53.1**	
DC-8	3/31/2003	**36.4**	
DC-8	9/3/2003	**34.7**	
DC-8	7/25/2005	**26.0**	
DC-8	4/11/2006	**14.0**	
DC-8	10/26/2006	**28.0**	
DC-8	4/24/2007	**24.0**	
DC-8	4/16/2008	**39.4**	
DC-8	11/3/2010	**25**	
DC-8	6/1/2011	**11**	
DC-8	7/21/2011	**25**	
DC-8	10/19/2011	**26**	
DC-8	4/5/2012	**18**	
DC-8	5/30/2013	**11**	
DC-8	10/30/2014	**18**	
DC-8	12/16/2015	**8.61**	

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)	Other VOCs detected (µg/l)
DC-8	3/16/2017	**9.69**	
DC-8	7/19/2017	**8.94**	
DC-8	10/23/2017	**14.8**	
DC-8	1/24/2018	**12.0**	
DC-8	4/18/2018	**13.0**	
DC-8	7/18/2018	**11.7**	
DC-8	10/18/2018	**12.1**	
DC-8	10/29/2019	**15.0**	
DC-8	12/8/2021	**11.0**	
DC-9A	4/8/1999	**135**	Toluene (3.2)
DC-9A	12/8/1999	**73**	
DC-9A	4/26/2000	**240**	
DC-9A	8/3/2000	**110**	
DC-9A	4/11/2006	**78**	
DC-9A	8/8/2006	**49**	
DC-9A	11/2/2006	2.9	
DC-9A	4/26/2007	**33**	
* Monitoring well cannot be located			
DC-10A	4/8/1999	**150**	Toluene (1.7)
DC-10A	12/8/1999	**73**	TCE (1.1)
DC-10A	4/26/2000	**210**	
DC-10A	4/5/2012	**41**	
DC-10A	5/31/2013	**19**	
DC-10A	10/30/2014	**17**	
DC-10A	12/15/2016	**10.8**	
DC-10A	3/17/2017	**8.62**	
DC-10A	7/19/2017	**4.69**	
DC-10A	10/26/2017	**4.72**	
DC-10A	1/25/2018	**3.62**	
DC-10A	4/20/2018	**4.67**	
DC-10A	7/17/2018	**2.68**	
DC-11	4/26/2007	**12**	
DC-11	3/9/2010	**4.6**	
DC-11	11/1/2010	**4.8**	
DC-11	4/4/2012	**3.1**	
DC-11	4/15/2014	**1.2**	
DC-11	10/27/2014	**1.4**	
DC-11	12/11/2015	**1.48**	
DC-11	3/15/2017	**1.97**	
DC-11	10/26/2017	**1.35**	
DC-11	4/19/2018	**1.21**	
DC-11	10/18/2018	**1.25**	
DC -12	4/25/2007	**16**	
DC-12	4/4/2012	**3.7**	

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)	Other VOCs detected (µg/l)
DC-12	5/30/2013	**2.3**	
DC-12	4/15/2014	**1.4**	
DC-12	10/27/2014	**1.8**	
DC-12	12/14/2015	**2.04**	
DC-12	3/15/2017	**2.02**	
DC-12	10/27/2017	**1.66**	
DC-12	4/20/2018	**1.50**	
DC-12	10/19/2018	**1.66**	
DC-13	4/25/2007	**15**	
DC-13	4/16/2008	**23**	
DC-13	3/1/2010	**10**	
DC-13	11/2/2010	**9.2**	
DC-13	4/5/2012	**6.4**	
DC-13	5/30/2013	**1.7**	
DC-13	4/14/2014	**3.2**	
DC-13	10/27/2014	**2.7**	
DC-13	12/14/2015	**2.78**	
DC-13	3/15/2017	**4.32**	
DC-13	10/27/2017	**2.79**	
DC-13	4/20/2018	**2.87**	
DC-13	10/19/2018	**2.74**	
DC-14	4/25/2007	**11**	
DC-14	4/3/2012	**11**	
DC-14	5/30/2013	**6.0**	
DC-14	10/29/2014	**19**	
DC-14	12/15/2015	**6.02**	
DC-14	3/16/2017	**6.20**	
DC-14	7/19/2017	**4.94**	
DC-14	10/26/2017	**5.40**	Chloroform (2.23)
DC-14	2/2/2018	**7.81**	
DC-14	4/19/2018	**5.14**	Chloroform (2.27)
DC-14	7/19/2018	**5.40**	Chloroform (1.25)
DC-15	4/24/2007	**11**	
DC-15	4/5/2012	**20**	
DC-15	4/15/2014	**10**	
DC-15	10/30/2014	**5.8**	
DC-15	12/16/2015	**5.93**	
DC-15	3/16/2017	**8.96**	
DC-15	10/23/2017	**7.42**	
DC-15	1/24/2018	**8.61**	
DC-15	4/18/2018	**9.88**	
DC-15	7/18/2018	**7.82**	
DC-15	10/18/2018	**7.65**	
DC-15	10/29/2019	**9.72**	

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)		Other VOCs detected (µg/l)
DC-15	12/8/2021	**9.31**		
DC-17	4/25/2007	**47**		
DC-17	4/16/2008	**74.6**		
DC-17	5/31/2013	**21**		
DC-17	10/23/2014	**17**		
DC-17	12/16/2015	**15.1**		
DC-17	3/17/2017	**13.9**		
DC-17	10/23/2017	**8.06**		
DC-17	1/26/2018	**7.38**		
DC-17	4/20/2018	**10.1**		
DC-17	7/20/2018	**8.62**		
DC-17	10/19/2018	**8.24**		
DC-17	5/21/2019	**8.62**		
DC-17	10/30/2019	**5.72**		
DC-17	12/9/2021	**0.810**		
DC-18	4/25/2007	**19**		
DC-18	4/5/2012	**7.2**		
DC-18	5/30/2013	**4.8**		
DC-18	10/28/2014	**3.0**		
DC-18	12/14/2015	**3.19**		
DC-18	3/16/2017	**3.24**		
DC-18	10/26/2017	**3.26**		Chloroform (3.00)
DC-18	4/20/2018	**3.31**		Chloroform (3.23)
DC-18	10/19/2018	**2.79**		Chloroform (2.36)
DC-19	6/4/2007	**0.79**		
DC-19	4/14/2008	**0.66**		
DC-19	4/4/2012	2.0	U	
DC-20	6/2/2008	**8.1**		
DC-20	5/30/2013	**1.7**		
DC-20	4/14/2014	**1.4**		
DC-20	10/28/2014	1.0	U	
DC-20	12/15/2015	**1.74**		1,2-Dichlororpropane (1.82)
DC-20	3/15/2017	**2.00**		
DC-20	10/27/2017	**0.991**		
DC-20	4/19/2018	**1.14**		
DC-20	10/19/2018	**0.885**		Benzene (0.54), sec-Butylbenzene (0.6 0)
KMW-1	4/11/2006	1.0	U	
KMW-1	10/26/2006	1.0	U	
KMW-1	4/25/2007	0.2	U	
KMW-1	4/14/2008	0.2	U	Chloroform (0.450)
KMW-1	4/3/2012	2.0	U	
KMW-2	6/12/2006	**130**		

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)		Other VOCs detected (µg/l)
KMW-2	8/8/2006	**130**		
KMW-2	10/26/2006	**190**		
KMW-2	4/24/2007	**63**		
KMW-2	4/16/2008	**96**		
KMW-2	3/8/2010	**81**		
KMW-2	11/3/2010	**74**		
KMW-2	6/1/2011	**12**		Acetone (140)
KMW-2	7/20/2011	**44**		
KMW-2	10/19/2011	**40**		
KMW-2	4/6/2012	**25**		
KMW-2	5/31/2013	**22**		
KMW-2	10/29/2014	**18**		
KMW-2	12/15/2015	**15**		
KMW-2	12/15/2016	**1.18**		
KMW-2	3/14/2017	1.00	U	
KMW-2	7/18/2017	1.00	U	
KMW-2	10/24/2017	0.500	U	
KMW-2	4/18/2018	0.500	U	
KMW-2	10/16/2018	0.500	U	
KMW-3	6/12/2006	**20**		
KMW-3	10/26/2006	**13**		
KMW-3	4/24/2007	**9.9**		
KMW-3	11/2/2010	**11**		
KMW-3	5/31/2011	**6.2**		
KMW-3	7/20/2011	**12**		
KMW-3	10/18/2011	**11**		
KMW-3	4/3/2012	**6.8**		
KMW-3	10/28/2014	1.0	U	
KMW-3	3/14/2017	**3.23**		
KMW-3	10/26/2017	**5.78**		
KMW-3	1/25/2018	**4.95**		
KMW-3	4/20/2018	**5.37**		
KMW-3	7/19/2018	**5.18**		
KMW-3	10/23/2018	**5.41**		
KMW-3	10/25/2019	**4.74**		
KMW-3	12/9/2021	**3.40**		
KMW-4	4/25/2007	**0.73**		
KMW-4	4/3/2012	2.0	U	
KMW-5	4/25/2007	**0.82**		
KMW-5	4/3/2012	2.0	U	
KMW-6	4/24/2007	**3.8**		
KMW-6	4/3/2012	2.0	U	
KMW-7	4/24/2007	**3.8**		

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)		Other VOCs detected (µg/l)
KMW-7	4/15/2008	**3.9**		
KMW-7	11/3/2010	2.0	U	
KMW-7	5/30/2011	**2.3**		
KMW-7	7/20/2011	2.0	U	
KMW-7	10/18/2011	2.0	U	
KMW-7	4/3/2012	**3.3**		
KMW-7	10/28/2014	**2.0**		p-isopropyltoluene (2.8)
KMW-7	12/15/2015	**2.17**		
KMW-7	3/16/2017	**1.17**		
KMW-7	10/25/2017	0.500	U	
KMW-7	4/19/2018	**1.59**		
KMW-7	10/23/2018	**0.711**		
KMW-7	10/29/2019	**0.631**		
KMW-7	12/10/2021	**0.620**		
KMW-8	4/24/2007	**11**		
KMW-8	4/15/2008	**17.4**		
KMW-8	4/3/2012	**10**		
KMW-8	10/28/2014	**5.9**		
KMW-8	12/15/2015	**3.98**		
KMW-8	3/16/2017	**6.71**		
KMW-8	7/19/2017	**5.00**		
KMW-8	10/26/2017	**4.99**		Chloroform (1.15)
KMW-8	1/25/2018	**5.89**		Chloroform (2.01)
KMW-8	4/19/2018	**5.74**		Chloroform (1.68)
KMW-8	7/19/2018	**5.17**		Chloroform (1.13)
KMW-8	10/23/2018	**5.26**		Chloroform (1.16)
KMW-8	10/28/2019	**6.24**		
KMW-8	12/10/2021	**1.94**		
KMW-9	4/26/2007	**9.3**		
KMW-9	3/8/2010	**4.4**		
KMW-9	11/4/2010	**2.8**		
KMW-9	4/5/2012	**4.0**		
KMW-9	4/15/2014	**1.0**		
KMW-9	10/27/2014	1.0	U	
KMW-9	12/10/2015	**1.47**		
KMW-9	3/15/2017	**2.07**		
KMW-9	10/26/2017	**0.770**		
KMW-9	4/18/2018	**1.02**		
KMW-9	10/18/2018	0.500	U	Chloroform (0.699)
Deep Monitoring Wells				
MW-19	10/29/2019	0.500	U	Chloroform (0.560)
MW-19	12/4/2019	0.500	U	
DC-5	2/4/1999	**2.4**		

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)		Other VOCs detected (µg/l)
DC-5	4/8/1999	**1.6**		Chloroform (2.6), Toluene (1.0)
DC-5	7/25/2005	**37**		
DC-5	4/11/2006	**1.3**		
DC-5	4/26/2007	**2.1**		
DC-5	11/3/2010	**2.1**		
DC-5	5/30/2011	2.0	U	
DC-5	7/19/2011	2.0	U	
DC-5	10/18/2011	2.0	U	
DC-5	4/6/2012	2.0	U	
DC-5	5/29/2013	1.0	U	
DC-9B	4/8/1999	**1.4**		Chloroform (1.4), Toluene (2.9)
DC-9B	3/6/2001	**2.0**		
DC-9B	6/20/2001	1.0	U	
DC-9B	9/17/2001	1.0	U	
DC-9B	12/20/2001	**6.4**		
DC-9B	7/25/2005	1.0	U	
DC-9B	4/11/2006	1.0	U	
DC-9B	8/8/2006	1.0	U	
DC-9B	10/26/2006	1.0	U	
DC-9B	4/26/2007	0.2	U	
DC-9B	4/15/2008	**0.60**		
* Monitoring well has been decommissioned				
DC-10B	4/8/1999	**1.8**		Chloroform (1.2), Toluene (1.9)
DC-10B	3/6/2001	**3.3**		TCE (1.7)
DC-10B	6/20/2001	**2.4**		
DC-10B	9/17/2001	1.0	U	
DC-10B	12/20/2001	1.0	U	
DC-10B	7/25/2005	1.0	U	
DC-10B	4/11/2006	1.0	U	
DC-10B	4/26/2007	**0.34**		
DC-10B	11/3/2010	**2.6**		
DC-10B	5/30/2011	2.0	U	Acetone (290)
DC-10B	7/19/2011	2.0	U	Acetone (54)
DC-10B	10/18/2011	2.0	U	Acetone (31)
DC-10B	4/6/2012	2.0	U	
DC-16	4/25/2007	**0.42**		
DC-16	11/5/2010	2.0	U	
DC-16	5/31/2011	2.0	U	
DC-16	7/19/2011	2.0	U	
DC-16	10/18/2011	2.0	U	
DC-16	4/6/2012	2.0	U	
KMW-5D	4/25/2007	0.2	U	
KMW-5D	4/3/2012	2.0	U	

Table C3
Historical Summary of Groundwater Analytical Results (1999 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Monitoring Well	Date	PCE (µg/l)	Other VOCs detected (µg/l)

NOTES:

1. Tetrachloroethene (PCE) concentrations in migrograms per liter (µg/l).
2. Groundwater samples analyzed using USEPA Method 8260B.
3. U = concentration not detected at or above the laboratory practical quantitation limit (PQL).
4. J = the identification of the analyte is acceptable; the reported value is an estimate
5. Detected concentrations are shown in **bold.**
6. Concentrations exceeding the cleanup level are **bold and shaded**.
7. Other detected VOCs are below their respective cleanup level unless otherwise noted.
8. Shallow monitoring wells are screened at the top of the shallow aquifer, and deep monitoring wells are screened below and deeper within the shallow aquifer.
9. Review of historical results indicate that DC-17 was inadvertently sampled as DC-5 in 2010, 2011 and 2012. This table reports the 2010 - 2012 DC-17 data as DC-5.

Table C4
Historical Summary of Soil Analytical Results (1998 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Sample ID	Depth (ft bgs)	Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
B-01	2	03/12/98	**0.28**		
B-01	5	03/12/98	**35**		
B-02	2	03/12/98	**0.3**		
B-02	4	03/12/98	**1.2**		
B-03	2	03/12/98	**1.2**		
B-03	5	03/12/98	**1.3**		
B-04	2	03/12/98	**1.4**		
B-04	2	03/12/98	**0.88**		Duplicate
B-04	5	03/12/98	**0.99**		
S-01	11	04/14/98	**0.8**		
S-01	20	04/14/98	**0.6**		
S-01	30	04/14/98	ND U		
S-01	34	04/14/98	ND U		
DC-01	NA	12/17/98	ND U		Composite
DC-02	NA	12/17/98	**0.19**		Composite
DC-03	NA	12/17/98	ND U		Composite
DC-04	NA	12/17/98	**0.15**		Composite
DC-04	NA	12/17/98	**0.16**		Duplicate
DC-03	NA	12/17/98	**0.18**		Comp (sat)
DC-04	NA	12/17/98	ND U		Comp (sat)
BH-01	3.5	12/16/98	**0.88**	Ethylbenzene = 0.17 Xylenes = 0.63	
BH-01	3.5	12/16/98	**0.9**	Benzene = 0.15, Xylenes 0.66	Duplicate
BH-01	9	12/16/98	**0.19**		
BH-02	8	12/16/98	ND U		
BH-03	7	12/16/98	ND U		
BH-04	7	12/16/98	ND U		
BH-05	6	12/16/98	**2.2**		
BH-05	6	12/16/98	**2.2**		Duplicate
BH-05	11	12/16/98	ND U		
BH-06	7	12/16/98	ND U		
BH-06	10	12/16/98	ND U	cis-1,2-dichloroethene = 0.07	
BH-07	1	12/16/98	**0.1**	Benzene = 0.31 Toluene = 0.32 Xylenes = 0.38	
BH-08	8	12/16/98	ND U		
BH-09	8	12/16/98	ND U	Benzene = 0.66 Ethylbenzene = 1.1	
BH-10	8	12/16/98	ND U		
BH-11	1	12/16/98	ND U		
BH-12	8	12/16/98	ND U		
BH-13	7	12/16/98	**1.4**		
BH-13	11	12/16/98	ND U		

Table C4
Historical Summary of Soil Analytical Results (1998 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Sample ID	Depth (ft bgs)	Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
BH-14	8	12/16/98	**10**		
BH-14	11	12/16/98	**0.22**		
BH-14	11	12/16/98	**0.16**		Duplicate
BH-14	20	12/16/98	ND U		
BH-15	6	12/17/98	**1.1**		
BH-15	11	12/17/98	ND U		
BH-16	7	12/17/98	**0.3**		
BH-16	11	12/17/98	ND U		
BH-17	11	12/17/98	ND U		
BH-18	7	12/17/98	ND U		
BH-18	11	12/17/98	ND U		
BH-19	8	12/17/98	ND U		
DC-05	56	01/22/99	ND U		
DC-06	40	01/22/99	ND U		
DC-07	35	01/22/99	ND U		
DC-08	35	01/22/99	ND U		
DC-9B	35	04/05/99	ND U		
DC-10B	50	04/05/99	ND U		
MW-01	2.5-4	12/09/99	ND U		
MW-02	32.5-34	12/09/99	ND U		
HA-01	4.5-5	12/22/99	0.05 U		
HA-01	10.10.5	12/22/99	**0.0685**		
HA-01	12.5-13	12/22/99	0.05 U		
T-01	4	07/26/00	ND U		S.Sewer Ex.
T-02	4	07/26/00	ND U		S.Sewer Ex.
T-03	3	07/26/00	ND U		S.Sewer Ex.
T-04	3	07/26/00	ND U		S.Sewer Ex.
SVS-04	0-4	02/11/05	**0.0058**		
SVS-05	0-4	02/11/05	0.0011 U		
KB-01	4-5	04/15/05	0.02 U		
KB-01	15-16	04/15/05	**0.02**		
KB-01	25-26	04/15/05	**0.084**		
KB-01	35-36	04/15/05	**0.18**		
KB-02	4-5	04/15/05	0.02 U		
KB-02	15-16	04/15/05	0.02 U		
KB-02	25-26	04/15/05	**0.098**		
KB-02	35-36	04/15/05	**0.16**		
KB-03	4-5	04/15/05	0.02 U		
KB-03	15-16	04/15/05	0.02 U		
KB-03	25-26	04/15/05	0.02 U		
KB-04	4-5	04/15/05	0.02 U		
KB-04	15-16	04/15/05	**0.049**		
KB-04	19-20	04/15/05	**0.1**		

Table C4
Historical Summary of Soil Analytical Results (1998 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Sample ID	Depth (ft bgs)	Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
KB-05	4-5	04/15/05	0.02 U		
KB-05	15-16	04/15/05	0.02 U		
KB-05	25-26	04/15/05	**0.035**		
KB-05	35-36	04/15/05	**0.055**		
ST-01	6	03/29/06	**0.07**		Overexcavated
North Septic Sidewall	9	04/05/06	0.005 U		Sidewall
East Septic Sidewall	9	04/05/06	**0.033**	TCE = 0.019, cis-1,2-DCE=0.012	Overexcavated
South Septic Sidewall	9	04/05/06	0.005 U		Sidewall
West Septic Sidewall	9	04/05/06	0.005 U		Sidewall
ST-02	6	04/05/06	**0.006**	TCE = 0.005, cis-1,2-DCE=0.007	Overexcavated
ST-03	7	04/05/06	**0.016**		Overexcavated
ST-04	7	04/05/06	**0.073**	TCE = 0.026, cis-1,2-DCE=0.032	Overexcavated
ST5 Clearance	9	04/05/06	0.005 U		Overexcavated
ST6 Clearance	9	04/05/06	**0.007**		Bottom
East Septic Sidewall 2	11	04/06/06	0.005 U		Sidewall
ST5 Clearance 2	12	04/05/06	0.005 U		Bottom
KMW-01	7	07/25/05	0.05 U		
KMW-01	22	07/25/05	0.05 U		
KMW-01	40	07/25/05	0.05 U		
KMW-02	10	05/01/06	0.05 U		
KMW-02	20	05/01/06	0.05 U		
KMW-02	30	05/01/06	0.05 U		
KMW-03	10	05/01/06	0.05 U		
KMW-03	20	05/01/06	0.05 U		
TW-01	5	05/01/06	0.05 U		
TW-01	10	05/01/06	0.05 U		
TW-01	20	05/01/06	0.05 U		
TW-01	30	05/01/06	0.05 U		
KMW-04	4-5.5	03/28/07	0.05 U		
KMW-04	9-10.5	03/28/07	0.05 U		
KMW-04	19-20.5	03/28/07	0.05 U		
KMW-04	29-30.5	03/28/07	0.05 U		
KMW-05	4-5.5	03/28/07	0.05 U		
KMW-05	9-10.5	03/28/07	0.05 U		
KMW-05	19-20.5	03/28/07	0.05 U		
KMW-05	29-30.5	03/28/07	0.05 U		
KMW-5D	4-5.5	03/28/07	0.05 U		
KMW-5D	9-10.5	03/28/07	0.05 U		
KMW-5D	24-25.5	03/28/07	0.05 U		
KMW-5D	46	03/28/07	0.05 U		
KMW-06	9-10.5	03/27/07	0.05 U		
KMW-06	19-20.5	03/27/07	0.05 U		
KMW-06	29-30.5	03/27/07	0.05 U		
KMW-06	41-42.5	03/27/07	0.05 U		

Table C4
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Normandy Park, Washington

Sample ID	Depth (ft bgs)	Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
KMW-07	9-10.5	03/27/07	0.05 U		
KMW-07	19-20.5	03/27/07	0.05 U		
KMW-07	29-30.5	03/27/07	0.05 U		
KMW-08	9-10.5	03/27/07	0.05 U		
KMW-08	20-21.5	03/27/07	0.05 U		
KMW-08	29-30.5	03/27/07	0.05 U		
KMW-09	5	03/27/07	**0.0043**		
KMW-09	14-15.5	03/27/07	**0.2**		
KMW-09	19-20.5	03/27/07	**0.23**		
KMW-09	24-25.5	03/27/07	**1.8**		
KMW-09	29-30.5	03/27/07	**0.32**		
KMW-09	34-35.5	03/27/07	**0.29**		Split
KMW-09	35	03/27/07	**0.016**		Split
KMW-09	39-40.5	03/27/07	**0.053**		
KGP-01	4	07/06/07	**1.6**		Split
KGP-01	4	07/06/07	**13**	TCE = 0.15	Split
KGP-01	8	07/06/07	**59**		Split
KGP-01	8	07/06/07	**14**		Split
KGP-01	10.5	07/06/07	**2.1**		
KGP-01	16	07/06/07	**0.28**		Split
KGP-01	16	07/06/07	**0.08**		Split
KGP-01	20	07/06/07	**0.23**		
KGP-01	23	07/06/07	**0.15**		
KGP-01	32	07/06/07	**0.17**		
KGP-01	38	07/06/07	**0.051**		
KGP-02	4	07/06/07	**0.16**		Split
KGP-02	4	07/06/07	**0.087**		Split
KGP-02	8	07/06/07	**0.013**		Split
KGP-02	8	07/06/07	**0.0082**		Split
KGP-02	10.5	07/06/07	**0.064**		
KGP-02	16	07/06/07	**0.02**		Split
KGP-02	16	07/06/07	**0.022**		Split
KGP-02	20	07/06/07	**0.088**		
KGP-02	23	07/06/07	**0.033**		
KGP-02	30-31	07/06/07	**0.016**		
KGP-02	37	07/06/07	**0.015**		

Table C4
Historical Summary of Soil Analytical Results (1998 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Sample ID	Depth (ft bgs)	Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
KGP-03	2-4	07/06/07	**0.001**		Split
KGP-03	2-4	07/06/07	**0.0017**		Split
KGP-03	8	07/06/07	**0.005**		Split
KGP-03	8	07/06/07	**0.0045**		Split
KGP-03	10.5	07/06/07	**0.007**		
KGP-03	13-16	07/06/07	**0.009**		Split
KGP-03	13-16	07/06/07	**0.0089**		Split
KGP-03	20	07/06/07	**0.009**		
KGP-03	23	07/06/07	**0.012**		
KGP-03	29-32	07/06/07	**0.011**		
KGP-03	38	07/06/07	**0.01**		
GP-01	8-12	03/30/07	0.0008 U		
GP-01	30-34	03/30/07	**0.0067**		
GP-02	4-8	04/02/07	0.0009 U		
GP-02	28-32	04/02/07	**0.0055**		
GP-03	8-12	03/30/07	0.00099 U		
GP-03	28-30	03/30/07	**0.011**		
GP-04	20-24	03/30/07	**0.0023**		
GP-05	4-8	04/03/07	**0.0028**		
GP-05	16-20	04/03/07	**0.024**		
GP-06	4-8	04/02/07	0.0011 U		
GP-06	27-30	04/02/07	**0.0033**		
GP-07	4-8	04/02/07	0.00095 U		
GP-07	30-34	04/02/07	**0.0016**		
GP-08	6	05/27/08	**0.0017**		
GP-08	10	05/27/08	**0.0026**		
GP-09	4	05/27/08	0.00086 U		
GP-09	10	05/27/08	**0.0019**		
GP-10	4	05/27/08	0.001 U		
GP-10	10	05/27/08	**0.0017**		
GP-11	6	05/27/08	**0.0014**		
GP-11	10	05/27/08	**0.0013**		
GP-12	6	05/27/08	**0.0011**		
GP-12	10	05/27/08	0.00092 U		
DC-11	15-16.5	04/19/07	**0.0013**		
DC-11	30-31.5	04/19/07	**0.0084**		
DC-12	15-16.5	04/18/07	**0.0024**		
DC-13	15-16.5	04/19/07	**0.00096**		
DC-13	35-36.5	04/19/07	**0.0081**		
DC-14	15-16.5	04/17/07	0.0011 U		
DC-15	15-16.5	04/16/07	0.0011 U		
DC-16	15-16.5	04/17/07	0.0011 U		
DC-17	15-16.5	04/16/07	0.001 U		
DC-17	35-36.5	04/16/07	**0.077**		
DC-18	15-16.5	04/18/07	0.001 U		

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Sample ID	Depth (ft bgs)	Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
DC-19	3.5-5	06/01/07	0.00077 U		
DC-19	7.5-9	06/01/07	0.00069 U		
DC-19	37.5-38	06/01/07	**0.0047**		
DC-20	10	05/28/08	**0.0026**		
DC-20	35	05/28/08	**0.0018**		
TP-01	4	05/12/08	**0.001**		Split
TP-01	4	05/12/08	0.02 U		Split
TP-01	6.5	05/12/08	0.0012 U		Split
TP-01	6.5	05/12/08	**0.02**		Split
TP-02-south	4	05/12/08	**0.0068**		Split
TP-02-south	4	05/12/08	**0.27**		Split
TP-02-north	4	05/12/08	**0.05**		
TP-03	3.5	05/12/08	**0.014**		Split
TP-03	3.5	05/12/08	**0.02**		Split
TP-05	2.5	05/12/08	**0.34**		
B-05	10	03/26/08	0.00287 U		
B-05	20	03/26/08	**0.0034**		
B-05	30	03/26/08	**0.00888**		
B-06	10	03/25/08	0.00302 U		
B-06	20	03/25/08	**0.00816**		
B-06	30	03/25/08	**0.00899**		
B-07	10	03/25/08	0.000151 U		
B-07	20	03/25/08	**0.00351**		
B-07	30	03/25/08	**0.00884**		
B-08	10	03/26/08	**0.00654**		
B-08	20	03/26/08	**0.00554**		
B-08	30	03/26/08	**0.00562**		
B-09	10	03/25/08	**0.00616**		
B-09	20	03/25/08	**0.0143**		
B-09	30	03/25/08	**0.0116**		
B-10	10	03/24/08	**0.671**		
B-10	20	03/24/08	**0.0508**		
B-10	30	03/24/08	**0.0154**		
B-11	10	03/27/08	**0.0324**		
B-11	20	03/27/08	**0.346**		
B-11	30	03/27/08	**0.279**		
B-12	10	03/27/08	0.00292 U		
B-12	20	03/27/08	**0.00299**		
B-12	30	03/27/08	**0.00848**		
B-13	10	03/27/08	**0.0311**		
B-13	20	03/27/08	**0.0314**		
B-13	30	03/27/08	**0.0231**		
B-14	10	03/24/08	**0.0118**		
B-14	20	03/24/08	**0.0296**		
B-14	30	03/24/08	**0.594**		

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Manhattan Village Shopping Center and Harris Properties
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Sample ID	Depth (ft bgs)	Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
B-15	10	03/24/08	**0.00532**		
B-15	20	03/24/08	**0.0188**		
B-15	30	03/24/08	**0.00785**		
B-16	10	03/25/08	0.00324 U		
B-16	20	03/25/08	0.00324 U		
B-16	24	03/25/08	0.000139 U		
B-17	10	03/26/08	0.00269 U		
B-17	20	03/26/08	0.00251 U		
B-17	30	03/26/08	0.00244 U		
SB-01	10	04/19/11	0.01 U		
SB-01	20	04/19/11	0.01 U		
SB-01	30	04/19/11	0.01 U		
SB-02	10	04/19/11	0.01 U		
SB-02	20	04/19/11	0.01 U		
SB-02	30	04/19/11	0.01 U		
SB-03	10	04/19/11	0.01 U		
SB-03	20	04/19/11	0.01 U		
SB-03	30	04/19/11	0.01 U		
SB-04	5	03/01/12	0.01 U		
SB-04	10	03/01/12	0.01 U		
SB-04	20	03/01/12	0.01 U		
SB-04	30	03/01/12	0.01 U		
SB-04	34	03/01/12	0.01 U		
SB-05	10	02/29/12	0.01 U		
SB-05	20	02/29/12	0.01 U		
SB-05	30	02/29/12	0.01 U		
SB-06	5	02/29/12	0.01 U		
SB-06	10	02/29/12	**0.028**		
SB-06	20	02/29/12	0.01 U		
SB-06	30	02/29/12	0.01 U		
SB-06	38	02/29/12	0.01 U		
SB-07	5	03/01/12	0.01 U		
SB-07	20	03/01/12	0.01 U		
SB-07	30	03/01/12	0.01 U		
SB-07	38	03/01/12	0.01 U		
SB-07	43	03/01/12	0.01 U		
SB-08	10	02/29/12	0.01 U		
SB-08	20	02/29/12	0.01 U		
SB-08	30	02/29/12	0.01 U		
SB-09	2	04/28/12	ND U		
SB-09	8	04/28/12	**0.013**		
SB-09	12	04/28/12	ND U		
SB-09	20	04/28/12	ND U		
AS-2	5	09/29/14	0.0011 U	Acetone = 0.082	
AS-3	10	10/01/14	**0.0010**		
AS-4	5	09/30/14	**0.0011**		

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Normandy Park, Washington

Sample ID	Depth (ft bgs)	Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
AS-5	15	09/30/14	**0.0040**		
AS-6	5	09/26/14	**0.0042**	Acetone = 0.063	
AS-7	5	09/24/14	0.0012 U	Acetone = 0.29	
AS-8	3.5	09/30/14	**0.0075**		
AS-8	25	10/17/14	**0.029**	n-butylbenzene = 0.0036, sec-butylbenzene = 0.002 p-isopropyltoluene = 0.0016 Napthalene = 0.0041 1,2,4-Trimethlybenzene = 0.047 1,2,3-Trimethlybenzene = 0.014 1,3,5-Trimethlybenzene = 0.013 Total xylenes = 0.011	
AS-9	3	09/30/14	**0.0039**		
AS-9	25	10/16/14	**0.012**	n-butylbenzene = 0.0034, sec-butylbenzene = 0.0014 p-isopropyltoluene = 0.0012 Napthalene = 0.0088 n-propylbenzene = 0.0029 1,2,4-Trimethlybenzene = 0.042 1,2,3-Trimethlybenzene = 0.016 1,3,5-Trimethlybenzene = 0.010 Total xylenes = 0.0078	
AS-10	3	10/01/14	0.0011 U	Acetone = 0.069	
AS-10	8	10/14/14	**0.007**		
AS-11	3	10/01/14	**0.0011**		
AS-11	10	10/13/14	**0.0021**		
AS-12	3	10/01/14	**0.0017**	Acetone = 0.100 n-butylbenzene = 0.0013, n-propylbenzene = 0.0019 1,2,4-Trimethlybenzene = 0.020 1,2,3-Trimethlybenzene = 0.0053 1,3,5-Trimethlybenzene = 0.006 Total xylenes = 0.0084	
AS-12	8	10/10/14	**0.017**		
AS-13	3	10/01/14	**0.0028**		
AS-13	8	10/01/14	**0.0022**		
AS-14	3	09/29/14	**0.0038**		
AS-14	8	10/08/14	**0.0021**		
AS-15	3	09/29/14	**0.014**	Acetone = 0.11	
AS-15	8	10/06/14	**0.0031**		
AS-16	3	09/29/14	**0.018**		
AS-16	15	10/07/14	**0.0032**		
AS-17	3	09/29/14	**0.044**	Acetone = 0.33, MEK = 0.011	
AS-17	8	10/03/14	**0.0071**	1,2,4-Trimethlybenzene = 0.0028 1,2,3-Trimethlybenzene = 0.001	
AS-17	30	10/03/14	**0.0022**		

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Sample ID	Depth (ft bgs)	Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
AS-18	3	09/29/14	**0.0049**		
AS-18	8	10/02/14	**0.0014**		
AS-19	3	09/29/14	**0.0091**		
AS-19	8	10/02/14	**0.094**	n-butylbenzene = 1.4 sec-butylbenzene = 0.67 2-Chlorotoluene = 0.48 4-Chlorotoluene = 0.52 Ethylbenzene = 0.94 Cumene = 0.41 p-isopropyltoluene = 0.41 Napthalene = 1.5 n-propylbenzene = 1.8 Styrene = 0.089 1,1,2,2-Tetrachloroethane = 0.45 Toluene = 0.13 1,2,3-Trichlorotoluene = 0.036 1,1,2-Trichloroethane = 0.34 1,2,4-Trimethlybenzene = 18 1,2,3-Trimethlybenzene = 4.6 1,3,5-Trimethlybenzene = 5.0 Total xylenes = 7.7	
AS-20	3	09/29/14	**0.012**		
AS-20	10	10/06/14	**0.0033**	1,2,4-Trimethlybenzene = 0.0029	
AS-21	3	10/01/14	**0.0034**		
AS-21	8	10/07/14	**0.0038**		
AS-22	3	10/01/14	**0.0066**	Acetone = 0.062	
AS-22	8	10/01/14	**0.0052**		
AS-22	10	10/08/14	**0.0027**	Acetone = 0.073 n-butylbenzene = 0.0097 sec-butylbenzene = 0.0059 Ethylbenzene = 0.0072 Cumene = 0.0041 p-isopropyltoluene = 0.0036 Napthalene = 0.022 n-propylbenzene = 0.019 1,2,4-Trimethlybenzene = 0.18 1,2,3-Trimethlybenzene = 0.052 1,3,5-Trimethlybenzene = 0.047 Total xylenes = 0.076	
AS-23	3	09/30/14	**0.0012**		
AS-23	8	09/30/14	**0.0022**		
AS-23	10	10/10/14	**0.0038**		
AS-24	3	09/30/14	**0.0074**	Acetone = 0.066	
AS-24	8	09/30/14	**0.0013**		
AS-24	10	10/14/14	**0.0022**		

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Sample ID	Depth (ft bgs)	Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
AS-25	3	10/01/14	**0.0017**		
AS-25	10	10/15/14	**0.0020**		
AS-26	3	09/30/14	**0.0093**	Acetone = 0.057	
AS-26	8	09/30/14	**0.0089**	Acetone = 0.057	
AS-26	10	10/16/14	**0.0067**		
AS-27	3	09/30/14	**0.0051**		
AS-27	8	10/17/14	**0.015**		
AS-28	10	09/22/14	**0.0082**		
AS-29	5	09/23/14	**0.0034**	Acetone = 0.21, MEK = 0.018	
AS-30	5	09/25/14	**0.0015**		
AS-31	5	09/25/14	0.0011 U	Acetone = 0.076	
SVE-14	3.5	09/30/14	0.0011 U		
SVE-14	8.5	10/13/14	**0.0012**	1,2,4-Trimethlybenzene = 0.0044 1,2,3-Trimethlybenzene = 0.0019 1,3,5-Trimethlybenzene = 0.0015	
SVE-15	3	11/01/14	**0.0018**		
SVE-15	8	10/15/14	**0.0024**		
SVE-16	3	09/30/14	**0.0037**		
SVE-16	10	10/15/14	**0.008**	n-butylbenzene = 0.0048 sec-butylbenzene = 0.0028 Ethylbenzene = 0.0013 Cumene = 0.0013 p-isopropyltoluene = 0.0023 Napthalene = 0.0075 n-propylbenzene = 0.0057 Styrene = 0.089 1,1,2,2-Tetrachloroethane = 0.45 1,2,4-Trimethlybenzene = 0.074 1,2,3-Trimethlybenzene = 0.023 1,3,5-Trimethlybenzene = 0.021 Total xylenes = 0.020	
SVE-17	5	09/24/14	**0.026**		
SVE-18	5	09/23/14	**0.0024**		
SVE-19	5	09/29/14	0.0011 U		
SB-10	6	04/16/18	**0.193**		
SB-10	10	04/16/18	0.0359 U		
SB-11	8	04/16/18	0.0347 U		
SB-11	15	04/16/18	0.0353 U		
SB-12	1	04/16/18	0.0348 U		
SB-12	5	04/16/18	**0.138**		
SB-12	10	04/16/18	0.0325 U		

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Sample ID	Depth (ft bgs)	Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
SB-13	5	04/16/18	0.0350 U		
SB-13	10	04/16/18	**0.128**		
SB-13	20	04/16/18	**6.03**		
SB-13	29	04/16/18	**0.110**		
SB-13b	36	04/25/18	**0.0829**		
SB-13b	40	04/25/18	**0.128**		
SB-14	5	04/16/18	0.0317 U		
SB-14	10	04/16/18	0.0298 U		
SB-14	20	04/16/18	0.0253 U		
SB-14	30	04/16/18	**0.109**		
SB-14a	40	04/25/18	**0.105**		
SB-15	10	04/17/18	0.0334 U		
SB-15	20	04/17/18	**0.0781**		
SB-15	30	04/17/18	**0.0645**		
SB-15	40	04/17/18	**0.132**		
SB-16	20	04/17/18	0.0366 U		
SB-16	30	04/17/18	**0.0505**		
SB-16	40	04/17/18	**0.0575**		
SB-17	20	04/18/18	**0.0435**		
SB-17	30	04/18/18	0.0281 U		
SB-17	40	04/18/18	**0.0286**		
SB-18	30	04/18/18	**0.0429**		
SB-18	40	04/18/18	**0.0284**		
SB-26	2	04/24/18	**0.0960**		
SB-26	4	04/24/18	0.0292 U		
SB-26	10	04/24/18	0.0433 U		
SB-26	20	04/24/18	**0.0763**		
SB-26	30	04/24/18	**0.0647**		
SB-26	40	04/24/18	0.0340 U		
SB-27	2	04/24/18	**0.0800**		
SB-27	4	04/24/18	0.0426 U		
SB-27	10	04/24/18	0.0339 U		
SB-27	20	04/24/18	**0.0942**		
SB-27	30	04/24/18	**0.118**		
SB-27	40	04/24/18	**0.169**		
SB-28	20	04/24/18	0.0323 U		
SB-28	30	04/24/18	**0.0784**		
SB-28	40	04/24/18	0.0325 U		
SB-30	30	04/25/18	0.0395 U		
SB-30	35	04/25/18	**0.142**		
SB-30	40	04/25/18	**0.0665**		
MW-17	25	03/01/19	0.0244 U		
MW-17	30	03/01/19	0.0267 U		
MW-17	35	03/01/19	**0.0543**		

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Sample ID	Depth (ft bgs)	Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
MW-18	10	02/28/19	0.0314 U		
MW-18	30	02/28/19	**0.0288**		
MW-18	35	02/28/19	**0.0358**		
MW-19	30.5	10/17/19	0.0271 U		
MW-19	35	10/17/19	**0.0717**		
MW-19	38	10/17/19	**0.107**		
MW-19	44	10/17/19	0.0268 U		
MW-20	30	10/17/19	**0.0280** U		
MW-20	35	10/17/19	**0.0299**		
SVE-20	2	08/31/20	**0.0907**		
SVE-20	8.5	08/31/20	**1.54**		
SVE-20	11	08/31/20	**1.30**	Cis-1,2-dichloroethene = 0.0455; Trichloroethene = 0.0226	
SVE-21	2	08/31/20	**0.254**		
SVE-21	12	08/31/20	**0.0381**		
SVE-21	25	08/31/20	**0.0558**		
SVE-21	35	08/31/20	**0.135**		
SVE-22	2	09/01/20	**0.0320**		
SVE-22	26	09/01/20	**0.102**		
SVE-22	32	09/01/20	**0.105**		
SVE-23	2	09/01/20	0.0270 U		
SVE-23	19	09/01/20	**0.0252**	1,2,3-Trichlorobenzene = 0.0254; Hexachlorobutadiene = 0.0313	
SVE-23	25	09/01/20	**0.0489**		
SVE-24	3	08/31/20	0.0315 U		
SVE-24	8	09/01/20	0.0215 U		Vert depth = 5.7 ft
SVE-24	13.5	09/01/20	0.0245 U		Vert depth = 9.6 ft
SVE-25	2	09/01/20	0.0269 U		
SVE-25	11.5	09/02/20	**0.0373**		Vert depth = 8.2 ft
SVE-25	43.5	09/02/20	**0.063**		Vert depth = 30.9 ft
SVE-25	49	09/02/20	**0.0422**		Vert depth = 34.8 ft
Trench	2.5	09/02/20	0.0240 U		Adj. to sanitary line
EX-1	1.5	09/17/20	**0.144**		
EX-1	4	09/17/20	0.0242 U		
EX-2	1	09/17/20	0.0233 U		
EX-2	4	09/17/20	0.0260 U		
EX-3	3	09/17/20	0.0239 U		
EX-3	4	09/17/20	0.0240 U		
EX-4	2	09/17/20	**0.130**		
EX-4	4	09/17/20	0.0224 U		
EX-5	2	09/17/20	0.0237 U		
EX-6	3	09/17/20	0.00565 U		
EX-7	2	09/17/20	0.00620 U		
EX-8	1.5	09/17/20	0.00632 U		
EX-9	3	09/17/20	0.00666 U		

Table C4
Historical Summary of Soil Analytical Results (1998 - 2021)
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Sample ID	Depth (ft bgs)	Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
EX-10	3	09/17/20	0.00588 U		
EX-11	2	09/17/20	0.00642 U		
EX-12	2	09/17/20	0.00606 U		
EX-13	2	09/17/20	0.00642 U		
EX-14	2	09/17/20	0.00608 U		
EX-15	2	09/17/20	0.00576 U		
EX-16	1.5	01/27/21	0.0214 U		
EX-17	1.5	01/27/21	**0.0876**		
EX-18	1.5	01/27/21	0.0236 U		
EX-19	2	01/27/21	0.0265 U		
EX-20	2.5	01/27/21	0.0231 U		
EX-21	2	01/27/21	0.0229 U		
EX-22	2.5	01/27/21	0.0237 U		
EX-23	2	01/27/21	0.0273 U		
EX-24	2	01/27/21	0.0242 U		
EX-25	3	01/27/21	0.0264 U		
EX-26	3	01/27/21	0.0231 U		
EX-27	3	01/27/21	0.0193 U		

NOTES:

1. Tetrachloroethene (PCE) concentrations in milligrams per kilogram (mg/kg).
2. Samples analyzed using USEPA Methods 8260 (and by 8021B in 1998 through 2000 only). Samples EX-6 EX-15 analyzed by EPA Method 8260-SIM
3. ND and U = concentration not detected at or above the laboratory practical quantitation limit (PQL).
4. Detected concentrations are shown in **bold.**
5. Concentrations exceeding the PCE MTCA Method A cleanup level of 0.050 mg/kg are **bold and shaded**.
6. Other detected VOCs - only those which are above their respective cleanup level are listed.
7. SVE-24 and SVE-25 were installed at a 45 degree angle and sample depths indicate length along boring. Vertical depths are included in the comments.

Table C5

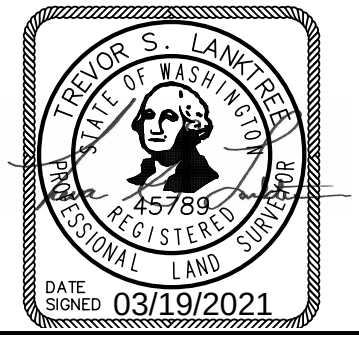
Soil Vapor Results - March 11 and June 3, 2019
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Parameter	CAS Number	Commercial Remediation Screening Level	Subslab Soil Gas Sample ID												Soil Gas Sample ID	
			SVS-10		SVS-11		SVS-12	SVS-13		SVS-14		SVS-15		SVS-16	SVS-17	
			3/11/2019	6/3/2019	3/11/2019	6/3/2019	6/3/2019	3/11/2019	6/3/2019	3/11/2019	6/3/2019	3/11/2019	6/3/2019	3/11/2019	3/11/2019	6/3/2019
		Screen Depth (ft)	1.3		1.3		1.3	1.2		1.3		1.3		1.3	4.5 to 5	
cis-1,2-Dichloroethene	156-59-2	-	1.59 U	1.59 U	1.59 U	**15.0**	1.59 U	1.59 U	1.59 U	1.59 U	1.59 U	1.59 U	1.59 U	1.59 U	**1,230**	**8,600**
trans-1,2-Dichloroethene	156-60-5	-	1.59 U	1.59 U	1.59 U	1.59 U	1.59 U	1.59 U	1.59 U	1.59 U	1.59 U	1.59 U	1.59 U	1.59 U	**43.4**	**519**
Tetrachloroethene	127-18-4	1,067	**105**	**485**	**108**	**537**	**367**	**611**	**1,500**	**9.93**	**168**	**50.5**	**115**	**369**	**26,900**	**104,000**
Trichloroethene	79-01-6	36.7	**2.52**	2.14 U	2.14 U	**5.64**	2.14 U	2.14 U	2.14 U	2.14 U	2.14 U	2.14 U	2.14 U	2.14 U	**319**	**3,290**
Vinyl Chloride	75-01-4	31.7	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	1.02 U	**44.7**	**21.4**

NOTES:

1. All results in µg/m^3 (micrograms per cubic meter).
2. U = not detected at or above the method reporting limit shown.
3. - = not applicable
4. Commercial remediation screening levels (SLs) for tetrachloroethene, trichloroethene, and vinyl chloride have been calculated using Equation 750-2 (Washington Administrative Code 173-340-750). Per Ecology's *Frequently Asked* Questions (FAQs) Regarding *Vapor Intrusion (VI) and Ecology's Guidance Implementation Memorandum No. 21 (November 1, 2018)* , an exposure frequency (EF) factor of 0.3 was used (instead of 1.0) to reflect a commercial exposure of 52 weeks at 50 hours per week. Ecology has not assigned vapor intrusion SLs to cis- and trans-1,2-dichloroethene.
5. Detected concentrations are shown in **bold.**
6. Concentrations exceeding the commercial remediation screening level are **bold and shaded**.
7. Only tetrachloroethene and breakdown daughter products are shown. See lab reports for other detected VOCs unrelated to tetrachloroethene including acetone, carbon disulfide, chloroform, chloromethane, 1,2-dichlorobenzene, 1,1-dichloroethene, 1,4-dioxane, ethanol, ethylbenzene, trichlorfluoromethane, dichlororfluoroethane, hexane, methylene chloride, 2-butanone, isopropyl alcohol, 1-propene, styrene, tetrahydrofuran, toluene, 1,1,1-trichloroethane, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, m,p-xylene, and o-xylene.
8. SVS-10 and SVS-11 were collected beneath the slab in Four Star Cleaners on MVSC Property.
9. SVS-12, SVS-13, SVS-14, SVS-15, and SVS-16 were collected beneath the slab in Archies Restaurant on Harris Property. The sample from SVS-12 was not analyzed in March 2019 due to leakage in the sampling train. SVS-16 was not sampled in June 2019 due to floor wax in sampling probe tip.
10. SVS-17 was collected beneath the aspalt paved alley behind Four Star Cleaners on MVSC Property.

Facility Name: **MTIC and Harris - 2021 Wells, Excavation, Trench**	
Address: **17825, 17835, 17855 First Ave S, and**	
145 SW 178th St in Normandy Park, Washington	
PES Contact Name: Sean Kounovsky, Matt Dahl	
Phone Number: **(541) 868-6935, (425) 922-0872**	
PES Project Number: **1358.001.02.014**	
Survey Firm: **LANKTREE LAND SURVEYING, INC.**	
Surveyor Name: Trevor Lanktree	
Date of Field Survey: 03/19/2021	
Project Number:	
Horizontal Datum:	
Vertical Datum:	



PES SITE ID	Surveyor's Point ID	Descripton	WA State Plane NAD 83-91 (HARN) Zone: Easting (x) (to 0.1 ft)	Northing (y) (to 0.1 ft)	Elevation NAVD 88 Ground Surface (to 0.1 ft)	Top of Monument (to 0.01 ft)	Top of Well Casing (to 0.01 ft)	Notes
Horizontal and Elevation Survey of wells, excavation limits, and trench alignment								
SVE-10	200313		1268841.1	165187.7	311.1	311.20	310.69	near excavation
SVE-20	200328		1268696.8	165057.7	313.4	313.37	313.02	In paved alley
SVE-21	200325		1268703.5	165057.2	313.5	313.47	313.04	In paved alley
SVE-22	200331		1268715.6	165085.5	310.2	310.27	309.90	In field
SVE-23	200310		1268839.9	165180.7	311.2	311.22	310.71	near excavation
SVE-24	200319		1268862.8	165175.9	312.5	312.53	312.20	near excavation
SVE-25	200322		1268852.0	165164.6	311.8	311.86	311.32	near excavation
MW-1	200307		1268830.5	165180.1	310.8	310.89	310.63	near excavation
DC-12	200316		1268852.1	165179.8	311.7	311.81	311.22	near excavation
Trench-1	200283		1268844.4	165180.1	311.3			
Trench-2	200284		1268785.9	165186.5	310.3			
Trench-3	200285		1268754.6	165082.1	310.7			
Exc-1	200291		1268844.4	165180.3	311.3			
Exc-2	200292		1268847.8	165181.5	311.5			
Exc-3	200293		1268850.9	165181.2	311.6			
Exc-4	200294		1268850.6	165177.3	311.6			
Exc-5	200295		1268853.2	165177.1	311.7			
Exc-6	200296		1268862.3	165185.1	312.5			
Exc-7	200297		1268870.1	165184.1	312.6			
Exc-8	200298		1268868.8	165171.8	312.6			
Exc-9	200299		1268860.6	165172.6	312.5			
Exc-10	200300		1268859.1	165158.6	311.8			
Exc-11	200301		1268849.2	165159.6	311.6			
Exc-12	200302		1268849.1	165171.6	311.6			
Exc-13	200303		1268847.1	165173.7	311.6			
Exc-14	200304		1268847.4	165175.2	311.5			
Exc-15	200305		1268843.9	165175.6	311.4			
Man-1	200286		1268755.2	165063.5	311.60			Top of 2in PVC at Manifold
Man-2	200287		1268753.7	165063.5	311.61			Top of 2in PVC at Manifold
Man-3	200288		1268752.3	165063.6	311.61			Top of 2in PVC at Manifold
Man-4	200289		1268750.8	165063.6	311.61			Top of 2in PVC at Manifold
Man-5	200290		1268749.3	165063.5	311.62			Top of 2in PVC at Manifold

Horizontal Control Point Description(s)

Vertical Control Point Description

ATTACHMENT D

LABORATORY REPORTS AND DATA VALIDATION MEMORANDA

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

PES Environmental, Inc.
Matt Dahl
1215 Fourth Avenue, Suite 1350
Seattle, WA 98161

RE: MVSC - Harris
Work Order Number: 2009053

January 05, 2021

Attention Matt Dahl:

Fremont Analytical, Inc. received 25 sample(s) on 9/2/2020 for the analyses presented in the following report.

Sample Moisture (Percent Moisture)
Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,



Brianna Barnes
Project Manager

Date: *01/05/2021*

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris
Work Order: 2009053

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2009053-001	SVE-20-2	08/31/2020 9:00 AM	09/02/2020 5:00 PM
2009053-002	SVE-21-2	08/31/2020 9:10 AM	09/02/2020 5:00 PM
2009053-003	SVE-20-8.5	08/31/2020 12:00 PM	09/02/2020 5:00 PM
2009053-004	SVE-20-11	08/31/2020 12:20 PM	09/02/2020 5:00 PM
2009053-005	SVE-24-3	08/31/2020 12:30 PM	09/02/2020 5:00 PM
2009053-006	SVE-21-12	08/31/2020 1:20 PM	09/02/2020 5:00 PM
2009053-007	SVE-21-25	08/31/2020 2:30 PM	09/02/2020 5:00 PM
2009053-008	SVE-21-35	08/31/2020 3:00 PM	09/02/2020 5:00 PM
2009053-009	SVE-22-2	08/31/2020 3:15 PM	09/02/2020 5:00 PM
2009053-010	SVE-22-2	09/01/2020 8:10 AM	09/02/2020 5:00 PM
2009053-011	SVE-22-26	09/01/2020 9:25 AM	09/02/2020 5:00 PM
2009053-012	SVE-22-32	09/01/2020 9:35 AM	09/02/2020 5:00 PM
2009053-013	SVE-23-2	09/01/2020 9:55 AM	09/02/2020 5:00 PM
2009053-014	SVE-23-19	09/01/2020 11:25 AM	09/02/2020 5:00 PM
2009053-015	SVE-23-25	09/01/2020 11:20 AM	09/02/2020 5:00 PM
2009053-016	SVE-24-8	09/01/2020 3:20 PM	09/02/2020 5:00 PM
2009053-017	SVE-24-12	09/01/2020 3:30 PM	09/02/2020 5:00 PM
2009053-018	SVE-25-2	09/01/2020 9:45 AM	09/02/2020 5:00 PM
2009053-019	SVE-25-11.5	09/02/2020 9:30 AM	09/02/2020 5:00 PM
2009053-020	SVE-25-43.5	09/02/2020 10:35 AM	09/02/2020 5:00 PM
2009053-021	SVE-25-49	09/02/2020 10:55 AM	09/02/2020 5:00 PM
2009053-022	TRENCH-25	09/02/2020 9:25 AM	09/02/2020 5:00 PM
2009053-023	DRUM-090220	09/02/2020 3:45 PM	09/02/2020 5:00 PM
2009053-024	Trip Blank	08/25/2020 3:32 PM	09/02/2020 5:00 PM
2009053-025	Trip Blank	08/25/2020 3:32 PM	09/02/2020 5:00 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Revision v1

Case Narrative

WO#: **2009053**
Date: **1/5/2021**

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

1/5/2021: Revision 1 includes addition of MEK data.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 9:00:00 AM
Project: MVSC - Harris
Lab ID: 2009053-001
Matrix: Soil
Client Sample ID: SVE-20-2

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0230	Q	mg/Kg-dry	1	9/8/2020 9:18:57 PM
Chloromethane	ND	0.0576	Q	mg/Kg-dry	1	9/8/2020 9:18:57 PM
Vinyl chloride	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Bromomethane	ND	0.0576		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Trichlorofluoromethane (CFC-11)	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Chloroethane	ND	0.0576		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,1-Dichloroethene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Methylene chloride	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
trans-1,2-Dichloroethene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Methyl tert-butyl ether (MTBE)	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,1-Dichloroethane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
cis-1,2-Dichloroethene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
(MEK) 2-Butanone	ND	0.288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Chloroform	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,1,1-Trichloroethane (TCA)	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,1-Dichloropropene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Carbon tetrachloride	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2-Dichloroethane (EDC)	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Benzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Trichloroethene (TCE)	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2-Dichloropropane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Bromodichloromethane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Dibromomethane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
cis-1,3-Dichloropropene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Toluene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
trans-1,3-Dichloropropylene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,1,2-Trichloroethane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,3-Dichloropropane	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Tetrachloroethene (PCE)	0.0907	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Dibromochloromethane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2-Dibromoethane (EDB)	ND	0.00576		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Chlorobenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,1,1,2-Tetrachloroethane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Ethylbenzene	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
m,p-Xylene	ND	0.0576		mg/Kg-dry	1	9/8/2020 9:18:57 PM
o-Xylene	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Styrene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Isopropylbenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Bromoform	ND	0.0576		mg/Kg-dry	1	9/8/2020 9:18:57 PM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 9:00:00 AM
Project: MVSC - Harris
Lab ID: 2009053-001
Matrix: Soil
Client Sample ID: SVE-20-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
n-Propylbenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Bromobenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,3,5-Trimethylbenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
2-Chlorotoluene	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
4-Chlorotoluene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
tert-Butylbenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2,3-Trichloropropane	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2,4-Trichlorobenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
sec-Butylbenzene	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
4-Isopropyltoluene	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,3-Dichlorobenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,4-Dichlorobenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
n-Butylbenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2-Dichlorobenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2-Dibromo-3-chloropropane	ND	0.576		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2,4-Trimethylbenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Hexachloro-1,3-butadiene	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Naphthalene	ND	0.0576		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2,3-Trichlorobenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Surr: Dibromofluoromethane	104	82.3 - 112		%Rec	1	9/8/2020 9:18:57 PM
Surr: Toluene-d8	98.8	90.7 - 109		%Rec	1	9/8/2020 9:18:57 PM
Surr: 1-Bromo-4-fluorobenzene	95.5	88.4 - 109		%Rec	1	9/8/2020 9:18:57 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61706		Analyst: EH
Percent Moisture	12.5	0.500		wt%	1	9/9/2020 8:14:48 AM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 9:10:00 AM
Project: MVSC - Harris
Lab ID: 2009053-002
Matrix: Soil
Client Sample ID: SVE-21-2

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0226	Q	mg/Kg-dry	1	9/8/2020 10:19:13 PM
Chloromethane	ND	0.0565	Q	mg/Kg-dry	1	9/8/2020 10:19:13 PM
Vinyl chloride	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Bromomethane	ND	0.0565		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Trichlorofluoromethane (CFC-11)	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Chloroethane	ND	0.0565		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,1-Dichloroethene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Methylene chloride	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
trans-1,2-Dichloroethene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Methyl tert-butyl ether (MTBE)	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,1-Dichloroethane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
cis-1,2-Dichloroethene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
(MEK) 2-Butanone	ND	0.283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Chloroform	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,1,1-Trichloroethane (TCA)	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,1-Dichloropropene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Carbon tetrachloride	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2-Dichloroethane (EDC)	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Benzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Trichloroethene (TCE)	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2-Dichloropropane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Bromodichloromethane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Dibromomethane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
cis-1,3-Dichloropropene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Toluene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
trans-1,3-Dichloropropylene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,1,2-Trichloroethane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,3-Dichloropropane	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Tetrachloroethene (PCE)	0.254	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Dibromochloromethane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2-Dibromoethane (EDB)	ND	0.00565		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Chlorobenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,1,1,2-Tetrachloroethane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Ethylbenzene	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
m,p-Xylene	ND	0.0565		mg/Kg-dry	1	9/8/2020 10:19:13 PM
o-Xylene	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Styrene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Isopropylbenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Bromoform	ND	0.0565		mg/Kg-dry	1	9/8/2020 10:19:13 PM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 9:10:00 AM
Project: MVSC - Harris
Lab ID: 2009053-002
Matrix: Soil
Client Sample ID: SVE-21-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
n-Propylbenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Bromobenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,3,5-Trimethylbenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
2-Chlorotoluene	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
4-Chlorotoluene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
tert-Butylbenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2,3-Trichloropropane	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2,4-Trichlorobenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
sec-Butylbenzene	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
4-Isopropyltoluene	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,3-Dichlorobenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,4-Dichlorobenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
n-Butylbenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2-Dichlorobenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2-Dibromo-3-chloropropane	ND	0.565		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2,4-Trimethylbenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Hexachloro-1,3-butadiene	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Naphthalene	ND	0.0565		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2,3-Trichlorobenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Surr: Dibromofluoromethane	95.8	83.3 - 111		%Rec	1	9/8/2020 10:19:13 PM
Surr: Toluene-d8	97.9	87.9 - 111		%Rec	1	9/8/2020 10:19:13 PM
Surr: 1-Bromo-4-fluorobenzene	95.6	85.1 - 111		%Rec	1	9/8/2020 10:19:13 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61706		Analyst: EH
Percent Moisture	15.9	0.500		wt%	1	9/9/2020 8:14:48 AM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 12:00:00 PM
Project: MVSC - Harris
Lab ID: 2009053-003
Matrix: Soil
Client Sample ID: SVE-20-8.5

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0481	Q	mg/Kg-dry	1	9/8/2020 10:49:20 PM
Chloromethane	ND	0.120	Q	mg/Kg-dry	1	9/8/2020 10:49:20 PM
Vinyl chloride	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Bromomethane	ND	0.120		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Trichlorofluoromethane (CFC-11)	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Chloroethane	ND	0.120		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,1-Dichloroethene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Methylene chloride	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
trans-1,2-Dichloroethene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Methyl tert-butyl ether (MTBE)	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,1-Dichloroethane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
cis-1,2-Dichloroethene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
(MEK) 2-Butanone	ND	0.602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Chloroform	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,1,1-Trichloroethane (TCA)	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,1-Dichloropropene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Carbon tetrachloride	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2-Dichloroethane (EDC)	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Benzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Trichloroethene (TCE)	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2-Dichloropropane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Bromodichloromethane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Dibromomethane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
cis-1,3-Dichloropropene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Toluene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
trans-1,3-Dichloropropylene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,1,2-Trichloroethane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,3-Dichloropropane	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Tetrachloroethene (PCE)	1.54	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Dibromochloromethane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2-Dibromoethane (EDB)	ND	0.0120		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Chlorobenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,1,1,2-Tetrachloroethane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Ethylbenzene	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
m,p-Xylene	ND	0.120		mg/Kg-dry	1	9/8/2020 10:49:20 PM
o-Xylene	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Styrene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Isopropylbenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Bromoform	ND	0.120		mg/Kg-dry	1	9/8/2020 10:49:20 PM

Client: PES Environmental, Inc. **Collection Date:** 8/31/2020 12:00:00 PM
Project: MVSC - Harris
Lab ID: 2009053-003 **Matrix:** Soil
Client Sample ID: SVE-20-8.5

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
1,1,2,2-Tetrachloroethane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
n-Propylbenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Bromobenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,3,5-Trimethylbenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
2-Chlorotoluene	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
4-Chlorotoluene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
tert-Butylbenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2,3-Trichloropropane	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2,4-Trichlorobenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
sec-Butylbenzene	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
4-Isopropyltoluene	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,3-Dichlorobenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,4-Dichlorobenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
n-Butylbenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2-Dichlorobenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2-Dibromo-3-chloropropane	ND	1.20		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2,4-Trimethylbenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Hexachloro-1,3-butadiene	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Naphthalene	ND	0.120		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2,3-Trichlorobenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Surr: Dibromofluoromethane	101	83.3 - 111		%Rec	1	9/8/2020 10:49:20 PM
Surr: Toluene-d8	97.9	87.9 - 111		%Rec	1	9/8/2020 10:49:20 PM
Surr: 1-Bromo-4-fluorobenzene	100	85.1 - 111		%Rec	1	9/8/2020 10:49:20 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R61706 Analyst: EH

Percent Moisture	29.2	0.500		wt%	1	9/9/2020 8:14:48 AM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 12:20:00 PM
Project: MVSC - Harris
Lab ID: 2009053-004
Matrix: Soil
Client Sample ID: SVE-20-11

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0206	Q	mg/Kg-dry	1	9/8/2020 11:49:35 PM
Chloromethane	ND	0.0514	Q	mg/Kg-dry	1	9/8/2020 11:49:35 PM
Vinyl chloride	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Bromomethane	ND	0.0514		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Trichlorofluoromethane (CFC-11)	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Chloroethane	ND	0.0514		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,1-Dichloroethene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Methylene chloride	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
trans-1,2-Dichloroethene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Methyl tert-butyl ether (MTBE)	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,1-Dichloroethane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
cis-1,2-Dichloroethene	0.0455	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
(MEK) 2-Butanone	ND	0.257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Chloroform	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,1,1-Trichloroethane (TCA)	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,1-Dichloropropene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Carbon tetrachloride	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2-Dichloroethane (EDC)	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Benzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Trichloroethene (TCE)	0.0226	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2-Dichloropropane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Bromodichloromethane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Dibromomethane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
cis-1,3-Dichloropropene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Toluene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
trans-1,3-Dichloropropylene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,1,2-Trichloroethane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,3-Dichloropropane	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Tetrachloroethene (PCE)	1.30	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Dibromochloromethane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2-Dibromoethane (EDB)	ND	0.00514		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Chlorobenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,1,1,2-Tetrachloroethane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Ethylbenzene	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
m,p-Xylene	ND	0.0514		mg/Kg-dry	1	9/8/2020 11:49:35 PM
o-Xylene	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Styrene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Isopropylbenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Bromoform	ND	0.0514		mg/Kg-dry	1	9/8/2020 11:49:35 PM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 12:20:00 PM
Project: MVSC - Harris
Lab ID: 2009053-004
Matrix: Soil
Client Sample ID: SVE-20-11

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
n-Propylbenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Bromobenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,3,5-Trimethylbenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
2-Chlorotoluene	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
4-Chlorotoluene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
tert-Butylbenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2,3-Trichloropropane	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2,4-Trichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
sec-Butylbenzene	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
4-Isopropyltoluene	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,3-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,4-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
n-Butylbenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2-Dibromo-3-chloropropane	ND	0.514		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2,4-Trimethylbenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Hexachloro-1,3-butadiene	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Naphthalene	ND	0.0514		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2,3-Trichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Surr: Dibromofluoromethane	99.9	83.3 - 111		%Rec	1	9/8/2020 11:49:35 PM
Surr: Toluene-d8	97.7	87.9 - 111		%Rec	1	9/8/2020 11:49:35 PM
Surr: 1-Bromo-4-fluorobenzene	97.6	85.1 - 111		%Rec	1	9/8/2020 11:49:35 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61706		Analyst: EH
Percent Moisture	24.3	0.500		wt%	1	9/9/2020 8:14:48 AM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 12:30:00 PM
Project: MVSC - Harris
Lab ID: 2009053-005
Matrix: Soil
Client Sample ID: SVE-24-3

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0315	Q	mg/Kg-dry	1	9/9/2020 12:19:44 AM
Chloromethane	ND	0.0788	Q	mg/Kg-dry	1	9/9/2020 12:19:44 AM
Vinyl chloride	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Bromomethane	ND	0.0788		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Trichlorofluoromethane (CFC-11)	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Chloroethane	ND	0.0788		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,1-Dichloroethene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Methylene chloride	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
trans-1,2-Dichloroethene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Methyl tert-butyl ether (MTBE)	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,1-Dichloroethane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
cis-1,2-Dichloroethene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
(MEK) 2-Butanone	ND	0.394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Chloroform	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,1,1-Trichloroethane (TCA)	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,1-Dichloropropene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Carbon tetrachloride	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2-Dichloroethane (EDC)	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Benzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Trichloroethene (TCE)	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2-Dichloropropane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Bromodichloromethane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Dibromomethane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
cis-1,3-Dichloropropene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Toluene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
trans-1,3-Dichloropropylene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,1,2-Trichloroethane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,3-Dichloropropane	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Tetrachloroethene (PCE)	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Dibromochloromethane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2-Dibromoethane (EDB)	ND	0.00788		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Chlorobenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,1,1,2-Tetrachloroethane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Ethylbenzene	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
m,p-Xylene	ND	0.0788		mg/Kg-dry	1	9/9/2020 12:19:44 AM
o-Xylene	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Styrene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Isopropylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Bromoform	ND	0.0788		mg/Kg-dry	1	9/9/2020 12:19:44 AM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 12:30:00 PM
Project: MVSC - Harris
Lab ID: 2009053-005
Matrix: Soil
Client Sample ID: SVE-24-3

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
1,1,2,2-Tetrachloroethane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
n-Propylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Bromobenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,3,5-Trimethylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
2-Chlorotoluene	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
4-Chlorotoluene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
tert-Butylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2,3-Trichloropropane	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2,4-Trichlorobenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
sec-Butylbenzene	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
4-Isopropyltoluene	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,3-Dichlorobenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,4-Dichlorobenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
n-Butylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2-Dichlorobenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2-Dibromo-3-chloropropane	ND	0.788		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2,4-Trimethylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Hexachloro-1,3-butadiene	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Naphthalene	ND	0.0788		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2,3-Trichlorobenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Surr: Dibromofluoromethane	99.7	83.3 - 111		%Rec	1	9/9/2020 12:19:44 AM
Surr: Toluene-d8	98.0	87.9 - 111		%Rec	1	9/9/2020 12:19:44 AM
Surr: 1-Bromo-4-fluorobenzene	98.1	85.1 - 111		%Rec	1	9/9/2020 12:19:44 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R61706 Analyst: EH

Percent Moisture	18.0	0.500		wt%	1	9/9/2020 8:14:48 AM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 1:20:00 PM
Project: MVSC - Harris
Lab ID: 2009053-006
Matrix: Soil
Client Sample ID: SVE-21-12

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0252	Q	mg/Kg-dry	1	9/9/2020 12:49:53 AM
Chloromethane	ND	0.0630	Q	mg/Kg-dry	1	9/9/2020 12:49:53 AM
Vinyl chloride	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Bromomethane	ND	0.0630		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Trichlorofluoromethane (CFC-11)	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Chloroethane	ND	0.0630		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,1-Dichloroethene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Methylene chloride	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
trans-1,2-Dichloroethene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Methyl tert-butyl ether (MTBE)	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,1-Dichloroethane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
cis-1,2-Dichloroethene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
(MEK) 2-Butanone	ND	0.315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Chloroform	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,1,1-Trichloroethane (TCA)	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,1-Dichloropropene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Carbon tetrachloride	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2-Dichloroethane (EDC)	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Benzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Trichloroethene (TCE)	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2-Dichloropropane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Bromodichloromethane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Dibromomethane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
cis-1,3-Dichloropropene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Toluene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
trans-1,3-Dichloropropylene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,1,2-Trichloroethane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,3-Dichloropropane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Tetrachloroethene (PCE)	0.0381	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Dibromochloromethane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2-Dibromoethane (EDB)	ND	0.00630		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Chlorobenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,1,1,2-Tetrachloroethane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Ethylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
m,p-Xylene	ND	0.0630		mg/Kg-dry	1	9/9/2020 12:49:53 AM
o-Xylene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Styrene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Isopropylbenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Bromoform	ND	0.0630		mg/Kg-dry	1	9/9/2020 12:49:53 AM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 1:20:00 PM
Project: MVSC - Harris
Lab ID: 2009053-006
Matrix: Soil
Client Sample ID: SVE-21-12

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
1,1,2,2-Tetrachloroethane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
n-Propylbenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Bromobenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,3,5-Trimethylbenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
2-Chlorotoluene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
4-Chlorotoluene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
tert-Butylbenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2,3-Trichloropropane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2,4-Trichlorobenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
sec-Butylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
4-Isopropyltoluene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,3-Dichlorobenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,4-Dichlorobenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
n-Butylbenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2-Dichlorobenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2-Dibromo-3-chloropropane	ND	0.630		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2,4-Trimethylbenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Hexachloro-1,3-butadiene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Naphthalene	ND	0.0630		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2,3-Trichlorobenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Surr: Dibromofluoromethane	98.6	83.3 - 111		%Rec	1	9/9/2020 12:49:53 AM
Surr: Toluene-d8	97.2	87.9 - 111		%Rec	1	9/9/2020 12:49:53 AM
Surr: 1-Bromo-4-fluorobenzene	97.4	85.1 - 111		%Rec	1	9/9/2020 12:49:53 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R61706 Analyst: EH

Percent Moisture	19.6	0.500		wt%	1	9/9/2020 8:14:48 AM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 2:30:00 PM
Project: MVSC - Harris
Lab ID: 2009053-007
Matrix: Soil
Client Sample ID: SVE-21-25

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0297	Q	mg/Kg-dry	1	9/9/2020 1:20:02 AM
Chloromethane	ND	0.0742	Q	mg/Kg-dry	1	9/9/2020 1:20:02 AM
Vinyl chloride	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Bromomethane	ND	0.0742		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Trichlorofluoromethane (CFC-11)	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Chloroethane	ND	0.0742		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,1-Dichloroethene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Methylene chloride	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
trans-1,2-Dichloroethene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Methyl tert-butyl ether (MTBE)	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,1-Dichloroethane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
cis-1,2-Dichloroethene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
(MEK) 2-Butanone	ND	0.371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Chloroform	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,1,1-Trichloroethane (TCA)	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,1-Dichloropropene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Carbon tetrachloride	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2-Dichloroethane (EDC)	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Benzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Trichloroethene (TCE)	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2-Dichloropropane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Bromodichloromethane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Dibromomethane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
cis-1,3-Dichloropropene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Toluene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
trans-1,3-Dichloropropylene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,1,2-Trichloroethane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,3-Dichloropropane	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Tetrachloroethene (PCE)	0.0558	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Dibromochloromethane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2-Dibromoethane (EDB)	ND	0.00742		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Chlorobenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,1,1,2-Tetrachloroethane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Ethylbenzene	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
m,p-Xylene	ND	0.0742		mg/Kg-dry	1	9/9/2020 1:20:02 AM
o-Xylene	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Styrene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Isopropylbenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Bromoform	ND	0.0742		mg/Kg-dry	1	9/9/2020 1:20:02 AM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 2:30:00 PM
Project: MVSC - Harris
Lab ID: 2009053-007
Matrix: Soil
Client Sample ID: SVE-21-25

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
1,1,2,2-Tetrachloroethane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
n-Propylbenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Bromobenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,3,5-Trimethylbenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
2-Chlorotoluene	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
4-Chlorotoluene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
tert-Butylbenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2,3-Trichloropropane	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2,4-Trichlorobenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
sec-Butylbenzene	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
4-Isopropyltoluene	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,3-Dichlorobenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,4-Dichlorobenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
n-Butylbenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2-Dichlorobenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2-Dibromo-3-chloropropane	ND	0.742		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2,4-Trimethylbenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Hexachloro-1,3-butadiene	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Naphthalene	ND	0.0742		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2,3-Trichlorobenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Surr: Dibromofluoromethane	98.0	83.3 - 111		%Rec	1	9/9/2020 1:20:02 AM
Surr: Toluene-d8	99.2	87.9 - 111		%Rec	1	9/9/2020 1:20:02 AM
Surr: 1-Bromo-4-fluorobenzene	98.2	85.1 - 111		%Rec	1	9/9/2020 1:20:02 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R61706 Analyst: EH

Percent Moisture	20.5	0.500		wt%	1	9/9/2020 8:14:48 AM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 3:00:00 PM
Project: MVSC - Harris
Lab ID: 2009053-008
Matrix: Soil
Client Sample ID: SVE-21-35

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0270	Q	mg/Kg-dry	1	9/9/2020 1:50:12 AM
Chloromethane	ND	0.0675	Q	mg/Kg-dry	1	9/9/2020 1:50:12 AM
Vinyl chloride	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Bromomethane	ND	0.0675		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Trichlorofluoromethane (CFC-11)	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Chloroethane	ND	0.0675		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,1-Dichloroethene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Methylene chloride	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
trans-1,2-Dichloroethene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Methyl tert-butyl ether (MTBE)	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,1-Dichloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
cis-1,2-Dichloroethene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
(MEK) 2-Butanone	ND	0.337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Chloroform	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,1,1-Trichloroethane (TCA)	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,1-Dichloropropene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Carbon tetrachloride	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2-Dichloroethane (EDC)	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Benzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Trichloroethene (TCE)	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2-Dichloropropane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Bromodichloromethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Dibromomethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
cis-1,3-Dichloropropene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Toluene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
trans-1,3-Dichloropropylene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,1,2-Trichloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,3-Dichloropropane	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Tetrachloroethene (PCE)	0.135	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Dibromochloromethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2-Dibromoethane (EDB)	ND	0.00675		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Chlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,1,1,2-Tetrachloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Ethylbenzene	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
m,p-Xylene	ND	0.0675		mg/Kg-dry	1	9/9/2020 1:50:12 AM
o-Xylene	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Styrene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Isopropylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Bromoform	ND	0.0675		mg/Kg-dry	1	9/9/2020 1:50:12 AM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 3:00:00 PM
Project: MVSC - Harris
Lab ID: 2009053-008
Matrix: Soil
Client Sample ID: SVE-21-35

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
n-Propylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Bromobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,3,5-Trimethylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
2-Chlorotoluene	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
4-Chlorotoluene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
tert-Butylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2,3-Trichloropropane	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2,4-Trichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
sec-Butylbenzene	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
4-Isopropyltoluene	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,3-Dichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,4-Dichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
n-Butylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2-Dichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2-Dibromo-3-chloropropane	ND	0.675		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2,4-Trimethylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Hexachloro-1,3-butadiene	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Naphthalene	ND	0.0675		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2,3-Trichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Surr: Dibromofluoromethane	98.2	83.3 - 111		%Rec	1	9/9/2020 1:50:12 AM
Surr: Toluene-d8	98.5	87.9 - 111		%Rec	1	9/9/2020 1:50:12 AM
Surr: 1-Bromo-4-fluorobenzene	96.3	85.1 - 111		%Rec	1	9/9/2020 1:50:12 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	16.7	0.500		wt%	1	9/9/2020 9:20:54 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 8:10:00 AM
Project: MVSC - Harris
Lab ID: 2009053-010
Matrix: Soil
Client Sample ID: SVE-22-2

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0284	Q	mg/Kg-dry	1	9/9/2020 2:20:19 AM
Chloromethane	ND	0.0710	Q	mg/Kg-dry	1	9/9/2020 2:20:19 AM
Vinyl chloride	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Bromomethane	ND	0.0710		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Trichlorofluoromethane (CFC-11)	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Chloroethane	ND	0.0710		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,1-Dichloroethene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Methylene chloride	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
trans-1,2-Dichloroethene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Methyl tert-butyl ether (MTBE)	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,1-Dichloroethane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
cis-1,2-Dichloroethene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
(MEK) 2-Butanone	ND	0.355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Chloroform	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,1,1-Trichloroethane (TCA)	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,1-Dichloropropene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Carbon tetrachloride	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2-Dichloroethane (EDC)	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Benzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Trichloroethene (TCE)	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2-Dichloropropane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Bromodichloromethane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Dibromomethane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
cis-1,3-Dichloropropene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Toluene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
trans-1,3-Dichloropropylene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,1,2-Trichloroethane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,3-Dichloropropane	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Tetrachloroethene (PCE)	0.0320	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Dibromochloromethane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2-Dibromoethane (EDB)	ND	0.00710		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Chlorobenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,1,1,2-Tetrachloroethane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Ethylbenzene	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
m,p-Xylene	ND	0.0710		mg/Kg-dry	1	9/9/2020 2:20:19 AM
o-Xylene	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Styrene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Isopropylbenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Bromoform	ND	0.0710		mg/Kg-dry	1	9/9/2020 2:20:19 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 8:10:00 AM
Project: MVSC - Harris
Lab ID: 2009053-010
Matrix: Soil
Client Sample ID: SVE-22-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
n-Propylbenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Bromobenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,3,5-Trimethylbenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
2-Chlorotoluene	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
4-Chlorotoluene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
tert-Butylbenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2,3-Trichloropropane	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2,4-Trichlorobenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
sec-Butylbenzene	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
4-Isopropyltoluene	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,3-Dichlorobenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,4-Dichlorobenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
n-Butylbenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2-Dichlorobenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2-Dibromo-3-chloropropane	ND	0.710		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2,4-Trimethylbenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Hexachloro-1,3-butadiene	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Naphthalene	ND	0.0710		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2,3-Trichlorobenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Surr: Dibromofluoromethane	99.1	83.3 - 111		%Rec	1	9/9/2020 2:20:19 AM
Surr: Toluene-d8	99.1	87.9 - 111		%Rec	1	9/9/2020 2:20:19 AM
Surr: 1-Bromo-4-fluorobenzene	97.4	85.1 - 111		%Rec	1	9/9/2020 2:20:19 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	13.1	0.500		wt%	1	9/9/2020 9:20:54 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 9:25:00 AM
Project: MVSC - Harris
Lab ID: 2009053-011
Matrix: Soil
Client Sample ID: SVE-22-26

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0225	Q	mg/Kg-dry	1	9/9/2020 2:50:29 AM
Chloromethane	ND	0.0564	Q	mg/Kg-dry	1	9/9/2020 2:50:29 AM
Vinyl chloride	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Bromomethane	ND	0.0564		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Trichlorofluoromethane (CFC-11)	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Chloroethane	ND	0.0564		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,1-Dichloroethene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Methylene chloride	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
trans-1,2-Dichloroethene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Methyl tert-butyl ether (MTBE)	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,1-Dichloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
cis-1,2-Dichloroethene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
(MEK) 2-Butanone	ND	0.282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Chloroform	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,1,1-Trichloroethane (TCA)	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,1-Dichloropropene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Carbon tetrachloride	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2-Dichloroethane (EDC)	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Benzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Trichloroethene (TCE)	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2-Dichloropropane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Bromodichloromethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Dibromomethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
cis-1,3-Dichloropropene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Toluene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
trans-1,3-Dichloropropylene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,1,2-Trichloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,3-Dichloropropane	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Tetrachloroethene (PCE)	0.102	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Dibromochloromethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2-Dibromoethane (EDB)	ND	0.00564		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Chlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,1,1,2-Tetrachloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Ethylbenzene	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
m,p-Xylene	ND	0.0564		mg/Kg-dry	1	9/9/2020 2:50:29 AM
o-Xylene	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Styrene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Isopropylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Bromoform	ND	0.0564		mg/Kg-dry	1	9/9/2020 2:50:29 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 9:25:00 AM
Project: MVSC - Harris
Lab ID: 2009053-011
Matrix: Soil
Client Sample ID: SVE-22-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
n-Propylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Bromobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,3,5-Trimethylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
2-Chlorotoluene	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
4-Chlorotoluene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
tert-Butylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2,3-Trichloropropane	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2,4-Trichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
sec-Butylbenzene	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
4-Isopropyltoluene	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,3-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,4-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
n-Butylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2-Dibromo-3-chloropropane	ND	0.564		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2,4-Trimethylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Hexachloro-1,3-butadiene	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Naphthalene	ND	0.0564		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2,3-Trichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Surr: Dibromofluoromethane	98.8	83.3 - 111		%Rec	1	9/9/2020 2:50:29 AM
Surr: Toluene-d8	98.4	87.9 - 111		%Rec	1	9/9/2020 2:50:29 AM
Surr: 1-Bromo-4-fluorobenzene	96.7	85.1 - 111		%Rec	1	9/9/2020 2:50:29 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	9.81	0.500		wt%	1	9/9/2020 9:20:54 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 9:35:00 AM
Project: MVSC - Harris
Lab ID: 2009053-012
Matrix: Soil
Client Sample ID: SVE-22-32

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0200	Q	mg/Kg-dry	1	9/9/2020 3:20:36 AM
Chloromethane	ND	0.0500	Q	mg/Kg-dry	1	9/9/2020 3:20:36 AM
Vinyl chloride	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Bromomethane	ND	0.0500		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Trichlorofluoromethane (CFC-11)	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Chloroethane	ND	0.0500		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,1-Dichloroethene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Methylene chloride	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
trans-1,2-Dichloroethene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Methyl tert-butyl ether (MTBE)	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,1-Dichloroethane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
cis-1,2-Dichloroethene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
(MEK) 2-Butanone	ND	0.250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Chloroform	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,1,1-Trichloroethane (TCA)	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,1-Dichloropropene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Carbon tetrachloride	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2-Dichloroethane (EDC)	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Benzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Trichloroethene (TCE)	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2-Dichloropropane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Bromodichloromethane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Dibromomethane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
cis-1,3-Dichloropropene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Toluene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
trans-1,3-Dichloropropylene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,1,2-Trichloroethane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,3-Dichloropropane	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Tetrachloroethene (PCE)	0.105	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Dibromochloromethane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2-Dibromoethane (EDB)	ND	0.00500		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Chlorobenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,1,1,2-Tetrachloroethane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Ethylbenzene	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
m,p-Xylene	ND	0.0500		mg/Kg-dry	1	9/9/2020 3:20:36 AM
o-Xylene	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Styrene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Isopropylbenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Bromoform	ND	0.0500		mg/Kg-dry	1	9/9/2020 3:20:36 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 9:35:00 AM
Project: MVSC - Harris
Lab ID: 2009053-012
Matrix: Soil
Client Sample ID: SVE-22-32

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
1,1,2,2-Tetrachloroethane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
n-Propylbenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Bromobenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,3,5-Trimethylbenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
2-Chlorotoluene	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
4-Chlorotoluene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
tert-Butylbenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2,3-Trichloropropane	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2,4-Trichlorobenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
sec-Butylbenzene	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
4-Isopropyltoluene	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,3-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,4-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
n-Butylbenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2-Dibromo-3-chloropropane	ND	0.500		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2,4-Trimethylbenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Hexachloro-1,3-butadiene	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Naphthalene	ND	0.0500		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2,3-Trichlorobenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Surr: Dibromofluoromethane	97.8	83.3 - 111		%Rec	1	9/9/2020 3:20:36 AM
Surr: Toluene-d8	98.4	87.9 - 111		%Rec	1	9/9/2020 3:20:36 AM
Surr: 1-Bromo-4-fluorobenzene	97.4	85.1 - 111		%Rec	1	9/9/2020 3:20:36 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R61711 Analyst: EH

Percent Moisture	5.67	0.500		wt%	1	9/9/2020 9:20:54 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 9:55:00 AM
Project: MVSC - Harris
Lab ID: 2009053-013
Matrix: Soil
Client Sample ID: SVE-23-2

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0270	Q	mg/Kg-dry	1	9/9/2020 3:50:45 AM
Chloromethane	ND	0.0674	Q	mg/Kg-dry	1	9/9/2020 3:50:45 AM
Vinyl chloride	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Bromomethane	ND	0.0674		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Trichlorofluoromethane (CFC-11)	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Chloroethane	ND	0.0674		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,1-Dichloroethene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Methylene chloride	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
trans-1,2-Dichloroethene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Methyl tert-butyl ether (MTBE)	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,1-Dichloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
cis-1,2-Dichloroethene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
(MEK) 2-Butanone	ND	0.337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Chloroform	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,1,1-Trichloroethane (TCA)	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,1-Dichloropropene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Carbon tetrachloride	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2-Dichloroethane (EDC)	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Benzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Trichloroethene (TCE)	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2-Dichloropropane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Bromodichloromethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Dibromomethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
cis-1,3-Dichloropropene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Toluene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
trans-1,3-Dichloropropylene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,1,2-Trichloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,3-Dichloropropane	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Tetrachloroethene (PCE)	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Dibromochloromethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2-Dibromoethane (EDB)	ND	0.00674		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Chlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,1,1,2-Tetrachloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Ethylbenzene	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
m,p-Xylene	ND	0.0674		mg/Kg-dry	1	9/9/2020 3:50:45 AM
o-Xylene	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Styrene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Isopropylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Bromoform	ND	0.0674		mg/Kg-dry	1	9/9/2020 3:50:45 AM

Analytical Report

Work Order: **2009053**
Date Reported: **1/5/2021**

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 9:55:00 AM
Project: MVSC - Harris
Lab ID: 2009053-013
Matrix: Soil
Client Sample ID: SVE-23-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
n-Propylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Bromobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,3,5-Trimethylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
2-Chlorotoluene	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
4-Chlorotoluene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
tert-Butylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2,3-Trichloropropane	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2,4-Trichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
sec-Butylbenzene	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
4-Isopropyltoluene	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,3-Dichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,4-Dichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
n-Butylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2-Dichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2-Dibromo-3-chloropropane	ND	0.674		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2,4-Trimethylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Hexachloro-1,3-butadiene	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Naphthalene	ND	0.0674		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2,3-Trichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Surr: Dibromofluoromethane	98.4	83.3 - 111		%Rec	1	9/9/2020 3:50:45 AM
Surr: Toluene-d8	98.4	87.9 - 111		%Rec	1	9/9/2020 3:50:45 AM
Surr: 1-Bromo-4-fluorobenzene	96.9	85.1 - 111		%Rec	1	9/9/2020 3:50:45 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	18.8	0.500		wt%	1	9/9/2020 9:20:54 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 11:25:00 AM
Project: MVSC - Harris
Lab ID: 2009053-014
Matrix: Soil
Client Sample ID: SVE-23-19

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0225	Q	mg/Kg-dry	1	9/9/2020 6:21:29 AM
Chloromethane	ND	0.0563	Q	mg/Kg-dry	1	9/9/2020 6:21:29 AM
Vinyl chloride	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Bromomethane	ND	0.0563		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Trichlorofluoromethane (CFC-11)	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Chloroethane	ND	0.0563		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,1-Dichloroethene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Methylene chloride	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
trans-1,2-Dichloroethene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Methyl tert-butyl ether (MTBE)	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,1-Dichloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
cis-1,2-Dichloroethene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
(MEK) 2-Butanone	ND	0.281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Chloroform	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,1,1-Trichloroethane (TCA)	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,1-Dichloropropene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Carbon tetrachloride	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2-Dichloroethane (EDC)	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Benzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Trichloroethene (TCE)	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2-Dichloropropane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Bromodichloromethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Dibromomethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
cis-1,3-Dichloropropene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Toluene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
trans-1,3-Dichloropropylene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,1,2-Trichloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,3-Dichloropropane	ND	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Tetrachloroethene (PCE)	0.0252	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Dibromochloromethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2-Dibromoethane (EDB)	ND	0.00563		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Chlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,1,1,2-Tetrachloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Ethylbenzene	ND	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
m,p-Xylene	ND	0.0563		mg/Kg-dry	1	9/9/2020 6:21:29 AM
o-Xylene	ND	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Styrene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Isopropylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Bromoform	ND	0.0563		mg/Kg-dry	1	9/9/2020 6:21:29 AM

Client: PES Environmental, Inc. **Collection Date:** 9/1/2020 11:25:00 AM
Project: MVSC - Harris
Lab ID: 2009053-014 **Matrix:** Soil
Client Sample ID: SVE-23-19

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
1,1,2,2-Tetrachloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
n-Propylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Bromobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,3,5-Trimethylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
2-Chlorotoluene	ND	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
4-Chlorotoluene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
tert-Butylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2,3-Trichloropropane	ND	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2,4-Trichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
sec-Butylbenzene	ND	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
4-Isopropyltoluene	ND	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,3-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,4-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
n-Butylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2-Dibromo-3-chloropropane	ND	0.563		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2,4-Trimethylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Hexachloro-1,3-butadiene	0.0313	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Naphthalene	ND	0.0563		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2,3-Trichlorobenzene	0.0254	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Surr: Dibromofluoromethane	101	83.3 - 111		%Rec	1	9/9/2020 6:21:29 AM
Surr: Toluene-d8	99.3	87.9 - 111		%Rec	1	9/9/2020 6:21:29 AM
Surr: 1-Bromo-4-fluorobenzene	97.8	85.1 - 111		%Rec	1	9/9/2020 6:21:29 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R61711 Analyst: EH

Percent Moisture	4.42	0.500		wt%	1	9/9/2020 9:20:54 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 11:20:00 AM
Project: MVSC - Harris
Lab ID: 2009053-015
Matrix: Soil
Client Sample ID: SVE-23-25

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0206	Q	mg/Kg-dry	1	9/9/2020 6:51:39 AM
Chloromethane	ND	0.0515	Q	mg/Kg-dry	1	9/9/2020 6:51:39 AM
Vinyl chloride	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Bromomethane	ND	0.0515		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Trichlorofluoromethane (CFC-11)	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Chloroethane	ND	0.0515		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,1-Dichloroethene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Methylene chloride	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
trans-1,2-Dichloroethene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Methyl tert-butyl ether (MTBE)	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,1-Dichloroethane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
cis-1,2-Dichloroethene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
(MEK) 2-Butanone	ND	0.258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Chloroform	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,1,1-Trichloroethane (TCA)	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,1-Dichloropropene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Carbon tetrachloride	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2-Dichloroethane (EDC)	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Benzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Trichloroethene (TCE)	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2-Dichloropropane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Bromodichloromethane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Dibromomethane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
cis-1,3-Dichloropropene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Toluene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
trans-1,3-Dichloropropylene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,1,2-Trichloroethane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,3-Dichloropropane	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Tetrachloroethene (PCE)	0.0489	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Dibromochloromethane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2-Dibromoethane (EDB)	ND	0.00515		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Chlorobenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,1,1,2-Tetrachloroethane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Ethylbenzene	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
m,p-Xylene	ND	0.0515		mg/Kg-dry	1	9/9/2020 6:51:39 AM
o-Xylene	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Styrene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Isopropylbenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Bromoform	ND	0.0515		mg/Kg-dry	1	9/9/2020 6:51:39 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 11:20:00 AM
Project: MVSC - Harris
Lab ID: 2009053-015
Matrix: Soil
Client Sample ID: SVE-23-25

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
n-Propylbenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Bromobenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,3,5-Trimethylbenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
2-Chlorotoluene	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
4-Chlorotoluene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
tert-Butylbenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2,3-Trichloropropane	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2,4-Trichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
sec-Butylbenzene	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
4-Isopropyltoluene	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,3-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,4-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
n-Butylbenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2-Dibromo-3-chloropropane	ND	0.515		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2,4-Trimethylbenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Hexachloro-1,3-butadiene	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Naphthalene	ND	0.0515		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2,3-Trichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Surr: Dibromofluoromethane	99.2	83.3 - 111		%Rec	1	9/9/2020 6:51:39 AM
Surr: Toluene-d8	97.6	87.9 - 111		%Rec	1	9/9/2020 6:51:39 AM
Surr: 1-Bromo-4-fluorobenzene	96.8	85.1 - 111		%Rec	1	9/9/2020 6:51:39 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	9.14	0.500		wt%	1	9/9/2020 9:20:54 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 3:20:00 PM
Project: MVSC - Harris
Lab ID: 2009053-016
Matrix: Soil
Client Sample ID: SVE-24-8

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0215	Q	mg/Kg-dry	1	9/9/2020 7:21:48 AM
Chloromethane	ND	0.0537	Q	mg/Kg-dry	1	9/9/2020 7:21:48 AM
Vinyl chloride	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Bromomethane	ND	0.0537		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Trichlorofluoromethane (CFC-11)	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Chloroethane	ND	0.0537		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,1-Dichloroethene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Methylene chloride	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
trans-1,2-Dichloroethene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Methyl tert-butyl ether (MTBE)	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,1-Dichloroethane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
cis-1,2-Dichloroethene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
(MEK) 2-Butanone	ND	0.268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Chloroform	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,1,1-Trichloroethane (TCA)	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,1-Dichloropropene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Carbon tetrachloride	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2-Dichloroethane (EDC)	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Benzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Trichloroethene (TCE)	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2-Dichloropropane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Bromodichloromethane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Dibromomethane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
cis-1,3-Dichloropropene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Toluene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
trans-1,3-Dichloropropylene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,1,2-Trichloroethane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,3-Dichloropropane	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Tetrachloroethene (PCE)	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Dibromochloromethane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2-Dibromoethane (EDB)	ND	0.00537		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Chlorobenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,1,1,2-Tetrachloroethane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Ethylbenzene	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
m,p-Xylene	ND	0.0537		mg/Kg-dry	1	9/9/2020 7:21:48 AM
o-Xylene	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Styrene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Isopropylbenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Bromoform	ND	0.0537		mg/Kg-dry	1	9/9/2020 7:21:48 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 3:20:00 PM
Project: MVSC - Harris
Lab ID: 2009053-016
Matrix: Soil
Client Sample ID: SVE-24-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
n-Propylbenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Bromobenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,3,5-Trimethylbenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
2-Chlorotoluene	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
4-Chlorotoluene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
tert-Butylbenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2,3-Trichloropropane	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2,4-Trichlorobenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
sec-Butylbenzene	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
4-Isopropyltoluene	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,3-Dichlorobenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,4-Dichlorobenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
n-Butylbenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2-Dichlorobenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2-Dibromo-3-chloropropane	ND	0.537		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2,4-Trimethylbenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Hexachloro-1,3-butadiene	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Naphthalene	ND	0.0537		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2,3-Trichlorobenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Surr: Dibromofluoromethane	103	83.3 - 111		%Rec	1	9/9/2020 7:21:48 AM
Surr: Toluene-d8	98.9	87.9 - 111		%Rec	1	9/9/2020 7:21:48 AM
Surr: 1-Bromo-4-fluorobenzene	96.7	85.1 - 111		%Rec	1	9/9/2020 7:21:48 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	15.4	0.500		wt%	1	9/9/2020 9:20:54 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 3:30:00 PM
Project: MVSC - Harris
Lab ID: 2009053-017
Matrix: Soil
Client Sample ID: SVE-24-12

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0245	Q	mg/Kg-dry	1	9/9/2020 8:22:07 AM
Chloromethane	ND	0.0613	Q	mg/Kg-dry	1	9/9/2020 8:22:07 AM
Vinyl chloride	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Bromomethane	ND	0.0613		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Trichlorofluoromethane (CFC-11)	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Chloroethane	ND	0.0613		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,1-Dichloroethene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Methylene chloride	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
trans-1,2-Dichloroethene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Methyl tert-butyl ether (MTBE)	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,1-Dichloroethane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
cis-1,2-Dichloroethene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
(MEK) 2-Butanone	ND	0.307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Chloroform	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,1,1-Trichloroethane (TCA)	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,1-Dichloropropene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Carbon tetrachloride	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2-Dichloroethane (EDC)	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Benzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Trichloroethene (TCE)	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2-Dichloropropane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Bromodichloromethane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Dibromomethane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
cis-1,3-Dichloropropene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Toluene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
trans-1,3-Dichloropropylene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,1,2-Trichloroethane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,3-Dichloropropane	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Tetrachloroethene (PCE)	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Dibromochloromethane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2-Dibromoethane (EDB)	ND	0.00613		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Chlorobenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,1,1,2-Tetrachloroethane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Ethylbenzene	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
m,p-Xylene	ND	0.0613		mg/Kg-dry	1	9/9/2020 8:22:07 AM
o-Xylene	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Styrene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Isopropylbenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Bromoform	ND	0.0613		mg/Kg-dry	1	9/9/2020 8:22:07 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 3:30:00 PM
Project: MVSC - Harris
Lab ID: 2009053-017
Matrix: Soil
Client Sample ID: SVE-24-12

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
1,1,2,2-Tetrachloroethane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
n-Propylbenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Bromobenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,3,5-Trimethylbenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
2-Chlorotoluene	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
4-Chlorotoluene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
tert-Butylbenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2,3-Trichloropropane	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2,4-Trichlorobenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
sec-Butylbenzene	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
4-Isopropyltoluene	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,3-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,4-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
n-Butylbenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2-Dibromo-3-chloropropane	ND	0.613		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2,4-Trimethylbenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Hexachloro-1,3-butadiene	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Naphthalene	ND	0.0613		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2,3-Trichlorobenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Surr: Dibromofluoromethane	102	83.3 - 111		%Rec	1	9/9/2020 8:22:07 AM
Surr: Toluene-d8	98.7	87.9 - 111		%Rec	1	9/9/2020 8:22:07 AM
Surr: 1-Bromo-4-fluorobenzene	96.5	85.1 - 111		%Rec	1	9/9/2020 8:22:07 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R61711 Analyst: EH

Percent Moisture	20.4	0.500		wt%	1	9/9/2020 9:20:54 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 9:45:00 AM
Project: MVSC - Harris
Lab ID: 2009053-018
Matrix: Soil
Client Sample ID: SVE-25-2

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0269	Q	mg/Kg-dry	1	9/9/2020 8:52:16 AM
Chloromethane	ND	0.0671	Q	mg/Kg-dry	1	9/9/2020 8:52:16 AM
Vinyl chloride	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Bromomethane	ND	0.0671		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Trichlorofluoromethane (CFC-11)	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Chloroethane	ND	0.0671		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,1-Dichloroethene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Methylene chloride	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
trans-1,2-Dichloroethene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Methyl tert-butyl ether (MTBE)	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,1-Dichloroethane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
cis-1,2-Dichloroethene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
(MEK) 2-Butanone	ND	0.336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Chloroform	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,1,1-Trichloroethane (TCA)	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,1-Dichloropropene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Carbon tetrachloride	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2-Dichloroethane (EDC)	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Benzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Trichloroethene (TCE)	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2-Dichloropropane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Bromodichloromethane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Dibromomethane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
cis-1,3-Dichloropropene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Toluene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
trans-1,3-Dichloropropylene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,1,2-Trichloroethane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,3-Dichloropropane	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Tetrachloroethene (PCE)	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Dibromochloromethane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2-Dibromoethane (EDB)	ND	0.00671		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Chlorobenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,1,1,2-Tetrachloroethane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Ethylbenzene	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
m,p-Xylene	ND	0.0671		mg/Kg-dry	1	9/9/2020 8:52:16 AM
o-Xylene	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Styrene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Isopropylbenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Bromoform	ND	0.0671		mg/Kg-dry	1	9/9/2020 8:52:16 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 9:45:00 AM
Project: MVSC - Harris
Lab ID: 2009053-018
Matrix: Soil
Client Sample ID: SVE-25-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
n-Propylbenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Bromobenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,3,5-Trimethylbenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
2-Chlorotoluene	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
4-Chlorotoluene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
tert-Butylbenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2,3-Trichloropropane	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2,4-Trichlorobenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
sec-Butylbenzene	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
4-Isopropyltoluene	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,3-Dichlorobenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,4-Dichlorobenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
n-Butylbenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2-Dichlorobenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2-Dibromo-3-chloropropane	ND	0.671		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2,4-Trimethylbenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Hexachloro-1,3-butadiene	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Naphthalene	ND	0.0671		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2,3-Trichlorobenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Surr: Dibromofluoromethane	102	83.3 - 111		%Rec	1	9/9/2020 8:52:16 AM
Surr: Toluene-d8	98.8	87.9 - 111		%Rec	1	9/9/2020 8:52:16 AM
Surr: 1-Bromo-4-fluorobenzene	98.1	85.1 - 111		%Rec	1	9/9/2020 8:52:16 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	16.7	0.500		wt%	1	9/9/2020 9:20:54 AM

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 9:30:00 AM
Project: MVSC - Harris
Lab ID: 2009053-019
Matrix: Soil
Client Sample ID: SVE-25-11.5

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0224	Q	mg/Kg-dry	1	9/9/2020 9:22:26 AM
Chloromethane	ND	0.0559	Q	mg/Kg-dry	1	9/9/2020 9:22:26 AM
Vinyl chloride	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Bromomethane	ND	0.0559		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Trichlorofluoromethane (CFC-11)	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Chloroethane	ND	0.0559		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,1-Dichloroethene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Methylene chloride	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
trans-1,2-Dichloroethene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Methyl tert-butyl ether (MTBE)	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,1-Dichloroethane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
cis-1,2-Dichloroethene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
(MEK) 2-Butanone	ND	0.280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Chloroform	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,1,1-Trichloroethane (TCA)	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,1-Dichloropropene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Carbon tetrachloride	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2-Dichloroethane (EDC)	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Benzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Trichloroethene (TCE)	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2-Dichloropropane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Bromodichloromethane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Dibromomethane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
cis-1,3-Dichloropropene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Toluene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
trans-1,3-Dichloropropylene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,1,2-Trichloroethane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,3-Dichloropropane	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Tetrachloroethene (PCE)	0.0373	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Dibromochloromethane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2-Dibromoethane (EDB)	ND	0.00559		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Chlorobenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,1,1,2-Tetrachloroethane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Ethylbenzene	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
m,p-Xylene	ND	0.0559		mg/Kg-dry	1	9/9/2020 9:22:26 AM
o-Xylene	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Styrene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Isopropylbenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Bromoform	ND	0.0559		mg/Kg-dry	1	9/9/2020 9:22:26 AM

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 9:30:00 AM
Project: MVSC - Harris
Lab ID: 2009053-019
Matrix: Soil
Client Sample ID: SVE-25-11.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
n-Propylbenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Bromobenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,3,5-Trimethylbenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
2-Chlorotoluene	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
4-Chlorotoluene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
tert-Butylbenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2,3-Trichloropropane	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2,4-Trichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
sec-Butylbenzene	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
4-Isopropyltoluene	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,3-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,4-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
n-Butylbenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2-Dibromo-3-chloropropane	ND	0.559		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2,4-Trimethylbenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Hexachloro-1,3-butadiene	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Naphthalene	ND	0.0559		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2,3-Trichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Surr: Dibromofluoromethane	93.2	83.3 - 111		%Rec	1	9/9/2020 9:22:26 AM
Surr: Toluene-d8	94.7	87.9 - 111		%Rec	1	9/9/2020 9:22:26 AM
Surr: 1-Bromo-4-fluorobenzene	103	85.1 - 111		%Rec	1	9/9/2020 9:22:26 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	9.74	0.500		wt%	1	9/9/2020 9:20:54 AM

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 10:35:00 AM
Project: MVSC - Harris
Lab ID: 2009053-020
Matrix: Soil
Client Sample ID: SVE-25-43.5

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0198	Q	mg/Kg-dry	1	9/9/2020 9:52:37 AM
Chloromethane	ND	0.0494	Q	mg/Kg-dry	1	9/9/2020 9:52:37 AM
Vinyl chloride	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Bromomethane	ND	0.0494		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Trichlorofluoromethane (CFC-11)	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Chloroethane	ND	0.0494		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,1-Dichloroethene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Methylene chloride	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
trans-1,2-Dichloroethene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Methyl tert-butyl ether (MTBE)	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,1-Dichloroethane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
cis-1,2-Dichloroethene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
(MEK) 2-Butanone	ND	0.247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Chloroform	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,1,1-Trichloroethane (TCA)	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,1-Dichloropropene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Carbon tetrachloride	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2-Dichloroethane (EDC)	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Benzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Trichloroethene (TCE)	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2-Dichloropropane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Bromodichloromethane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Dibromomethane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
cis-1,3-Dichloropropene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Toluene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
trans-1,3-Dichloropropylene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,1,2-Trichloroethane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,3-Dichloropropane	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Tetrachloroethene (PCE)	0.0632	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Dibromochloromethane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2-Dibromoethane (EDB)	ND	0.00494		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Chlorobenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,1,1,2-Tetrachloroethane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Ethylbenzene	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
m,p-Xylene	ND	0.0494		mg/Kg-dry	1	9/9/2020 9:52:37 AM
o-Xylene	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Styrene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Isopropylbenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Bromoform	ND	0.0494		mg/Kg-dry	1	9/9/2020 9:52:37 AM

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 10:35:00 AM
Project: MVSC - Harris
Lab ID: 2009053-020
Matrix: Soil
Client Sample ID: SVE-25-43.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
n-Propylbenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Bromobenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,3,5-Trimethylbenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
2-Chlorotoluene	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
4-Chlorotoluene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
tert-Butylbenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2,3-Trichloropropane	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2,4-Trichlorobenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
sec-Butylbenzene	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
4-Isopropyltoluene	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,3-Dichlorobenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,4-Dichlorobenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
n-Butylbenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2-Dichlorobenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2-Dibromo-3-chloropropane	ND	0.494		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2,4-Trimethylbenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Hexachloro-1,3-butadiene	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Naphthalene	ND	0.0494		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2,3-Trichlorobenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Surr: Dibromofluoromethane	105	83.3 - 111		%Rec	1	9/9/2020 9:52:37 AM
Surr: Toluene-d8	98.9	87.9 - 111		%Rec	1	9/9/2020 9:52:37 AM
Surr: 1-Bromo-4-fluorobenzene	97.9	85.1 - 111		%Rec	1	9/9/2020 9:52:37 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	5.27	0.500		wt%	1	9/9/2020 9:20:54 AM

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 10:55:00 AM
Project: MVSC - Harris
Lab ID: 2009053-021
Matrix: Soil
Client Sample ID: SVE-25-49

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0211	Q	mg/Kg-dry	1	9/9/2020 10:22:47 AM
Chloromethane	ND	0.0528	Q	mg/Kg-dry	1	9/9/2020 10:22:47 AM
Vinyl chloride	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Bromomethane	ND	0.0528		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Trichlorofluoromethane (CFC-11)	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Chloroethane	ND	0.0528		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,1-Dichloroethene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Methylene chloride	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
trans-1,2-Dichloroethene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Methyl tert-butyl ether (MTBE)	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,1-Dichloroethane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
cis-1,2-Dichloroethene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
(MEK) 2-Butanone	ND	0.264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Chloroform	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,1,1-Trichloroethane (TCA)	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,1-Dichloropropene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Carbon tetrachloride	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2-Dichloroethane (EDC)	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Benzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Trichloroethene (TCE)	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2-Dichloropropane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Bromodichloromethane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Dibromomethane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
cis-1,3-Dichloropropene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Toluene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
trans-1,3-Dichloropropylene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,1,2-Trichloroethane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,3-Dichloropropane	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Tetrachloroethene (PCE)	0.0422	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Dibromochloromethane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2-Dibromoethane (EDB)	ND	0.00528		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Chlorobenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,1,1,2-Tetrachloroethane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Ethylbenzene	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
m,p-Xylene	ND	0.0528		mg/Kg-dry	1	9/9/2020 10:22:47 AM
o-Xylene	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Styrene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Isopropylbenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Bromoform	ND	0.0528		mg/Kg-dry	1	9/9/2020 10:22:47 AM

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 10:55:00 AM
Project: MVSC - Harris
Lab ID: 2009053-021
Matrix: Soil
Client Sample ID: SVE-25-49

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
n-Propylbenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Bromobenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,3,5-Trimethylbenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
2-Chlorotoluene	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
4-Chlorotoluene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
tert-Butylbenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2,3-Trichloropropane	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2,4-Trichlorobenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
sec-Butylbenzene	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
4-Isopropyltoluene	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,3-Dichlorobenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,4-Dichlorobenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
n-Butylbenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2-Dichlorobenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2-Dibromo-3-chloropropane	ND	0.528		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2,4-Trimethylbenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Hexachloro-1,3-butadiene	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Naphthalene	ND	0.0528		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2,3-Trichlorobenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Surr: Dibromofluoromethane	100	83.3 - 111		%Rec	1	9/9/2020 10:22:47 AM
Surr: Toluene-d8	98.1	87.9 - 111		%Rec	1	9/9/2020 10:22:47 AM
Surr: 1-Bromo-4-fluorobenzene	96.4	85.1 - 111		%Rec	1	9/9/2020 10:22:47 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	4.23	0.500		wt%	1	9/9/2020 9:20:54 AM

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 9:25:00 AM
Project: MVSC - Harris
Lab ID: 2009053-022
Matrix: Soil
Client Sample ID: TRENCH-25

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29610 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Chloromethane	ND	0.0601	Q	mg/Kg-dry	1	9/8/2020 7:59:19 PM
Vinyl chloride	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Bromomethane	ND	0.0601		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Trichlorofluoromethane (CFC-11)	ND	0.0240	Q	mg/Kg-dry	1	9/8/2020 7:59:19 PM
Chloroethane	ND	0.0601		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,1-Dichloroethene	ND	0.0240	Q	mg/Kg-dry	1	9/8/2020 7:59:19 PM
Methylene chloride	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
trans-1,2-Dichloroethene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Methyl tert-butyl ether (MTBE)	ND	0.0240	Q	mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,1-Dichloroethane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
cis-1,2-Dichloroethene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
(MEK) 2-Butanone	ND	0.300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Chloroform	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,1,1-Trichloroethane (TCA)	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,1-Dichloropropene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Carbon tetrachloride	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2-Dichloroethane (EDC)	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Benzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Trichloroethene (TCE)	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2-Dichloropropane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Bromodichloromethane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Dibromomethane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
cis-1,3-Dichloropropene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Toluene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
trans-1,3-Dichloropropylene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,1,2-Trichloroethane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,3-Dichloropropane	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Tetrachloroethene (PCE)	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Dibromochloromethane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2-Dibromoethane (EDB)	ND	0.00601		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Chlorobenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,1,1,2-Tetrachloroethane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Ethylbenzene	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
m,p-Xylene	ND	0.0601		mg/Kg-dry	1	9/8/2020 7:59:19 PM
o-Xylene	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Styrene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Isopropylbenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Bromoform	ND	0.0601		mg/Kg-dry	1	9/8/2020 7:59:19 PM

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 9:25:00 AM
Project: MVSC - Harris
Lab ID: 2009053-022
Matrix: Soil
Client Sample ID: TRENCH-25

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29610		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
n-Propylbenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Bromobenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,3,5-Trimethylbenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
2-Chlorotoluene	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
4-Chlorotoluene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
tert-Butylbenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2,3-Trichloropropane	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2,4-Trichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
sec-Butylbenzene	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
4-Isopropyltoluene	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,3-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,4-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
n-Butylbenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2-Dibromo-3-chloropropane	ND	0.601		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2,4-Trimethylbenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Hexachloro-1,3-butadiene	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Naphthalene	ND	0.0601		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2,3-Trichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Surr: Dibromofluoromethane	93.9	82.3 - 112		%Rec	1	9/8/2020 7:59:19 PM
Surr: Toluene-d8	108	90.7 - 109		%Rec	1	9/8/2020 7:59:19 PM
Surr: 1-Bromo-4-fluorobenzene	94.6	88.4 - 109		%Rec	1	9/8/2020 7:59:19 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	17.7	0.500		wt%	1	9/9/2020 9:20:54 AM

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 3:45:00 PM
Project: MVSC - Harris
Lab ID: 2009053-023
Matrix: Water
Client Sample ID: DRUM-090220

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29612 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Chloromethane	ND	2.00		µg/L	1	9/10/2020 2:55:40 AM
Vinyl chloride	ND	0.200		µg/L	1	9/10/2020 2:55:40 AM
Bromomethane	ND	1.00	Q	µg/L	1	9/10/2020 2:55:40 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Chloroethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Methylene chloride	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Chloroform	1.72	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Carbon tetrachloride	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Benzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/10/2020 2:55:40 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Bromodichloromethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Dibromomethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Toluene	3.98	1.00		µg/L	1	9/10/2020 2:55:40 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Dibromochloromethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	9/10/2020 2:55:40 AM
Chlorobenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Ethylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
m,p-Xylene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
o-Xylene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Styrene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Isopropylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Bromoform	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 3:45:00 PM
Project: MVSC - Harris
Lab ID: 2009053-023
Matrix: Water
Client Sample ID: DRUM-090220

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29612 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
n-Propylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Bromobenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
2-Chlorotoluene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
4-Chlorotoluene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
tert-Butylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	9/10/2020 2:55:40 AM
sec-Butylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
n-Butylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/10/2020 2:55:40 AM
Naphthalene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	9/10/2020 2:55:40 AM
Surr: Dibromofluoromethane	101	87.8 - 114		%Rec	1	9/10/2020 2:55:40 AM
Surr: Toluene-d8	95.5	90.6 - 109		%Rec	1	9/10/2020 2:55:40 AM
Surr: 1-Bromo-4-fluorobenzene	104	88.6 - 111		%Rec	1	9/10/2020 2:55:40 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-29610** SampType: **LCS** Units: **mg/Kg** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **LCSS** Batch ID: **29610** Analysis Date: **9/8/2020** SeqNo: **1237775**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.947	0.0200	1.000	0	94.7	13.4	185				
Chloromethane	0.930	0.0500	1.000	0	93.0	38.5	158				
Vinyl chloride	1.04	0.0200	1.000	0	104	53.6	138				
Bromomethane	1.03	0.0500	1.000	0	103	56.6	151				
Trichlorofluoromethane (CFC-11)	0.924	0.0200	1.000	0	92.4	64.2	137				
Chloroethane	0.840	0.0500	1.000	0	84.0	54.1	134				
1,1-Dichloroethene	0.945	0.0200	1.000	0	94.5	66	133				
Methylene chloride	0.866	0.0200	1.000	0	86.6	74.3	117				
trans-1,2-Dichloroethene	0.878	0.0200	1.000	0	87.8	79.6	115				
Methyl tert-butyl ether (MTBE)	0.860	0.0200	1.000	0	86.0	73.1	119				
1,1-Dichloroethane	0.824	0.0200	1.000	0	82.4	75.8	117				
cis-1,2-Dichloroethene	1.01	0.0200	1.000	0	101	77.8	115				
(MEK) 2-Butanone	2.60	0.250	2.500	0	104	66.2	129				
Chloroform	1.01	0.0200	1.000	0	101	78.2	115				
1,1,1-Trichloroethane (TCA)	1.01	0.0200	1.000	0	101	76	121				
1,1-Dichloropropene	0.993	0.0200	1.000	0	99.3	77.2	120				
Carbon tetrachloride	1.01	0.0200	1.000	0	101	74	122				
1,2-Dichloroethane (EDC)	1.02	0.0200	1.000	0	102	74.7	115				
Benzene	1.02	0.0200	1.000	0	102	80.5	114				
Trichloroethene (TCE)	1.01	0.0200	1.000	0	101	79.6	118				
1,2-Dichloropropane	1.00	0.0200	1.000	0	100	78.2	115				
Bromodichloromethane	1.03	0.0200	1.000	0	103	76.6	116				
Dibromomethane	1.01	0.0200	1.000	0	101	77.9	115				
cis-1,3-Dichloropropene	1.01	0.0200	1.000	0	101	74.6	119				
Toluene	1.04	0.0200	1.000	0	104	79.6	116				
trans-1,3-Dichloropropylene	1.05	0.0200	1.000	0	105	70.6	124				
1,1,2-Trichloroethane	1.04	0.0200	1.000	0	104	75.6	116				
1,3-Dichloropropane	1.04	0.0250	1.000	0	104	75.3	116				
Tetrachloroethene (PCE)	1.04	0.0200	1.000	0	104	78.8	119				
Dibromochloromethane	1.09	0.0200	1.000	0	109	72.5	123				

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-29610** SampType: **LCS** Units: **mg/Kg** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **LCSS** Batch ID: **29610** Analysis Date: **9/8/2020** SeqNo: **1237775**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromoethane (EDB)	1.05	0.00500	1.000	0	105	75	116				
Chlorobenzene	1.03	0.0200	1.000	0	103	83.4	113				
1,1,1,2-Tetrachloroethane	1.02	0.0200	1.000	0	102	80.8	117				
Ethylbenzene	1.02	0.0250	1.000	0	102	81.6	116				
m,p-Xylene	2.05	0.0500	2.000	0	102	80.9	117				
o-Xylene	1.02	0.0250	1.000	0	102	80.8	114				
Styrene	1.02	0.0200	1.000	0	102	80.4	114				
Isopropylbenzene	1.02	0.0200	1.000	0	102	79.3	118				
Bromoform	1.03	0.0500	1.000	0	103	71	129				
1,1,2,2-Tetrachloroethane	1.01	0.0200	1.000	0	101	71.3	119				
n-Propylbenzene	1.04	0.0200	1.000	0	104	80.4	120				
Bromobenzene	1.01	0.0200	1.000	0	101	78.6	115				
1,3,5-Trimethylbenzene	1.03	0.0200	1.000	0	103	80	116				
2-Chlorotoluene	1.02	0.0250	1.000	0	102	78.6	116				
4-Chlorotoluene	1.03	0.0200	1.000	0	103	78.8	117				
tert-Butylbenzene	1.03	0.0200	1.000	0	103	77.8	118				
1,2,3-Trichloropropane	0.996	0.0250	1.000	0	99.6	67.5	129				
1,2,4-Trichlorobenzene	1.10	0.0200	1.000	0	110	79.6	124				
sec-Butylbenzene	1.03	0.0250	1.000	0	103	78.6	119				
4-Isopropyltoluene	1.04	0.0250	1.000	0	104	78	119				
1,3-Dichlorobenzene	1.07	0.0200	1.000	0	107	87.1	117				
1,4-Dichlorobenzene	1.08	0.0200	1.000	0	108	87.6	115				
n-Butylbenzene	1.08	0.0200	1.000	0	108	81.9	122				
1,2-Dichlorobenzene	1.06	0.0200	1.000	0	106	87.9	115				
1,2-Dibromo-3-chloropropane	1.03	0.500	1.000	0	103	65.6	132				
1,2,4-Trimethylbenzene	1.04	0.0200	1.000	0	104	79.3	117				
Hexachloro-1,3-butadiene	1.12	0.0250	1.000	0	112	75	130				
Naphthalene	1.01	0.0500	1.000	0	101	71.7	132				
1,2,3-Trichlorobenzene	1.06	0.0200	1.000	0	106	74.3	128				
Surr: Dibromofluoromethane	1.28		1.250		102	83.3	111				

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-29610** SampType: **LCS** Units: **mg/Kg** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **LCSS** Batch ID: **29610** Analysis Date: **9/8/2020** SeqNo: **1237775**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	1.24		1.250		99.4	87.9	111				
Surr: 1-Bromo-4-fluorobenzene	1.28		1.250		102	85.1	111				

Sample ID: **MB-29610** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **MBLKS** Batch ID: **29610** Analysis Date: **9/8/2020** SeqNo: **1237776**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0200									
Chloromethane	ND	0.0500									Q
Vinyl chloride	ND	0.0200									
Bromomethane	ND	0.0500									
Trichlorofluoromethane (CFC-11)	ND	0.0200									Q
Chloroethane	ND	0.0500									
1,1-Dichloroethene	ND	0.0200									Q
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0200									Q
1,1-Dichloroethane	ND	0.0200									
cis-1,2-Dichloroethene	ND	0.0200									
(MEK) 2-Butanone	ND	0.250									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0200									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0200									
1,2-Dichloroethane (EDC)	ND	0.0200									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0200									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0200									

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-29610** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **MBLKS** Batch ID: **29610** Analysis Date: **9/8/2020** SeqNo: **1237776**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0200									
1,1,2-Trichloroethane	ND	0.0200									
1,3-Dichloropropane	ND	0.0250									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0200									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0200									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0200									
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0200									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0250									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0250									
1,2,4-Trichlorobenzene	ND	0.0200									
sec-Butylbenzene	ND	0.0250									
4-Isopropyltoluene	ND	0.0250									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-29610** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **MBLKS** Batch ID: **29610** Analysis Date: **9/8/2020** SeqNo: **1237776**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.500									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachloro-1,3-butadiene	ND	0.0250									
Naphthalene	ND	0.0500									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: Dibromofluoromethane	1.22		1.250		97.2	83.3	111				
Surr: Toluene-d8	1.10		1.250		88.1	87.9	111				
Surr: 1-Bromo-4-fluorobenzene	1.18		1.250		94.0	85.1	111				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **LCS-29604** SampType: **LCS** Units: **mg/Kg** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **LCSS** Batch ID: **29604** Analysis Date: **9/8/2020** SeqNo: **1238500**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.873	0.0200	1.000	0	87.3	13.4	185				
Chloromethane	0.890	0.0500	1.000	0	89.0	38.5	158				
Vinyl chloride	0.893	0.0200	1.000	0	89.3	53.6	138				
Bromomethane	0.909	0.0500	1.000	0	90.9	56.6	151				
Trichlorofluoromethane (CFC-11)	0.963	0.0200	1.000	0	96.3	64.2	137				
Chloroethane	0.883	0.0500	1.000	0	88.3	54.1	134				
1,1-Dichloroethene	0.913	0.0200	1.000	0	91.3	66	133				
Methylene chloride	0.916	0.0200	1.000	0	91.6	74.3	117				
trans-1,2-Dichloroethene	0.968	0.0200	1.000	0	96.8	79.6	115				
Methyl tert-butyl ether (MTBE)	0.853	0.0200	1.000	0	85.3	73.1	119				
1,1-Dichloroethane	0.920	0.0200	1.000	0	92.0	75.8	117				
cis-1,2-Dichloroethene	0.944	0.0200	1.000	0	94.4	77.8	115				
(MEK) 2-Butanone	1.97	0.250	2.500	0	78.7	66.2	129				
Chloroform	0.932	0.0200	1.000	0	93.2	78.2	115				
1,1,1-Trichloroethane (TCA)	0.959	0.0200	1.000	0	95.9	76	121				

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-29604** SampType: **LCS** Units: **mg/Kg** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **LCSS** Batch ID: **29604** Analysis Date: **9/8/2020** SeqNo: **1238500**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloropropene	0.949	0.0200	1.000	0	94.9	77.2	120				
Carbon tetrachloride	0.959	0.0200	1.000	0	95.9	74	122				
1,2-Dichloroethane (EDC)	0.899	0.0200	1.000	0	89.9	74.7	115				
Benzene	0.923	0.0200	1.000	0	92.3	80.5	114				
Trichloroethene (TCE)	0.915	0.0200	1.000	0	91.5	79.6	118				
1,2-Dichloropropane	0.897	0.0200	1.000	0	89.7	78.2	115				
Bromodichloromethane	0.911	0.0200	1.000	0	91.1	76.6	116				
Dibromomethane	0.905	0.0200	1.000	0	90.5	77.9	115				
cis-1,3-Dichloropropene	0.918	0.0200	1.000	0	91.8	74.6	119				
Toluene	0.918	0.0200	1.000	0	91.8	79.6	116				
trans-1,3-Dichloropropylene	0.892	0.0200	1.000	0	89.2	70.6	124				
1,1,2-Trichloroethane	0.846	0.0200	1.000	0	84.6	75.6	116				
1,3-Dichloropropane	0.869	0.0250	1.000	0	86.9	75.3	116				
Tetrachloroethene (PCE)	0.941	0.0200	1.000	0	94.1	78.8	119				
Dibromochloromethane	0.866	0.0200	1.000	0	86.6	72.5	123				
1,2-Dibromoethane (EDB)	0.859	0.00500	1.000	0	85.9	75	116				
Chlorobenzene	0.912	0.0200	1.000	0	91.2	83.4	113				
1,1,1,2-Tetrachloroethane	0.893	0.0200	1.000	0	89.3	80.8	117				
Ethylbenzene	0.937	0.0250	1.000	0	93.7	81.6	116				
m,p-Xylene	1.90	0.0500	2.000	0	94.8	80.9	117				
o-Xylene	0.931	0.0250	1.000	0	93.1	80.8	114				
Styrene	0.928	0.0200	1.000	0	92.8	80.4	114				
Isopropylbenzene	0.951	0.0200	1.000	0	95.1	79.3	118				
Bromoform	0.829	0.0500	1.000	0	82.9	71	129				
1,1,2,2-Tetrachloroethane	0.804	0.0200	1.000	0	80.4	71.3	119				
n-Propylbenzene	0.950	0.0200	1.000	0	95.0	80.4	120				
Bromobenzene	0.903	0.0200	1.000	0	90.3	78.6	115				
1,3,5-Trimethylbenzene	0.944	0.0200	1.000	0	94.4	80	116				
2-Chlorotoluene	0.949	0.0250	1.000	0	94.9	78.6	116				
4-Chlorotoluene	0.935	0.0200	1.000	0	93.5	78.8	117				

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-29604** SampType: **LCS** Units: **mg/Kg** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **LCSS** Batch ID: **29604** Analysis Date: **9/8/2020** SeqNo: **1238500**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
tert-Butylbenzene	0.947	0.0200	1.000	0	94.7	77.8	118				
1,2,3-Trichloropropane	0.832	0.0250	1.000	0	83.2	67.5	129				
1,2,4-Trichlorobenzene	0.885	0.0200	1.000	0	88.5	79.6	124				
sec-Butylbenzene	0.951	0.0250	1.000	0	95.1	78.6	119				
4-Isopropyltoluene	0.953	0.0250	1.000	0	95.3	78	119				
1,3-Dichlorobenzene	0.943	0.0200	1.000	0	94.3	87.1	117				
1,4-Dichlorobenzene	0.937	0.0200	1.000	0	93.7	87.6	115				
n-Butylbenzene	0.977	0.0200	1.000	0	97.7	81.9	122				
1,2-Dichlorobenzene	0.922	0.0200	1.000	0	92.2	87.9	115				
1,2-Dibromo-3-chloropropane	0.818	0.500	1.000	0	81.8	65.6	132				
1,2,4-Trimethylbenzene	0.944	0.0200	1.000	0	94.4	79.3	117				
Hexachloro-1,3-butadiene	0.939	0.0250	1.000	0	93.9	75	130				
Naphthalene	0.816	0.0500	1.000	0	81.6	71.7	132				
1,2,3-Trichlorobenzene	0.833	0.0200	1.000	0	83.3	74.3	128				
Surr: Dibromofluoromethane	1.27		1.250		101	83.3	111				
Surr: Toluene-d8	1.25		1.250		100	87.9	111				
Surr: 1-Bromo-4-fluorobenzene	1.28		1.250		103	85.1	111				

Sample ID: **MB-29604** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **MBLKS** Batch ID: **29604** Analysis Date: **9/8/2020** SeqNo: **1238501**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0200									Q
Chloromethane	ND	0.0500									Q
Vinyl chloride	ND	0.0200									
Bromomethane	ND	0.0500									
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0500									
1,1-Dichloroethene	ND	0.0200									
Methylene chloride	ND	0.0200									

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-29604** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **MBLKS** Batch ID: **29604** Analysis Date: **9/8/2020** SeqNo: **1238501**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0200									
1,1-Dichloroethane	ND	0.0200									
cis-1,2-Dichloroethene	ND	0.0200									
(MEK) 2-Butanone	ND	0.250									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0200									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0200									
1,2-Dichloroethane (EDC)	ND	0.0200									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0200									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0200									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0200									
1,1,2-Trichloroethane	ND	0.0200									
1,3-Dichloropropane	ND	0.0250									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0200									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0200									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0200									

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-29604** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **MBLKS** Batch ID: **29604** Analysis Date: **9/8/2020** SeqNo: **1238501**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0200									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0250									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0250									
1,2,4-Trichlorobenzene	ND	0.0200									
sec-Butylbenzene	ND	0.0250									
4-Isopropyltoluene	ND	0.0250									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.500									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachloro-1,3-butadiene	ND	0.0250									
Naphthalene	ND	0.0500									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: Dibromofluoromethane	1.25		1.250		100	83.3	111				
Surr: Toluene-d8	1.22		1.250		97.6	87.9	111				
Surr: 1-Bromo-4-fluorobenzene	1.23		1.250		98.1	85.1	111				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009080-005BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **BATCH** Batch ID: **29610** Analysis Date: **9/8/2020** SeqNo: **1237756**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0181						0		30	
Chloromethane	ND	0.0452						0		30	Q
Vinyl chloride	ND	0.0181						0		30	
Bromomethane	ND	0.0452						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0181						0		30	Q
Chloroethane	ND	0.0452						0		30	
1,1-Dichloroethene	ND	0.0181						0		30	Q
Methylene chloride	ND	0.0181						0		30	
trans-1,2-Dichloroethene	ND	0.0181						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0181						0		30	Q
1,1-Dichloroethane	ND	0.0181						0		30	
cis-1,2-Dichloroethene	ND	0.0181						0		30	
(MEK) 2-Butanone	ND	0.226						0		30	
Chloroform	ND	0.0181						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0181						0		30	
1,1-Dichloropropene	ND	0.0181						0		30	
Carbon tetrachloride	ND	0.0181						0		30	
1,2-Dichloroethane (EDC)	ND	0.0181						0		30	
Benzene	ND	0.0181						0		30	
Trichloroethene (TCE)	ND	0.0181						0		30	
1,2-Dichloropropane	ND	0.0181						0		30	
Bromodichloromethane	ND	0.0181						0		30	
Dibromomethane	ND	0.0181						0		30	
cis-1,3-Dichloropropene	ND	0.0181						0		30	
Toluene	ND	0.0181						0		30	
trans-1,3-Dichloropropylene	ND	0.0181						0		30	
1,1,2-Trichloroethane	ND	0.0181						0		30	
1,3-Dichloropropane	ND	0.0226						0		30	
Tetrachloroethene (PCE)	ND	0.0181						0		30	
Dibromochloromethane	ND	0.0181						0		30	

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009080-005BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **BATCH** Batch ID: **29610** Analysis Date: **9/8/2020** SeqNo: **1237756**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromoethane (EDB)	ND	0.00452						0		30	
Chlorobenzene	ND	0.0181						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0181						0		30	
Ethylbenzene	ND	0.0226						0		30	
m,p-Xylene	ND	0.0452						0		30	
o-Xylene	ND	0.0226						0		30	
Styrene	ND	0.0181						0		30	
Isopropylbenzene	ND	0.0181						0		30	
Bromoform	ND	0.0452						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0181						0		30	
n-Propylbenzene	ND	0.0181						0		30	
Bromobenzene	ND	0.0181						0		30	
1,3,5-Trimethylbenzene	ND	0.0181						0		30	
2-Chlorotoluene	ND	0.0226						0		30	
4-Chlorotoluene	ND	0.0181						0		30	
tert-Butylbenzene	ND	0.0181						0		30	
1,2,3-Trichloropropane	ND	0.0226						0		30	
1,2,4-Trichlorobenzene	ND	0.0181						0		30	
sec-Butylbenzene	ND	0.0226						0		30	
4-Isopropyltoluene	ND	0.0226						0		30	
1,3-Dichlorobenzene	ND	0.0181						0		30	
1,4-Dichlorobenzene	ND	0.0181						0		30	
n-Butylbenzene	ND	0.0181						0		30	
1,2-Dichlorobenzene	ND	0.0181						0		30	
1,2-Dibromo-3-chloropropane	ND	0.452						0		30	
1,2,4-Trimethylbenzene	ND	0.0181						0		30	
Hexachloro-1,3-butadiene	ND	0.0226						0		30	
Naphthalene	ND	0.0452						0		30	
1,2,3-Trichlorobenzene	ND	0.0181						0		30	
Surr: Dibromofluoromethane	1.17		1.129		103	83.3	111		0		

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009080-005BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **BATCH** Batch ID: **29610** Analysis Date: **9/8/2020** SeqNo: **1237756**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	0.911		1.129		80.7	87.9	111		0		S
Surr: 1-Bromo-4-fluorobenzene	1.12		1.129		99.3	85.1	111		0		

NOTES:
S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed and recovered within range.
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2009053-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **SVE-20-2** Batch ID: **29604** Analysis Date: **9/8/2020** SeqNo: **1238474**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0230						0		30	Q
Chloromethane	ND	0.0576						0		30	Q
Vinyl chloride	ND	0.0230						0		30	
Bromomethane	ND	0.0576						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0230						0		30	
Chloroethane	ND	0.0576						0		30	
1,1-Dichloroethene	ND	0.0230						0		30	
Methylene chloride	ND	0.0230						0		30	
trans-1,2-Dichloroethene	ND	0.0230						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0230						0		30	
1,1-Dichloroethane	ND	0.0230						0		30	
cis-1,2-Dichloroethene	ND	0.0230						0		30	
(MEK) 2-Butanone	ND	0.288						0		30	
Chloroform	ND	0.0230						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0230						0		30	
1,1-Dichloropropene	ND	0.0230						0		30	
Carbon tetrachloride	ND	0.0230						0		30	
1,2-Dichloroethane (EDC)	ND	0.0230						0		30	
Benzene	ND	0.0230						0		30	
Trichloroethene (TCE)	ND	0.0230						0		30	
1,2-Dichloropropane	ND	0.0230						0		30	

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009053-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **SVE-20-2** Batch ID: **29604** Analysis Date: **9/8/2020** SeqNo: **1238474**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	0.0230						0		30	
Dibromomethane	ND	0.0230						0		30	
cis-1,3-Dichloropropene	ND	0.0230						0		30	
Toluene	ND	0.0230						0		30	
trans-1,3-Dichloropropylene	ND	0.0230						0		30	
1,1,2-Trichloroethane	ND	0.0230						0		30	
1,3-Dichloropropane	ND	0.0288						0		30	
Tetrachloroethene (PCE)	0.0928	0.0230						0.09068	2.28	30	
Dibromochloromethane	ND	0.0230						0		30	
1,2-Dibromoethane (EDB)	ND	0.00576						0		30	
Chlorobenzene	ND	0.0230						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0230						0		30	
Ethylbenzene	ND	0.0288						0		30	
m,p-Xylene	ND	0.0576						0		30	
o-Xylene	ND	0.0288						0		30	
Styrene	ND	0.0230						0		30	
Isopropylbenzene	ND	0.0230						0		30	
Bromoform	ND	0.0576						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0230						0		30	
n-Propylbenzene	ND	0.0230						0		30	
Bromobenzene	ND	0.0230						0		30	
1,3,5-Trimethylbenzene	ND	0.0230						0		30	
2-Chlorotoluene	ND	0.0288						0		30	
4-Chlorotoluene	ND	0.0230						0		30	
tert-Butylbenzene	ND	0.0230						0		30	
1,2,3-Trichloropropane	ND	0.0288						0		30	
1,2,4-Trichlorobenzene	ND	0.0230						0		30	
sec-Butylbenzene	ND	0.0288						0		30	
4-Isopropyltoluene	ND	0.0288						0		30	
1,3-Dichlorobenzene	ND	0.0230						0		30	

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009053-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **SVE-20-2** Batch ID: **29604** Analysis Date: **9/8/2020** SeqNo: **1238474**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	0.0230						0		30	
n-Butylbenzene	ND	0.0230						0		30	
1,2-Dichlorobenzene	ND	0.0230						0		30	
1,2-Dibromo-3-chloropropane	ND	0.576						0		30	
1,2,4-Trimethylbenzene	ND	0.0230						0		30	
Hexachloro-1,3-butadiene	ND	0.0288						0		30	
Naphthalene	ND	0.0576						0		30	
1,2,3-Trichlorobenzene	ND	0.0230						0		30	
Surr: Dibromofluoromethane	1.47		1.440		102	83.3	111		0		
Surr: Toluene-d8	1.42		1.440		98.6	87.9	111		0		
Surr: 1-Bromo-4-fluorobenzene	1.37		1.440		95.3	85.1	111		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2009053-003BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **SVE-20-8.5** Batch ID: **29604** Analysis Date: **9/8/2020** SeqNo: **1238479**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0481						0		30	Q
Chloromethane	ND	0.120						0		30	Q
Vinyl chloride	ND	0.0481						0		30	
Bromomethane	ND	0.120						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0481						0		30	
Chloroethane	ND	0.120						0		30	
1,1-Dichloroethene	ND	0.0481						0		30	
Methylene chloride	ND	0.0481						0		30	
trans-1,2-Dichloroethene	ND	0.0481						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0481						0		30	
1,1-Dichloroethane	ND	0.0481						0		30	
cis-1,2-Dichloroethene	ND	0.0481						0		30	
(MEK) 2-Butanone	ND	0.602						0		30	

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009053-003BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **SVE-20-8.5** Batch ID: **29604** Analysis Date: **9/8/2020** SeqNo: **1238479**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	ND	0.0481						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0481						0		30	
1,1-Dichloropropene	ND	0.0481						0		30	
Carbon tetrachloride	ND	0.0481						0		30	
1,2-Dichloroethane (EDC)	ND	0.0481						0		30	
Benzene	ND	0.0481						0		30	
Trichloroethene (TCE)	ND	0.0481						0		30	
1,2-Dichloropropane	ND	0.0481						0		30	
Bromodichloromethane	ND	0.0481						0		30	
Dibromomethane	ND	0.0481						0		30	
cis-1,3-Dichloropropene	ND	0.0481						0		30	
Toluene	ND	0.0481						0		30	
trans-1,3-Dichloropropylene	ND	0.0481						0		30	
1,1,2-Trichloroethane	ND	0.0481						0		30	
1,3-Dichloropropane	ND	0.0602						0		30	
Tetrachloroethene (PCE)	1.19	0.0481						1.542	25.9	30	
Dibromochloromethane	ND	0.0481						0		30	
1,2-Dibromoethane (EDB)	ND	0.0120						0		30	
Chlorobenzene	ND	0.0481						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0481						0		30	
Ethylbenzene	ND	0.0602						0		30	
m,p-Xylene	ND	0.120						0		30	
o-Xylene	ND	0.0602						0		30	
Styrene	ND	0.0481						0		30	
Isopropylbenzene	ND	0.0481						0		30	
Bromoform	ND	0.120						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0481						0		30	
n-Propylbenzene	ND	0.0481						0		30	
Bromobenzene	ND	0.0481						0		30	
1,3,5-Trimethylbenzene	ND	0.0481						0		30	

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009053-003BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **SVE-20-8.5** Batch ID: **29604** Analysis Date: **9/8/2020** SeqNo: **1238479**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Chlorotoluene	ND	0.0602						0		30	
4-Chlorotoluene	ND	0.0481						0		30	
tert-Butylbenzene	ND	0.0481						0		30	
1,2,3-Trichloropropane	ND	0.0602						0		30	
1,2,4-Trichlorobenzene	ND	0.0481						0		30	
sec-Butylbenzene	ND	0.0602						0		30	
4-Isopropyltoluene	ND	0.0602						0		30	
1,3-Dichlorobenzene	ND	0.0481						0		30	
1,4-Dichlorobenzene	ND	0.0481						0		30	
n-Butylbenzene	ND	0.0481						0		30	
1,2-Dichlorobenzene	ND	0.0481						0		30	
1,2-Dibromo-3-chloropropane	ND	1.20						0		30	
1,2,4-Trimethylbenzene	ND	0.0481						0		30	
Hexachloro-1,3-butadiene	ND	0.0602						0		30	
Naphthalene	ND	0.120						0		30	
1,2,3-Trichlorobenzene	ND	0.0481						0		30	
Surr: Dibromofluoromethane	3.05		3.008		101	83.3	111		0		
Surr: Toluene-d8	2.95		3.008		98.0	87.9	111		0		
Surr: 1-Bromo-4-fluorobenzene	2.98		3.008		99.0	85.1	111		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2009080-003BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **BATCH** Batch ID: **29610** Analysis Date: **9/9/2020** SeqNo: **1237753**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.06	0.0187	0.9356	0	113	5.73	173				
Chloromethane	0.649	0.0468	0.9356	0	69.4	41.3	150				
Vinyl chloride	1.03	0.0187	0.9356	0	110	49.5	138				
Bromomethane	1.15	0.0468	0.9356	0	123	48.5	158				
Trichlorofluoromethane (CFC-11)	0.664	0.0187	0.9356	0	70.9	40.6	159				

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009080-003BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **BATCH** Batch ID: **29610** Analysis Date: **9/9/2020** SeqNo: **1237753**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroethane	1.15	0.0468	0.9356	0	123	30.4	166				
1,1-Dichloroethene	0.651	0.0187	0.9356	0	69.5	55	138				
Methylene chloride	0.718	0.0187	0.9356	0	76.7	70.3	123				
trans-1,2-Dichloroethene	0.751	0.0187	0.9356	0	80.2	73.1	121				
Methyl tert-butyl ether (MTBE)	0.654	0.0187	0.9356	0	69.9	69.6	122				
1,1-Dichloroethane	0.746	0.0187	0.9356	0	79.7	70.8	122				
cis-1,2-Dichloroethene	0.815	0.0187	0.9356	0	87.1	71.8	122				
(MEK) 2-Butanone	1.79	0.234	2.339	0.1117	71.9	52.2	149				
Chloroform	0.851	0.0187	0.9356	0	90.9	72.9	122				
1,1,1-Trichloroethane (TCA)	0.990	0.0187	0.9356	0	106	69.6	125				
1,1-Dichloropropene	0.987	0.0187	0.9356	0	105	69.3	126				
Carbon tetrachloride	0.993	0.0187	0.9356	0	106	65	127				
1,2-Dichloroethane (EDC)	0.909	0.0187	0.9356	0	97.2	70.1	121				
Benzene	0.973	0.0187	0.9356	0	104	76.7	119				
Trichloroethene (TCE)	0.977	0.0187	0.9356	0	104	70.1	129				
1,2-Dichloropropane	0.930	0.0187	0.9356	0	99.4	74.6	120				
Bromodichloromethane	0.921	0.0187	0.9356	0	98.4	70.9	122				
Dibromomethane	0.900	0.0187	0.9356	0	96.2	75.6	120				
cis-1,3-Dichloropropene	0.868	0.0187	0.9356	0	92.7	68.3	120				
Toluene	0.990	0.0187	0.9356	0	106	74.7	119				
trans-1,3-Dichloropropylene	0.859	0.0187	0.9356	0	91.8	62.2	127				
1,1,2-Trichloroethane	0.922	0.0187	0.9356	0	98.5	72.9	120				
1,3-Dichloropropane	0.871	0.0234	0.9356	0	93.1	71.9	119				
Tetrachloroethene (PCE)	0.994	0.0187	0.9356	0	106	71.1	122				
Dibromochloromethane	0.903	0.0187	0.9356	0	96.5	65.9	126				
1,2-Dibromoethane (EDB)	0.851	0.00468	0.9356	0	91.0	72	119				
Chlorobenzene	0.995	0.0187	0.9356	0	106	81.4	116				
1,1,1,2-Tetrachloroethane	0.969	0.0187	0.9356	0	104	72.9	125				
Ethylbenzene	1.02	0.0234	0.9356	0	109	77.1	120				
m,p-Xylene	2.03	0.0468	1.871	0	108	76.3	120				

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009080-003BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **BATCH** Batch ID: **29610** Analysis Date: **9/9/2020** SeqNo: **1237753**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
o-Xylene	0.993	0.0234	0.9356	0	106	76.6	119				
Styrene	0.994	0.0187	0.9356	0	106	75.1	121				
Isopropylbenzene	1.01	0.0187	0.9356	0	108	74.8	122				
Bromoform	0.916	0.0468	0.9356	0	97.9	63.4	133				
1,1,2,2-Tetrachloroethane	0.889	0.0187	0.9356	0	95.0	61	128				
n-Propylbenzene	1.03	0.0187	0.9356	0	110	73	128				
Bromobenzene	0.977	0.0187	0.9356	0	104	77	120				
1,3,5-Trimethylbenzene	1.00	0.0187	0.9356	0	107	72.1	126				
2-Chlorotoluene	1.01	0.0234	0.9356	0	108	71.4	126				
4-Chlorotoluene	1.00	0.0187	0.9356	0	107	73.6	124				
tert-Butylbenzene	0.997	0.0187	0.9356	0	107	70.7	126				
1,2,3-Trichloropropane	0.821	0.0234	0.9356	0	87.7	65.7	132				
1,2,4-Trichlorobenzene	0.914	0.0187	0.9356	0	97.7	70.5	130				
sec-Butylbenzene	1.02	0.0234	0.9356	0	109	68.8	129				
4-Isopropyltoluene	0.994	0.0234	0.9356	0	106	69.2	128				
1,3-Dichlorobenzene	0.994	0.0187	0.9356	0	106	83.8	121				
1,4-Dichlorobenzene	1.00	0.0187	0.9356	0	107	85.7	117				
n-Butylbenzene	1.00	0.0187	0.9356	0	107	67.4	133				
1,2-Dichlorobenzene	0.981	0.0187	0.9356	0	105	81.8	120				
1,2-Dibromo-3-chloropropane	0.850	0.468	0.9356	0	90.8	56.9	139				
1,2,4-Trimethylbenzene	0.993	0.0187	0.9356	0	106	70.9	127				
Hexachloro-1,3-butadiene	0.961	0.0234	0.9356	0	103	61.1	140				
Naphthalene	0.920	0.0468	0.9356	0	98.4	63.3	143				
1,2,3-Trichlorobenzene	0.910	0.0187	0.9356	0	97.3	67.8	132				
Surr: Dibromofluoromethane	1.17		1.170		100	83.3	111				
Surr: Toluene-d8	1.14		1.170		97.6	87.9	111				
Surr: 1-Bromo-4-fluorobenzene	1.22		1.170		104	85.1	111				

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009080-003BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **BATCH** Batch ID: **29610** Analysis Date: **9/9/2020** SeqNo: **1237754**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.46	0.0187	0.9356	0	156	5.73	173	1.061	31.9	30	R
Chloromethane	0.855	0.0468	0.9356	0	91.3	41.3	150	0.6495	27.3	30	
Vinyl chloride	1.27	0.0187	0.9356	0	135	49.5	138	1.027	20.8	30	
Bromomethane	1.43	0.0468	0.9356	0	153	48.5	158	1.153	21.3	30	
Trichlorofluoromethane (CFC-11)	0.809	0.0187	0.9356	0	86.5	40.6	159	0.6636	19.8	30	
Chloroethane	1.24	0.0468	0.9356	0	133	30.4	166	1.153	7.48	30	
1,1-Dichloroethene	0.810	0.0187	0.9356	0	86.6	55	138	0.6505	21.8	30	
Methylene chloride	0.860	0.0187	0.9356	0	91.9	70.3	123	0.7178	18.0	30	
trans-1,2-Dichloroethene	0.923	0.0187	0.9356	0	98.6	73.1	121	0.7507	20.6	30	
Methyl tert-butyl ether (MTBE)	0.815	0.0187	0.9356	0	87.2	69.6	122	0.6539	22.0	30	
1,1-Dichloroethane	0.975	0.0187	0.9356	0	104	70.8	122	0.7461	26.6	30	
cis-1,2-Dichloroethene	1.09	0.0187	0.9356	0	117	71.8	122	0.8151	29.1	30	
(MEK) 2-Butanone	2.41	0.234	2.339	0.1117	98.1	52.2	149	1.793	29.2	30	
Chloroform	1.09	0.0187	0.9356	0	116	72.9	122	0.8509	24.6	30	
1,1,1-Trichloroethane (TCA)	0.984	0.0187	0.9356	0	105	69.6	125	0.9903	0.665	30	
1,1-Dichloropropene	0.901	0.0187	0.9356	0	96.3	69.3	126	0.9868	9.05	30	
Carbon tetrachloride	0.951	0.0187	0.9356	0	102	65	127	0.9928	4.28	30	
1,2-Dichloroethane (EDC)	0.860	0.0187	0.9356	0	91.9	70.1	121	0.9090	5.59	30	
Benzene	0.916	0.0187	0.9356	0	97.9	76.7	119	0.9726	5.96	30	
Trichloroethene (TCE)	0.907	0.0187	0.9356	0	96.9	70.1	129	0.9770	7.47	30	
1,2-Dichloropropane	0.840	0.0187	0.9356	0	89.7	74.6	120	0.9296	10.2	30	
Bromodichloromethane	0.905	0.0187	0.9356	0	96.7	70.9	122	0.9209	1.78	30	
Dibromomethane	0.829	0.0187	0.9356	0	88.7	75.6	120	0.8999	8.15	30	
cis-1,3-Dichloropropene	0.977	0.0187	0.9356	0	104	68.3	120	0.8676	11.8	30	
Toluene	1.11	0.0187	0.9356	0	119	74.7	119	0.9899	11.9	30	S
trans-1,3-Dichloropropylene	0.969	0.0187	0.9356	0	104	62.2	127	0.8593	12.0	30	
1,1,2-Trichloroethane	1.03	0.0187	0.9356	0	111	72.9	120	0.9219	11.5	30	
1,3-Dichloropropane	1.02	0.0234	0.9356	0	109	71.9	119	0.8711	15.6	30	
Tetrachloroethene (PCE)	1.14	0.0187	0.9356	0	122	71.1	122	0.9945	13.6	30	
Dibromochloromethane	1.01	0.0187	0.9356	0	107	65.9	126	0.9030	10.8	30	

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009080-003BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **BATCH** Batch ID: **29610** Analysis Date: **9/9/2020** SeqNo: **1237754**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromoethane (EDB)	0.962	0.00468	0.9356	0	103	72	119	0.8510	12.3	30	
Chlorobenzene	0.998	0.0187	0.9356	0	107	81.4	116	0.9950	0.346	30	
1,1,1,2-Tetrachloroethane	0.975	0.0187	0.9356	0	104	72.9	125	0.9690	0.579	30	
Ethylbenzene	1.02	0.0234	0.9356	0	109	77.1	120	1.019	0.108	30	
m,p-Xylene	2.02	0.0468	1.871	0	108	76.3	120	2.027	0.132	30	
o-Xylene	0.984	0.0234	0.9356	0	105	76.6	119	0.9931	0.973	30	
Styrene	0.993	0.0187	0.9356	0	106	75.1	121	0.9942	0.121	30	
Isopropylbenzene	1.01	0.0187	0.9356	0	108	74.8	122	1.013	0.0132	30	
Bromoform	0.924	0.0468	0.9356	0	98.8	63.4	133	0.9164	0.860	30	
1,1,2,2-Tetrachloroethane	0.899	0.0187	0.9356	0	96.1	61	128	0.8885	1.19	30	
n-Propylbenzene	1.02	0.0187	0.9356	0	109	73	128	1.025	0.212	30	
Bromobenzene	0.986	0.0187	0.9356	0	105	77	120	0.9772	0.877	30	
1,3,5-Trimethylbenzene	1.00	0.0187	0.9356	0	107	72.1	126	1.003	0.0450	30	
2-Chlorotoluene	1.00	0.0234	0.9356	0	107	71.4	126	1.015	1.25	30	
4-Chlorotoluene	0.999	0.0187	0.9356	0	107	73.6	124	1.002	0.259	30	
tert-Butylbenzene	0.995	0.0187	0.9356	0	106	70.7	126	0.9973	0.213	30	
1,2,3-Trichloropropane	0.827	0.0234	0.9356	0	88.4	65.7	132	0.8209	0.733	30	
1,2,4-Trichlorobenzene	0.957	0.0187	0.9356	0	102	70.5	130	0.9137	4.66	30	
sec-Butylbenzene	1.01	0.0234	0.9356	0	108	68.8	129	1.015	0.455	30	
4-Isopropyltoluene	0.998	0.0234	0.9356	0	107	69.2	128	0.9943	0.336	30	
1,3-Dichlorobenzene	1.01	0.0187	0.9356	0	107	83.8	121	0.9943	1.13	30	
1,4-Dichlorobenzene	1.01	0.0187	0.9356	0	108	85.7	117	1.005	0.677	30	
n-Butylbenzene	1.01	0.0187	0.9356	0	108	67.4	133	1.004	1.06	30	
1,2-Dichlorobenzene	0.985	0.0187	0.9356	0	105	81.8	120	0.9811	0.427	30	
1,2-Dibromo-3-chloropropane	0.879	0.468	0.9356	0	94.0	56.9	139	0.8499	3.42	30	
1,2,4-Trimethylbenzene	0.994	0.0187	0.9356	0	106	70.9	127	0.9926	0.170	30	
Hexachloro-1,3-butadiene	0.979	0.0234	0.9356	0	105	61.1	140	0.9607	1.87	30	
Naphthalene	0.973	0.0468	0.9356	0	104	63.3	143	0.9202	5.59	30	
1,2,3-Trichlorobenzene	0.958	0.0187	0.9356	0	102	67.8	132	0.9102	5.15	30	
Surr: Dibromofluoromethane	1.15		1.170		98.7	83.3	111		0		

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009080-003BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **BATCH** Batch ID: **29610** Analysis Date: **9/9/2020** SeqNo: **1237754**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	1.27		1.170		109	87.9	111		0		
Surr: 1-Bromo-4-fluorobenzene	1.20		1.170		103	85.1	111		0		

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.
R - High RPD observed, spike recovery is within range.

Sample ID: **2009053-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **SVE-21-2** Batch ID: **29604** Analysis Date: **9/9/2020** SeqNo: **1238476**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.54	0.0226	1.130	0	136	5.73	173				
Chloromethane	1.14	0.0565	1.130	0	101	41.3	150				
Vinyl chloride	1.16	0.0226	1.130	0	103	49.5	138				
Bromomethane	1.16	0.0565	1.130	0	103	48.5	158				
Trichlorofluoromethane (CFC-11)	1.16	0.0226	1.130	0	103	40.6	159				
Chloroethane	1.08	0.0565	1.130	0	95.5	30.4	166				
1,1-Dichloroethene	1.07	0.0226	1.130	0	95.1	55	138				
Methylene chloride	1.02	0.0226	1.130	0	90.5	70.3	123				
trans-1,2-Dichloroethene	1.06	0.0226	1.130	0	93.7	73.1	121				
Methyl tert-butyl ether (MTBE)	1.03	0.0226	1.130	0	91.5	69.6	122				
1,1-Dichloroethane	1.03	0.0226	1.130	0	90.7	70.8	122				
cis-1,2-Dichloroethene	1.04	0.0226	1.130	0	92.0	71.8	122				
(MEK) 2-Butanone	2.62	0.283	2.826	0	92.9	52.2	149				
Chloroform	1.03	0.0226	1.130	0	91.1	72.9	122				
1,1,1-Trichloroethane (TCA)	1.07	0.0226	1.130	0	95.0	69.6	125				
1,1-Dichloropropene	1.10	0.0226	1.130	0	97.1	69.3	126				
Carbon tetrachloride	1.09	0.0226	1.130	0	96.1	65	127				
1,2-Dichloroethane (EDC)	1.02	0.0226	1.130	0	90.6	70.1	121				
Benzene	1.03	0.0226	1.130	0	91.3	76.7	119				
Trichloroethene (TCE)	1.07	0.0226	1.130	0	94.8	70.1	129				
1,2-Dichloropropane	1.01	0.0226	1.130	0	89.4	74.6	120				

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009053-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **SVE-21-2** Batch ID: **29604** Analysis Date: **9/9/2020** SeqNo: **1238476**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	1.03	0.0226	1.130	0	90.8	70.9	122				
Dibromomethane	1.05	0.0226	1.130	0	92.6	75.6	120				
cis-1,3-Dichloropropene	0.977	0.0226	1.130	0	86.4	68.3	120				
Toluene	1.03	0.0226	1.130	0	90.8	74.7	119				
trans-1,3-Dichloropropylene	0.991	0.0226	1.130	0	87.6	62.2	127				
1,1,2-Trichloroethane	1.00	0.0226	1.130	0	88.8	72.9	120				
1,3-Dichloropropane	1.02	0.0283	1.130	0	89.9	71.9	119				
Tetrachloroethene (PCE)	1.31	0.0226	1.130	0	115	71.1	122				
Dibromochloromethane	0.993	0.0226	1.130	0	87.9	65.9	126				
1,2-Dibromoethane (EDB)	1.02	0.00565	1.130	0	89.9	72	119				
Chlorobenzene	1.02	0.0226	1.130	0	90.1	81.4	116				
1,1,1,2-Tetrachloroethane	1.02	0.0226	1.130	0	90.0	72.9	125				
Ethylbenzene	1.03	0.0283	1.130	0	91.2	77.1	120				
m,p-Xylene	2.08	0.0565	2.261	0	92.1	76.3	120				
o-Xylene	1.02	0.0283	1.130	0	90.5	76.6	119				
Styrene	1.02	0.0226	1.130	0	90.6	75.1	121				
Isopropylbenzene	1.05	0.0226	1.130	0	92.5	74.8	122				
Bromoform	0.975	0.0565	1.130	0	86.2	63.4	133				
1,1,2,2-Tetrachloroethane	0.938	0.0226	1.130	0	83.0	61	128				
n-Propylbenzene	1.06	0.0226	1.130	0	93.4	73	128				
Bromobenzene	1.02	0.0226	1.130	0	90.3	77	120				
1,3,5-Trimethylbenzene	1.04	0.0226	1.130	0	91.9	72.1	126				
2-Chlorotoluene	1.03	0.0283	1.130	0	90.8	71.4	126				
4-Chlorotoluene	1.04	0.0226	1.130	0	92.2	73.6	124				
tert-Butylbenzene	1.04	0.0226	1.130	0	92.0	70.7	126				
1,2,3-Trichloropropane	0.984	0.0283	1.130	0	87.1	65.7	132				
1,2,4-Trichlorobenzene	0.983	0.0226	1.130	0	86.9	70.5	130				
sec-Butylbenzene	1.06	0.0283	1.130	0	93.9	68.8	129				
4-Isopropyltoluene	1.05	0.0283	1.130	0	93.2	69.2	128				
1,3-Dichlorobenzene	1.03	0.0226	1.130	0	90.8	83.8	121				

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009053-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **SVE-21-2** Batch ID: **29604** Analysis Date: **9/9/2020** SeqNo: **1238476**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	1.02	0.0226	1.130	0	90.0	85.7	117				
n-Butylbenzene	1.03	0.0226	1.130	0	91.4	67.4	133				
1,2-Dichlorobenzene	1.01	0.0226	1.130	0	89.7	81.8	120				
1,2-Dibromo-3-chloropropane	0.988	0.565	1.130	0	87.4	56.9	139				
1,2,4-Trimethylbenzene	1.03	0.0226	1.130	0	91.5	70.9	127				
Hexachloro-1,3-butadiene	1.01	0.0283	1.130	0	89.5	61.1	140				
Naphthalene	0.982	0.0565	1.130	0	86.9	63.3	143				
1,2,3-Trichlorobenzene	1.00	0.0226	1.130	0	88.5	67.8	132				
Surr: Dibromofluoromethane	1.40		1.413		99.1	83.3	111				
Surr: Toluene-d8	1.42		1.413		100	87.9	111				
Surr: 1-Bromo-4-fluorobenzene	1.47		1.413		104	85.1	111				

Sample ID: **2009053-002BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **SVE-21-2** Batch ID: **29604** Analysis Date: **9/9/2020** SeqNo: **1238477**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.59	0.0226	1.130	0	141	5.73	173	1.540	3.36	30	
Chloromethane	1.22	0.0565	1.130	0	108	41.3	150	1.144	6.67	30	
Vinyl chloride	1.22	0.0226	1.130	0	108	49.5	138	1.165	4.65	30	
Bromomethane	1.15	0.0565	1.130	0	101	48.5	158	1.162	1.35	30	
Trichlorofluoromethane (CFC-11)	1.13	0.0226	1.130	0	99.7	40.6	159	1.160	2.88	30	
Chloroethane	1.15	0.0565	1.130	0	102	30.4	166	1.080	6.39	30	
1,1-Dichloroethene	1.15	0.0226	1.130	0	101	55	138	1.075	6.37	30	
Methylene chloride	1.07	0.0226	1.130	0	94.6	70.3	123	1.023	4.45	30	
trans-1,2-Dichloroethene	1.11	0.0226	1.130	0	98.3	73.1	121	1.060	4.70	30	
Methyl tert-butyl ether (MTBE)	1.06	0.0226	1.130	0	93.9	69.6	122	1.035	2.60	30	
1,1-Dichloroethane	1.05	0.0226	1.130	0	92.8	70.8	122	1.025	2.31	30	
cis-1,2-Dichloroethene	1.07	0.0226	1.130	0	94.5	71.8	122	1.040	2.67	30	
(MEK) 2-Butanone	2.60	0.283	2.826	0	92.0	52.2	149	2.625	0.949	30	
Chloroform	1.06	0.0226	1.130	0	93.6	72.9	122	1.030	2.76	30	

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009053-002BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **SVE-21-2** Batch ID: **29604** Analysis Date: **9/9/2020** SeqNo: **1238477**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane (TCA)	1.11	0.0226	1.130	0	98.3	69.6	125	1.073	3.45	30	
1,1-Dichloropropene	1.12	0.0226	1.130	0	98.8	69.3	126	1.098	1.73	30	
Carbon tetrachloride	1.12	0.0226	1.130	0	98.8	65	127	1.086	2.81	30	
1,2-Dichloroethane (EDC)	1.07	0.0226	1.130	0	94.5	70.1	121	1.024	4.23	30	
Benzene	1.08	0.0226	1.130	0	95.6	76.7	119	1.032	4.60	30	
Trichloroethene (TCE)	1.12	0.0226	1.130	0	98.7	70.1	129	1.072	3.94	30	
1,2-Dichloropropane	1.06	0.0226	1.130	0	93.4	74.6	120	1.011	4.32	30	
Bromodichloromethane	1.05	0.0226	1.130	0	93.1	70.9	122	1.027	2.49	30	
Dibromomethane	1.05	0.0226	1.130	0	93.1	75.6	120	1.046	0.602	30	
cis-1,3-Dichloropropene	1.02	0.0226	1.130	0	90.0	68.3	120	0.9771	4.01	30	
Toluene	1.06	0.0226	1.130	0	94.0	74.7	119	1.026	3.49	30	
trans-1,3-Dichloropropylene	1.02	0.0226	1.130	0	90.3	62.2	127	0.9906	3.02	30	
1,1,2-Trichloroethane	1.04	0.0226	1.130	0	92.1	72.9	120	1.003	3.69	30	
1,3-Dichloropropane	1.05	0.0283	1.130	0	92.6	71.9	119	1.016	3.03	30	
Tetrachloroethene (PCE)	1.36	0.0226	1.130	0	121	71.1	122	1.305	4.43	30	
Dibromochloromethane	1.04	0.0226	1.130	0	91.9	65.9	126	0.9934	4.53	30	
1,2-Dibromoethane (EDB)	1.05	0.00565	1.130	0	93.3	72	119	1.016	3.68	30	
Chlorobenzene	1.06	0.0226	1.130	0	93.8	81.4	116	1.019	3.99	30	
1,1,1,2-Tetrachloroethane	1.06	0.0226	1.130	0	93.4	72.9	125	1.018	3.71	30	
Ethylbenzene	1.08	0.0283	1.130	0	95.6	77.1	120	1.031	4.72	30	
m,p-Xylene	2.18	0.0565	2.261	0	96.5	76.3	120	2.082	4.75	30	
o-Xylene	1.09	0.0283	1.130	0	96.1	76.6	119	1.023	5.96	30	
Styrene	1.08	0.0226	1.130	0	95.5	75.1	121	1.025	5.27	30	
Isopropylbenzene	1.10	0.0226	1.130	0	97.2	74.8	122	1.045	4.95	30	
Bromoform	1.01	0.0565	1.130	0	89.2	63.4	133	0.9750	3.35	30	
1,1,2,2-Tetrachloroethane	1.02	0.0226	1.130	0	90.2	61	128	0.9384	8.30	30	
n-Propylbenzene	1.10	0.0226	1.130	0	97.6	73	128	1.056	4.36	30	
Bromobenzene	1.07	0.0226	1.130	0	94.5	77	120	1.021	4.49	30	
1,3,5-Trimethylbenzene	1.08	0.0226	1.130	0	95.6	72.1	126	1.039	3.92	30	
2-Chlorotoluene	1.10	0.0283	1.130	0	97.0	71.4	126	1.026	6.67	30	

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009053-002BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61742**
Client ID: **SVE-21-2** Batch ID: **29604** Analysis Date: **9/9/2020** SeqNo: **1238477**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chlorotoluene	1.09	0.0226	1.130	0	96.0	73.6	124	1.042	4.07	30	
tert-Butylbenzene	1.09	0.0226	1.130	0	96.3	70.7	126	1.040	4.62	30	
1,2,3-Trichloropropane	1.04	0.0283	1.130	0	92.2	65.7	132	0.9842	5.76	30	
1,2,4-Trichlorobenzene	1.05	0.0226	1.130	0	92.9	70.5	130	0.9827	6.66	30	
sec-Butylbenzene	1.09	0.0283	1.130	0	96.9	68.8	129	1.061	3.13	30	
4-Isopropyltoluene	1.10	0.0283	1.130	0	96.9	69.2	128	1.053	3.90	30	
1,3-Dichlorobenzene	1.08	0.0226	1.130	0	95.6	83.8	121	1.026	5.17	30	
1,4-Dichlorobenzene	1.09	0.0226	1.130	0	96.2	85.7	117	1.018	6.63	30	
n-Butylbenzene	1.08	0.0226	1.130	0	95.7	67.4	133	1.033	4.55	30	
1,2-Dichlorobenzene	1.07	0.0226	1.130	0	95.0	81.8	120	1.014	5.74	30	
1,2-Dibromo-3-chloropropane	1.02	0.565	1.130	0	90.3	56.9	139	0.9882	3.19	30	
1,2,4-Trimethylbenzene	1.09	0.0226	1.130	0	96.4	70.9	127	1.034	5.20	30	
Hexachloro-1,3-butadiene	1.08	0.0283	1.130	0	95.1	61.1	140	1.011	6.10	30	
Naphthalene	1.04	0.0565	1.130	0	92.2	63.3	143	0.9819	5.93	30	
1,2,3-Trichlorobenzene	1.06	0.0226	1.130	0	94.1	67.8	132	1.000	6.17	30	
Surr: Dibromofluoromethane	1.41		1.413		99.6	83.3	111		0		
Surr: Toluene-d8	1.42		1.413		100	87.9	111		0		
Surr: 1-Bromo-4-fluorobenzene	1.47		1.413		104	85.1	111		0		

Sample ID: **2009080-002BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **BATCH** Batch ID: **29610** Analysis Date: **9/9/2020** SeqNo: **1237751**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0191						0		30	
Chloromethane	ND	0.0479						0		30	Q
Vinyl chloride	ND	0.0191						0		30	
Bromomethane	ND	0.0479						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0191						0		30	Q
Chloroethane	ND	0.0479						0		30	
1,1-Dichloroethene	ND	0.0191						0		30	Q

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009080-002BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **BATCH** Batch ID: **29610** Analysis Date: **9/9/2020** SeqNo: **1237751**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	ND	0.0191						0		30	
trans-1,2-Dichloroethene	ND	0.0191						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0191						0		30	Q
1,1-Dichloroethane	ND	0.0191						0		30	
cis-1,2-Dichloroethene	ND	0.0191						0		30	
(MEK) 2-Butanone	ND	0.239						0		30	
Chloroform	ND	0.0191						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0191						0		30	
1,1-Dichloropropene	ND	0.0191						0		30	
Carbon tetrachloride	ND	0.0191						0		30	
1,2-Dichloroethane (EDC)	ND	0.0191						0		30	
Benzene	ND	0.0191						0		30	
Trichloroethene (TCE)	ND	0.0191						0		30	
1,2-Dichloropropane	ND	0.0191						0		30	
Bromodichloromethane	ND	0.0191						0		30	
Dibromomethane	ND	0.0191						0		30	
cis-1,3-Dichloropropene	ND	0.0191						0		30	
Toluene	ND	0.0191						0		30	
trans-1,3-Dichloropropylene	ND	0.0191						0		30	
1,1,2-Trichloroethane	ND	0.0191						0		30	
1,3-Dichloropropane	ND	0.0239						0		30	
Tetrachloroethene (PCE)	ND	0.0191						0		30	
Dibromochloromethane	ND	0.0191						0		30	
1,2-Dibromoethane (EDB)	ND	0.00479						0		30	
Chlorobenzene	ND	0.0191						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0191						0		30	
Ethylbenzene	ND	0.0239						0		30	
m,p-Xylene	ND	0.0479						0		30	
o-Xylene	ND	0.0239						0		30	
Styrene	ND	0.0191						0		30	

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009080-002BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/8/2020** RunNo: **61715**
Client ID: **BATCH** Batch ID: **29610** Analysis Date: **9/9/2020** SeqNo: **1237751**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	0.0191						0		30	
Bromoform	ND	0.0479						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0191						0		30	
n-Propylbenzene	ND	0.0191						0		30	
Bromobenzene	ND	0.0191						0		30	
1,3,5-Trimethylbenzene	0.155	0.0191						0.1139	30.5	30	R
2-Chlorotoluene	ND	0.0239						0		30	
4-Chlorotoluene	ND	0.0191						0		30	
tert-Butylbenzene	ND	0.0191						0		30	
1,2,3-Trichloropropane	ND	0.0239						0		30	
1,2,4-Trichlorobenzene	ND	0.0191						0		30	
sec-Butylbenzene	ND	0.0239						0		30	
4-Isopropyltoluene	ND	0.0239						0		30	
1,3-Dichlorobenzene	ND	0.0191						0		30	
1,4-Dichlorobenzene	ND	0.0191						0		30	
n-Butylbenzene	ND	0.0191						0		30	
1,2-Dichlorobenzene	ND	0.0191						0		30	
1,2-Dibromo-3-chloropropane	ND	0.479						0		30	
1,2,4-Trimethylbenzene	ND	0.0191						0		30	
Hexachloro-1,3-butadiene	ND	0.0239						0		30	
Naphthalene	ND	0.0479						0		30	
1,2,3-Trichlorobenzene	ND	0.0191						0		30	
Surr: Dibromofluoromethane	1.08		1.196		90.5	83.3	111		0		
Surr: Toluene-d8	1.28		1.196		107	87.9	111		0		
Surr: 1-Bromo-4-fluorobenzene	1.19		1.196		99.8	85.1	111		0		

NOTES:
R - High RPD observed.
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-29612** SampType: **LCS** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **LCSW** Batch ID: **29612** Analysis Date: **9/8/2020** SeqNo: **1237894**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.4	1.00	20.00	0	82.1	17.1	189				
Chloromethane	13.3	2.00	20.00	0	66.5	15.4	168				
Vinyl chloride	21.4	0.200	20.00	0	107	67.4	127				
Bromomethane	14.7	1.00	20.00	0	73.3	57.7	134				
Trichlorofluoromethane (CFC-11)	18.9	1.00	20.00	0	94.3	76.5	123				
Chloroethane	18.2	1.00	20.00	0	90.8	56.4	139				
1,1-Dichloroethene	19.4	1.00	20.00	0	97.2	72.2	124				
Acetone	53.2	5.00	50.00	0	106	60.7	134				
Methylene chloride	20.1	1.00	20.00	0	100	80.1	112				
trans-1,2-Dichloroethene	19.4	1.00	20.00	0	96.9	81.6	113				
Methyl tert-butyl ether (MTBE)	18.3	1.00	20.00	0	91.3	73.9	118				
1,1-Dichloroethane	22.2	1.00	20.00	0	111	78.2	113				
cis-1,2-Dichloroethene	18.9	1.00	20.00	0	94.7	82.8	111				
(MEK) 2-Butanone	45.3	2.00	50.00	0	90.7	64	130				
Chloroform	19.0	1.00	20.00	0	95.1	81.7	112				
1,1,1-Trichloroethane (TCA)	19.0	1.00	20.00	0	95.0	80.9	115				
1,1-Dichloropropene	19.8	1.00	20.00	0	99.0	80.8	114				
Carbon tetrachloride	18.7	1.00	20.00	0	93.6	80	119				
1,2-Dichloroethane (EDC)	19.6	1.00	20.00	0	98.2	78.6	114				
Benzene	19.8	1.00	20.00	0	99.1	81.2	113				
Trichloroethene (TCE)	20.7	0.500	20.00	0	104	81.6	114				
1,2-Dichloropropane	21.3	1.00	20.00	0	106	78.1	114				
Bromodichloromethane	20.0	1.00	20.00	0	99.8	81.4	113				
Dibromomethane	19.3	1.00	20.00	0	96.5	81.6	112				
cis-1,3-Dichloropropene	21.2	1.00	20.00	0	106	80.9	115				
Toluene	21.8	1.00	20.00	0	109	82.7	114				
trans-1,3-Dichloropropylene	20.4	1.00	20.00	0	102	80.6	117				
1,1,2-Trichloroethane	19.7	1.00	20.00	0	98.4	79.3	116				
1,3-Dichloropropane	20.9	1.00	20.00	0	104	78	116				
Tetrachloroethene (PCE)	20.8	1.00	20.00	0	104	83.2	117				

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-29612** SampType: **LCS** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **LCSW** Batch ID: **29612** Analysis Date: **9/8/2020** SeqNo: **1237894**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	18.9	1.00	20.00	0	94.3	78.9	119				
1,2-Dibromoethane (EDB)	19.1	0.250	20.00	0	95.5	80.3	115				
Chlorobenzene	19.2	1.00	20.00	0	95.8	82.4	113				
1,1,1,2-Tetrachloroethane	18.6	1.00	20.00	0	93.1	79.3	117				
Ethylbenzene	19.7	1.00	20.00	0	98.6	81.7	115				
m,p-Xylene	38.0	1.00	40.00	0	95.0	82.1	115				
o-Xylene	18.8	1.00	20.00	0	93.9	82	115				
Styrene	18.6	1.00	20.00	0	92.9	81.6	114				
Isopropylbenzene	18.7	1.00	20.00	0	93.6	81.9	116				
Bromoform	18.2	1.00	20.00	0	90.8	72.9	125				
1,1,2,2-Tetrachloroethane	18.6	1.00	20.00	0	93.0	64.7	127				
n-Propylbenzene	20.0	1.00	20.00	0	100	81.2	117				
Bromobenzene	19.5	1.00	20.00	0	97.5	80.7	116				
1,3,5-Trimethylbenzene	19.5	1.00	20.00	0	97.6	80.9	117				
2-Chlorotoluene	20.2	1.00	20.00	0	101	78.2	120				
4-Chlorotoluene	19.4	1.00	20.00	0	96.9	81.4	116				
tert-Butylbenzene	19.6	1.00	20.00	0	97.8	80.5	118				
1,2,3-Trichloropropane	19.0	1.00	20.00	0	94.9	69.7	121				
1,2,4-Trichlorobenzene	22.2	2.00	20.00	0	111	78.6	125				
sec-Butylbenzene	19.6	1.00	20.00	0	98.1	80.1	120				
4-Isopropyltoluene	19.6	1.00	20.00	0	98.2	79.1	120				
1,3-Dichlorobenzene	19.3	1.00	20.00	0	96.6	86.4	115				
1,4-Dichlorobenzene	19.5	1.00	20.00	0	97.5	85.6	115				
n-Butylbenzene	21.9	1.00	20.00	0	109	81	121				
1,2-Dichlorobenzene	20.0	1.00	20.00	0	100	85.2	115				
1,2-Dibromo-3-chloropropane	18.6	1.00	20.00	0	92.9	62.3	132				
1,2,4-Trimethylbenzene	20.2	1.00	20.00	0	101	80.3	119				
Hexachloro-1,3-butadiene	21.9	0.500	20.00	0	109	80.4	125				
Naphthalene	20.8	1.00	20.00	0	104	72.8	134				
1,2,3-Trichlorobenzene	21.0	4.00	20.00	0	105	76.1	127				

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-29612** SampType: **LCS** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **LCSW** Batch ID: **29612** Analysis Date: **9/8/2020** SeqNo: **1237894**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	24.4		25.00		97.6	83.7	117				
Surr: Toluene-d8	27.1		25.00		108	87.6	113				
Surr: 1-Bromo-4-fluorobenzene	25.1		25.00		101	94	110				

Sample ID: **LCSD-29612** SampType: **LCSD** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **LCSW02** Batch ID: **29612** Analysis Date: **9/8/2020** SeqNo: **1237895**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	15.9	1.00	20.00	0	79.7	17.1	189	16.41	2.95	20	
Chloromethane	12.9	2.00	20.00	0	64.3	15.4	168	13.29	3.31	20	
Vinyl chloride	20.5	0.200	20.00	0	103	67.4	127	21.35	3.88	20	
Bromomethane	13.1	1.00	20.00	0	65.6	57.7	134	14.66	11.0	20	
Trichlorofluoromethane (CFC-11)	17.9	1.00	20.00	0	89.3	76.5	123	18.86	5.37	20	
Chloroethane	17.2	1.00	20.00	0	85.9	56.4	139	18.15	5.56	20	
1,1-Dichloroethene	18.2	1.00	20.00	0	91.1	72.2	124	19.44	6.51	20	
Acetone	51.6	5.00	50.00	0	103	60.7	134	53.21	0	20	
Methylene chloride	18.8	1.00	20.00	0	94.1	80.1	112	20.10	6.62	20	
trans-1,2-Dichloroethene	19.0	1.00	20.00	0	94.8	81.6	113	19.37	2.17	20	
Methyl tert-butyl ether (MTBE)	18.5	1.00	20.00	0	92.7	73.9	118	18.25	1.61	20	
1,1-Dichloroethane	21.3	1.00	20.00	0	106	78.2	113	22.23	4.49	20	
cis-1,2-Dichloroethene	18.3	1.00	20.00	0	91.6	82.8	111	18.93	3.24	20	
(MEK) 2-Butanone	44.4	2.00	50.00	0	88.8	64	130	45.35	0	20	
Chloroform	18.3	1.00	20.00	0	91.7	81.7	112	19.03	3.63	20	
1,1,1-Trichloroethane (TCA)	18.3	1.00	20.00	0	91.3	80.9	115	19.01	3.98	20	
1,1-Dichloropropene	19.0	1.00	20.00	0	95.1	80.8	114	19.80	4.01	20	
Carbon tetrachloride	17.9	1.00	20.00	0	89.3	80	119	18.71	4.61	20	
1,2-Dichloroethane (EDC)	18.9	1.00	20.00	0	94.7	78.6	114	19.64	3.64	20	
Benzene	18.9	1.00	20.00	0	94.7	81.2	113	19.82	4.49	20	
Trichloroethene (TCE)	18.9	0.500	20.00	0	94.7	81.6	114	20.71	8.87	20	
1,2-Dichloropropane	19.7	1.00	20.00	0	98.4	78.1	114	21.29	7.88	20	

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCSD-29612** SampType: **LCSD** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **LCSW02** Batch ID: **29612** Analysis Date: **9/8/2020** SeqNo: **1237895**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	19.3	1.00	20.00	0	96.7	81.4	113	19.96	3.19	20	
Dibromomethane	17.9	1.00	20.00	0	89.5	81.6	112	19.30	7.52	20	
cis-1,3-Dichloropropene	20.2	1.00	20.00	0	101	80.9	115	21.22	4.74	20	
Toluene	20.4	1.00	20.00	0	102	82.7	114	21.79	6.78	20	
trans-1,3-Dichloropropylene	19.5	1.00	20.00	0	97.6	80.6	117	20.36	4.18	20	
1,1,2-Trichloroethane	18.5	1.00	20.00	0	92.7	79.3	116	19.69	5.95	20	
1,3-Dichloropropane	19.2	1.00	20.00	0	95.8	78	116	20.87	8.55	20	
Tetrachloroethene (PCE)	19.3	1.00	20.00	0	96.4	83.2	117	20.81	7.60	20	
Dibromochloromethane	17.4	1.00	20.00	0	87.2	78.9	119	18.85	7.82	20	
1,2-Dibromoethane (EDB)	17.3	0.250	20.00	0	86.3	80.3	115	19.10	10.1	20	
Chlorobenzene	18.6	1.00	20.00	0	93.0	82.4	113	19.17	3.01	20	
1,1,1,2-Tetrachloroethane	18.2	1.00	20.00	0	91.2	79.3	117	18.62	2.06	20	
Ethylbenzene	19.1	1.00	20.00	0	95.7	81.7	115	19.73	3.07	20	
m,p-Xylene	37.4	1.00	40.00	0	93.4	82.1	115	37.99	1.67	20	
o-Xylene	18.7	1.00	20.00	0	93.4	82	115	18.77	0.530	20	
Styrene	18.5	1.00	20.00	0	92.5	81.6	114	18.57	0.435	20	
Isopropylbenzene	19.1	1.00	20.00	0	95.6	81.9	116	18.72	2.16	20	
Bromoform	18.6	1.00	20.00	0	92.8	72.9	125	18.16	2.18	20	
1,1,2,2-Tetrachloroethane	19.3	1.00	20.00	0	96.7	64.7	127	18.61	3.80	20	
n-Propylbenzene	20.5	1.00	20.00	0	102	81.2	117	20.01	2.38	20	
Bromobenzene	20.2	1.00	20.00	0	101	80.7	116	19.49	3.67	20	
1,3,5-Trimethylbenzene	20.1	1.00	20.00	0	100	80.9	117	19.52	2.82	20	
2-Chlorotoluene	20.9	1.00	20.00	0	104	78.2	120	20.18	3.44	20	
4-Chlorotoluene	20.0	1.00	20.00	0	99.9	81.4	116	19.37	3.09	20	
tert-Butylbenzene	19.8	1.00	20.00	0	99.1	80.5	118	19.55	1.38	20	
1,2,3-Trichloropropane	19.5	1.00	20.00	0	97.7	69.7	121	18.98	2.87	20	
1,2,4-Trichlorobenzene	23.1	2.00	20.00	0	116	78.6	125	22.24	3.98	20	
sec-Butylbenzene	20.1	1.00	20.00	0	100	80.1	120	19.62	2.26	20	
4-Isopropyltoluene	20.2	1.00	20.00	0	101	79.1	120	19.64	3.00	20	
1,3-Dichlorobenzene	19.2	1.00	20.00	0	95.8	86.4	115	19.33	0.925	20	

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCSD-29612** SampType: **LCSD** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **LCSW02** Batch ID: **29612** Analysis Date: **9/8/2020** SeqNo: **1237895**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	19.5	1.00	20.00	0	97.3	85.6	115	19.50	0.156	20	
n-Butylbenzene	21.6	1.00	20.00	0	108	81	121	21.86	0.983	20	
1,2-Dichlorobenzene	19.8	1.00	20.00	0	99.2	85.2	115	20.03	0.949	20	
1,2-Dibromo-3-chloropropane	17.9	1.00	20.00	0	89.4	62.3	132	18.59	3.86	20	
1,2,4-Trimethylbenzene	20.8	1.00	20.00	0	104	80.3	119	20.19	3.21	20	
Hexachloro-1,3-butadiene	21.8	0.500	20.00	0	109	80.4	125	21.88	0.542	20	
Naphthalene	22.4	1.00	20.00	0	112	72.8	134	20.83	7.21	20	
1,2,3-Trichlorobenzene	22.1	4.00	20.00	0	111	76.1	127	21.02	5.10	20	
Surr: Dibromofluoromethane	24.4		25.00		97.8	83.7	117		0		
Surr: Toluene-d8	26.2		25.00		105	87.6	113		0		
Surr: 1-Bromo-4-fluorobenzene	26.6		25.00		106	94	110		0		

Sample ID: **MB-29612** SampType: **MBLK** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **MBLKW** Batch ID: **29612** Analysis Date: **9/8/2020** SeqNo: **1237896**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									Q
Chloromethane	ND	2.00									
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									Q
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Acetone	ND	5.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	1.00									
cis-1,2-Dichloroethene	ND	1.00									
(MEK) 2-Butanone	ND	2.00									

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-29612** SampType: **MBLK** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **MBLKW** Batch ID: **29612** Analysis Date: **9/8/2020** SeqNo: **1237896**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									
Benzene	ND	0.0747									MDL
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									
Dibromomethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
Toluene	ND	0.0912									MDL
trans-1,3-Dichloropropylene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.250									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	0.0868									MDL
m,p-Xylene	0.208	0.173									MDL,J
o-Xylene	ND	0.0688									MDL
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-29612** SampType: **MBLK** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **MBLKW** Batch ID: **29612** Analysis Date: **9/8/2020** SeqNo: **1237896**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									
4-Isopropyltoluene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2,4-Trimethylbenzene	ND	1.00									
Hexachloro-1,3-butadiene	ND	0.500									
Naphthalene	ND	1.00									
1,2,3-Trichlorobenzene	ND	4.00									
Surr: Dibromofluoromethane	23.8		25.00		95.0	83.7	117				
Surr: Toluene-d8	24.9		25.00		99.7	87.6	113				
Surr: 1-Bromo-4-fluorobenzene	25.0		25.00		100	81.2	113				

NOTES:
MDL - Analyte reported to Method Detection Limit (MDL)

Sample ID: **2009093-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **BATCH** Batch ID: **29612** Analysis Date: **9/8/2020** SeqNo: **1237879**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	Q
Chloromethane	ND	2.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	Q
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009093-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **BATCH** Batch ID: **29612** Analysis Date: **9/8/2020** SeqNo: **1237879**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Acetone	ND	5.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
(MEK) 2-Butanone	ND	2.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	0.0747						0		30	MDL
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	0.0912						0		30	MDL
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	0.0868						0		30	MDL

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009093-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **BATCH** Batch ID: **29612** Analysis Date: **9/8/2020** SeqNo: **1237879**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
m,p-Xylene	ND	0.173						0		30	MDL,J
o-Xylene	ND	0.0688						0		30	MDL
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	26.1		25.00		104	83.7	117		0		
Surr: Toluene-d8	25.1		25.00		101	87.6	113		0		
Surr: 1-Bromo-4-fluorobenzene	25.7		25.00		103	81.2	113		0		

NOTES:
MDL - Analyte reported to Method Detection Limit (MDL)

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009107-001EDUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **BATCH** Batch ID: **29612** Analysis Date: **9/9/2020** SeqNo: **1237881**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	Q
Chloromethane	ND	2.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	Q
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Acetone	ND	5.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
(MEK) 2-Butanone	ND	2.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009107-001EDUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **BATCH** Batch ID: **29612** Analysis Date: **9/9/2020** SeqNo: **1237881**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	

Work Order: 2009053
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009107-001EDUP** SampType: **DUP** Units: **µg/L** Prep Date: **9/8/2020** RunNo: **61717**
Client ID: **BATCH** Batch ID: **29612** Analysis Date: **9/9/2020** SeqNo: **1237881**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	24.8		25.00		99.1	83.7	117		0		
Surr: Toluene-d8	25.9		25.00		104	87.6	113		0		
Surr: 1-Bromo-4-fluorobenzene	25.8		25.00		103	81.2	113		0		

Sample Log-In Check List

Client Name:	**PES**	Work Order Number:	**2009053**
Logged by:	**Carissa True**	Date Received:	**9/2/2020 5:00:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No ☐	Not Present	☐
2.	How was the sample delivered?	Client				

Log In

3.	Coolers are present?	Yes	☑	No ☐	NA	☐
4.	Shipping container/cooler in good condition?	Yes	☑	No ☐		
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	☐	No ☐	Not Present	☑
6.	Was an attempt made to cool the samples?	Yes	☑	No ☐	NA	☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes	☑	No ☐	NA	☐
8.	Sample(s) in proper container(s)?	Yes	☑	No ☐		
9.	Sufficient sample volume for indicated test(s)?	Yes	☑	No ☐		
10.	Are samples properly preserved?	Yes	☑	No ☐		
11.	Was preservative added to bottles?	Yes	☐	No ☑	NA	☐
12.	Is there headspace in the VOA vials?	Yes	☐	No ☑	NA	☐
13.	Did all samples containers arrive in good condition(unbroken)?	Yes	☑	No ☐		
14.	Does paperwork match bottle labels?	Yes	☑	No ☐		
15.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No ☐		
16.	Is it clear what analyses were requested?	Yes	☑	No ☐		
17.	Were all holding times able to be met?	Yes	☑	No ☐		

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes	☑	No ☐	NA	☐

Person Notified:	Matt Dahl	Date:	9/8/2020
By Whom:	Gabrielle Coeuille	Via:	☑ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:			
Client Instructions:	Please take sample SVE-25-49 off hold and report results in the original due date.		

19. Additional remarks:

Item Information

Item #	Temp °C
Sample 1	3.5
Temp Blank 1	5.3

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 9-2-20 | Page: 1 of: 3 | Laboratory Project No (internal): 2009053

Project Name: MVSL - Harris

Project No: 1358.001.02.012

Collected by: Ben Hecht

Location: Burien, WA

Report To (PM): Matt Dahl

PM Email: MDAHL@PESENV.COM

Special Remarks:

Sample Disposal: ☐ Return to client ☑ Disposal by lab (after 30 days)

Client: PES Environmental

Address: On File

City, State, Zip:

Telephone:

Fax:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	SVE-20-2	8-31-20	9:00	S	X												
2	SVE-21-2		9:10		X												
3	SVE-20-8.5		12:00		X												
4	SVE-20-11		12:20		X												
5	SVE-24-3		12:30		X												
6	SVE-21-12		13:20		X												
7	SVE-21-25		14:30		X												
8	SVE-21-35		15:00		X												
9	SVE-22-2		15:15		X												HOLD
10	SVE-22-2	9-1-20	8:10	S	X												

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Turn-around Time:
- ☑ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

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Project Name: MVSC - Harris

Special Remarks:

Client: PES Environmental

Project No: 1358-001-02-012

Address: On File

Collected by: Ben Hecht

City, State, Zip:

Location: Burien, WA

Telephone:

Report To (PM): Matt Dahl

Sample Disposal: ☐ Return to client ☑ Disposal by lab (after 30 days)

Fax:

PM Email: MDAHL@PESENV.COM

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1	SVE-22-26	9-1-20	9:25	S	X													
2	SVE-22-32		9:35		X													
3	SVE-23-2		9:55		X													
4	SVE-23-19		11:25		X													
5	SVE-23-25		11:20		X													
6	SVE-24-8		15:20		X													
7	SVE-24-12		15:30		X													
8	SVE-25-2		9:45		X													
9	SVE-25-11.5	9-2-20	9:30		X													
10	SVE-25-43.5		10:35		X													

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Chain of Custody Record & Laboratory Services Agreement

Date: 9-2-20 | Page: 3 of: 3

Laboratory Project No (internal): 2009053

Project Name: MVSC - Harris

Special Remarks:

Client: PES Environmental

Project No: 1358.001.02.012

Address: On Site

Collected by: Ben Hecht

City, State, Zip:

Location: Burien, WA

Sample Disposal: ☐ Return to client ☑ Disposal by lab (after 30 days)

Telephone:

Report To (PM): Matt Dahl

Fax:

PM Email: MDAHL@PESENV.COM

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	SVE-25-44	9-2-20	10:55	S	X													HOLD
2	TRENCH-2.5	↓	9:25	S	X													
3	DRUM-090220	↓	15:45	W	X													
4																		
5																		
6																		
7																		
8																		
9																		
10																		

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Project Name: MVSC - Harris

Special Remarks:

Client: PES Environmental

Project No: 1358.001.02.012

Address: On Site

Collected by: Ben Hecht

City, State, Zip:

Location: Burien, WA

Telephone:

Report To (PM): Matt Dahl

Sample Disposal: ☐ Return to client ☑ Disposal by lab (after 30 days)

Fax:

PM Email: MDAHL@PESENV.COM

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
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2 TRENCH-25	↓	9:25	S	X													
3 DRUM-090220	↓	15:45	W	X													
4																	
5																	
6																	
7																	
8																	
9																	
10																	

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Page 92 of 95

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Date: 9-2-20 | Page: 1 of: 3 | Laboratory Project No (internal): 2009053

Project Name: MVSL - Harris

Special Remarks: *- Add MEK per M.D. 1/4/2021 -BB

Client: PES Environmental

Project No: 1358.001.02.012

Address: On File

Collected by: Ben Hecht

City, State, Zip:

Location: Burien, WA

Telephone:

Report To (PM): Matt Dahl

Sample Disposal: ☐ Return to client ☑ Disposal by lab (after 30 days)

Fax:

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6	SVE-21-12		13:20		X												
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8	SVE-21-35		15:00		X												
9	SVE-22-2		15:15		X												HOLD
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Chain of Custody Record & Laboratory Services Agreement

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Fax: 206-352-7178

Date: 9-2-20 | Page: 2 of: 3 | Laboratory Project No (internal): 2009053

Project Name: MVSC - Harris

Project No: 1358-001-02-012

Collected by: Ben Hecht

Location: Burien, WA

Report To (PM): Matt Dahl

PM Email: MDAHL@PESENV.COM

Client: PES Environmental

Address: On File

City, State, Zip:

Telephone:

Fax:

Special Remarks:

Sample Disposal: ☐ Return to client ☑ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
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3	SVE-23-2		9:55		X													
4	SVE-23-19		11:25		X													
5	SVE-23-25		11:20		X													
6	SVE-24-8		15:20		X													
7	SVE-24-12		15:30		X													
8	SVE-25-2		9:45		X													
9	SVE-25-11.5	9-2-20	9:30		X													
10	SVE-25-43.5		10:35		X													

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Special Remarks:

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Client: PES Environmental

Address: On Site

City, State, Zip:

Telephone:

Fax:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
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MEMORANDUM

TO: Project File **DATE:** September 17, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: Manhattan Village Shopping Center

PROJECT #: 1358.001.02.012

TASK: EIM Data Validation Level EPA2A – August 31 and September 1-2, 2020
SVE Well Soil Samples and Drum Water Sample

LAB: Fremont Work Order Number 2009053

Twenty (21) soil vapor extraction well (SVE) soil samples, one trench soil sample, and one wastewater profile sample during installation of 6 new SVE wells at the Manhattan Village Shopping Center site in Normandy Park, Washington on August 31 and September 1-2, 2020. Laboratory analytical services were provided by Fremont Analytical (Fremont) of Seattle, Washington. Two soil samples were placed on hold. Samples were analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D. Total solids were assessed using EPA Method 8000D.

The quality assurance review of the laboratory data for Fremont Work Order 2009053 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017).

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested. No concerns, issues, or anomalies were identified in the laboratory report with the following discussions:

- Per PES's 9/8/2020 request sample SVE-25-4 was removed from hold and submitted for VOC analysis.

Sample Collection and Preservation

The samples were stored on ice in coolers and delivered in good condition to the laboratory. Sample temperatures at the time of receipt were slightly below EPA's recommended temperature preservation range of less than 6.0 °Centigrade. No data qualifications are warranted.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of 14 days for preserved water and soil samples. All holding time criteria were met.

USEPA Method 8000D:
Samples were analyzed within the USEPA recommended holding time of seven days for total solids.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Fremont's notes indicate the following:

- *USEPA Method 8260D:* Continuing calibration verification (CCV) issue is noted by Fremont for various compounds associated with the analytical batches. These results are qualified by the laboratory "Q" to indicate that percent difference CCVs are outside of laboratory acceptance criteria**. All associated compound results with laboratory qualified (Q) results are estimated and qualified (J/UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (VOCs) were not detected in the method blanks at a concentration at or above the reporting detection limits (RLs) with the following exception:

- Analytical batch 29612: m,p-Xylene was detected above the RL in the method blank. No action is necessary since m,p-xylene is not detected in the associated sample.

Trip Blank Results

Trip blanks were not collected. No action is taken other than to note this.

Equipment Blank Results

An equipment blank was not collected.

Field Duplicate Analyses

Field duplicate samples were not collected. Refer to client or non-client laboratory duplicate results for precision data.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate analysis were performed on client soil sample SVE-20-8.5, non-client soil samples, and on a non-client water sample. Laboratory duplicate relative percent differences (RPDs) are within laboratory control limits.

USEPA Method 8000D:
Laboratory duplicate sample analyses were not performed. No action is taken other than to note this.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate percent recovery (%R) results for the samples, method blanks, and laboratory duplicates (client), matrix spike samples (client), and laboratory control samples are within the laboratory surrogate control limits. No data qualifications were warranted.

Laboratory Control Samples

USEPA Method 8260D:
The laboratory control sample and laboratory control sample duplicate (LCS/LCSD) percent recoveries and RPDs for analytical batch associated with soils and waters are within the laboratory control limits. Refer to matrix spike results for additional accuracy data.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on a client sample SVE-21-2 and on a non-client sample. Sample SVE-21-2 MS/MSD % recoveries and RPDs are within laboratory acceptance criteria. Non-client spiked sample is not assessed as results have no impact on client samples.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory reports with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered where needed.

Quantitation Limits

Results of the USEPA 8260 VOC analyses were reported based on laboratory RLs. The RLs indicate the minimum quantity of a target analyte that can be confidently determined by the reference method. The RLs were acceptable for the project; therefore, no data qualifications were warranted.

Data Assessment

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 9:00:00 AM
Project: MVSC - Harris
Lab ID: 2009053-001
Matrix: Soil
Client Sample ID: **SVE-20-2**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0230	UJ Q	mg/Kg-dry	1	9/8/2020 9:18:57 PM
Chloromethane	ND	0.0576	UJ Q	mg/Kg-dry	1	9/8/2020 9:18:57 PM
Vinyl chloride	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Bromomethane	ND	0.0576		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Trichlorofluoromethane (CFC-11)	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Chloroethane	ND	0.0576		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,1-Dichloroethene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Methylene chloride	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
trans-1,2-Dichloroethene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Methyl tert-butyl ether (MTBE)	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,1-Dichloroethane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
cis-1,2-Dichloroethene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Chloroform	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,1,1-Trichloroethane (TCA)	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,1-Dichloropropene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Carbon tetrachloride	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2-Dichloroethane (EDC)	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Benzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Trichloroethene (TCE)	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2-Dichloropropane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Bromodichloromethane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Dibromomethane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
cis-1,3-Dichloropropene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Toluene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
trans-1,3-Dichloropropylene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,1,2-Trichloroethane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,3-Dichloropropane	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Tetrachloroethene (PCE)	0.0907	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Dibromochloromethane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2-Dibromoethane (EDB)	ND	0.00576		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Chlorobenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,1,1,2-Tetrachloroethane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Ethylbenzene	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
m,p-Xylene	ND	0.0576		mg/Kg-dry	1	9/8/2020 9:18:57 PM
o-Xylene	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Styrene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Isopropylbenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Bromoform	ND	0.0576		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,1,2,2-Tetrachloroethane	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 9:00:00 AM
Project: MVSC - Harris
Lab ID: 2009053-001
Matrix: Soil
Client Sample ID: **SVE-20-2**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Bromobenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,3,5-Trimethylbenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
2-Chlorotoluene	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
4-Chlorotoluene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
tert-Butylbenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2,3-Trichloropropane	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2,4-Trichlorobenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
sec-Butylbenzene	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
4-Isopropyltoluene	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,3-Dichlorobenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,4-Dichlorobenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
n-Butylbenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2-Dichlorobenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2-Dibromo-3-chloropropane	ND	0.576		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2,4-Trimethylbenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Hexachloro-1,3-butadiene	ND	0.0288		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Naphthalene	ND	0.0576		mg/Kg-dry	1	9/8/2020 9:18:57 PM
1,2,3-Trichlorobenzene	ND	0.0230		mg/Kg-dry	1	9/8/2020 9:18:57 PM
Surr: Dibromofluoromethane	104	83.3 - 111		%Rec	1	9/8/2020 9:18:57 PM
Surr: Toluene-d8	98.8	87.9 - 111		%Rec	1	9/8/2020 9:18:57 PM
Surr: 1-Bromo-4-fluorobenzene	95.5	85.1 - 111		%Rec	1	9/8/2020 9:18:57 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61706		Analyst: EH
Percent Moisture	12.5	0.500		wt%	1	9/9/2020 8:14:48 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 9:10:00 AM
Project: MVSC - Harris
Lab ID: 2009053-002
Matrix: Soil
Client Sample ID: **SVE-21-2**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0226	UJ Q	mg/Kg-dry	1	9/8/2020 10:19:13 PM
Chloromethane	ND	0.0565	UJ Q	mg/Kg-dry	1	9/8/2020 10:19:13 PM
Vinyl chloride	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Bromomethane	ND	0.0565		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Trichlorofluoromethane (CFC-11)	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Chloroethane	ND	0.0565		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,1-Dichloroethene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Methylene chloride	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
trans-1,2-Dichloroethene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Methyl tert-butyl ether (MTBE)	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,1-Dichloroethane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
cis-1,2-Dichloroethene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Chloroform	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,1,1-Trichloroethane (TCA)	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,1-Dichloropropene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Carbon tetrachloride	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2-Dichloroethane (EDC)	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Benzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Trichloroethene (TCE)	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2-Dichloropropane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Bromodichloromethane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Dibromomethane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
cis-1,3-Dichloropropene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Toluene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
trans-1,3-Dichloropropylene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,1,2-Trichloroethane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,3-Dichloropropane	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Tetrachloroethene (PCE)	0.254	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Dibromochloromethane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2-Dibromoethane (EDB)	ND	0.00565		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Chlorobenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,1,1,2-Tetrachloroethane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Ethylbenzene	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
m,p-Xylene	ND	0.0565		mg/Kg-dry	1	9/8/2020 10:19:13 PM
o-Xylene	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Styrene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Isopropylbenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Bromoform	ND	0.0565		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,1,2,2-Tetrachloroethane	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM

Analytical Report

Work Order: **2009053**
Date Reported: **9/10/2020**

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 9:10:00 AM
Project: MVSC - Harris
Lab ID: 2009053-002
Matrix: Soil
Client Sample ID: SVE-21-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Bromobenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,3,5-Trimethylbenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
2-Chlorotoluene	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
4-Chlorotoluene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
tert-Butylbenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2,3-Trichloropropane	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2,4-Trichlorobenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
sec-Butylbenzene	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
4-Isopropyltoluene	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,3-Dichlorobenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,4-Dichlorobenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
n-Butylbenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2-Dichlorobenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2-Dibromo-3-chloropropane	ND	0.565		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2,4-Trimethylbenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Hexachloro-1,3-butadiene	ND	0.0283		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Naphthalene	ND	0.0565		mg/Kg-dry	1	9/8/2020 10:19:13 PM
1,2,3-Trichlorobenzene	ND	0.0226		mg/Kg-dry	1	9/8/2020 10:19:13 PM
Surr: Dibromofluoromethane	95.8	83.3 - 111		%Rec	1	9/8/2020 10:19:13 PM
Surr: Toluene-d8	97.9	87.9 - 111		%Rec	1	9/8/2020 10:19:13 PM
Surr: 1-Bromo-4-fluorobenzene	95.6	85.1 - 111		%Rec	1	9/8/2020 10:19:13 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61706		Analyst: EH
Percent Moisture	15.9	0.500		wt%	1	9/9/2020 8:14:48 AM

JC 9/17/2020

Analytical Report

Work Order: **2009053**
Date Reported: **9/10/2020**

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 12:00:00 PM
Project: MVSC - Harris
Lab ID: 2009053-003
Matrix: Soil
Client Sample ID: SVE-20-8.5

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0481	UJ Q	mg/Kg-dry	1	9/8/2020 10:49:20 PM
Chloromethane	ND	0.120	UJ Q	mg/Kg-dry	1	9/8/2020 10:49:20 PM
Vinyl chloride	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Bromomethane	ND	0.120		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Trichlorofluoromethane (CFC-11)	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Chloroethane	ND	0.120		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,1-Dichloroethene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Methylene chloride	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
trans-1,2-Dichloroethene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Methyl tert-butyl ether (MTBE)	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,1-Dichloroethane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
cis-1,2-Dichloroethene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Chloroform	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,1,1-Trichloroethane (TCA)	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,1-Dichloropropene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Carbon tetrachloride	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2-Dichloroethane (EDC)	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Benzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Trichloroethene (TCE)	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2-Dichloropropane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Bromodichloromethane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Dibromomethane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
cis-1,3-Dichloropropene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Toluene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
trans-1,3-Dichloropropylene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,1,2-Trichloroethane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,3-Dichloropropane	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Tetrachloroethene (PCE)	1.54	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Dibromochloromethane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2-Dibromoethane (EDB)	ND	0.0120		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Chlorobenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,1,1,2-Tetrachloroethane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Ethylbenzene	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
m,p-Xylene	ND	0.120		mg/Kg-dry	1	9/8/2020 10:49:20 PM
o-Xylene	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Styrene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Isopropylbenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Bromoform	ND	0.120		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,1,2,2-Tetrachloroethane	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM

Client: PES Environmental, Inc. **Collection Date:** 8/31/2020 12:00:00 PM
Project: MVSC - Harris
Lab ID: 2009053-003 **Matrix:** Soil
Client Sample ID: SVE-20-8.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Bromobenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,3,5-Trimethylbenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
2-Chlorotoluene	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
4-Chlorotoluene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
tert-Butylbenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2,3-Trichloropropane	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2,4-Trichlorobenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
sec-Butylbenzene	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
4-Isopropyltoluene	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,3-Dichlorobenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,4-Dichlorobenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
n-Butylbenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2-Dichlorobenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2-Dibromo-3-chloropropane	ND	1.20		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2,4-Trimethylbenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Hexachloro-1,3-butadiene	ND	0.0602		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Naphthalene	ND	0.120		mg/Kg-dry	1	9/8/2020 10:49:20 PM
1,2,3-Trichlorobenzene	ND	0.0481		mg/Kg-dry	1	9/8/2020 10:49:20 PM
Surr: Dibromofluoromethane	101	83.3 - 111		%Rec	1	9/8/2020 10:49:20 PM
Surr: Toluene-d8	97.9	87.9 - 111		%Rec	1	9/8/2020 10:49:20 PM
Surr: 1-Bromo-4-fluorobenzene	100	85.1 - 111		%Rec	1	9/8/2020 10:49:20 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61706		Analyst: EH
Percent Moisture	29.2	0.500		wt%	1	9/9/2020 8:14:48 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 12:20:00 PM
Project: MVSC - Harris
Lab ID: 2009053-004
Matrix: Soil
Client Sample ID: **SVE-20-11**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0206	UJ Q	mg/Kg-dry	1	9/8/2020 11:49:35 PM
Chloromethane	ND	0.0514	UJ Q	mg/Kg-dry	1	9/8/2020 11:49:35 PM
Vinyl chloride	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Bromomethane	ND	0.0514		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Trichlorofluoromethane (CFC-11)	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Chloroethane	ND	0.0514		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,1-Dichloroethene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Methylene chloride	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
trans-1,2-Dichloroethene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Methyl tert-butyl ether (MTBE)	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,1-Dichloroethane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
cis-1,2-Dichloroethene	0.0455	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Chloroform	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,1,1-Trichloroethane (TCA)	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,1-Dichloropropene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Carbon tetrachloride	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2-Dichloroethane (EDC)	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Benzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Trichloroethene (TCE)	0.0226	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2-Dichloropropane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Bromodichloromethane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Dibromomethane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
cis-1,3-Dichloropropene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Toluene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
trans-1,3-Dichloropropylene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,1,2-Trichloroethane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,3-Dichloropropane	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Tetrachloroethene (PCE)	1.30	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Dibromochloromethane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2-Dibromoethane (EDB)	ND	0.00514		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Chlorobenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,1,1,2-Tetrachloroethane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Ethylbenzene	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
m,p-Xylene	ND	0.0514		mg/Kg-dry	1	9/8/2020 11:49:35 PM
o-Xylene	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Styrene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Isopropylbenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Bromoform	ND	0.0514		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,1,2,2-Tetrachloroethane	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM

Client: PES Environmental, Inc. **Collection Date:** 8/31/2020 12:20:00 PM
Project: MVSC - Harris
Lab ID: 2009053-004 **Matrix:** Soil
Client Sample ID: SVE-20-11

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Bromobenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,3,5-Trimethylbenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
2-Chlorotoluene	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
4-Chlorotoluene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
tert-Butylbenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2,3-Trichloropropane	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2,4-Trichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
sec-Butylbenzene	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
4-Isopropyltoluene	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,3-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,4-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
n-Butylbenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2-Dibromo-3-chloropropane	ND	0.514		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2,4-Trimethylbenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Hexachloro-1,3-butadiene	ND	0.0257		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Naphthalene	ND	0.0514		mg/Kg-dry	1	9/8/2020 11:49:35 PM
1,2,3-Trichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/8/2020 11:49:35 PM
Surr: Dibromofluoromethane	99.9	83.3 - 111		%Rec	1	9/8/2020 11:49:35 PM
Surr: Toluene-d8	97.7	87.9 - 111		%Rec	1	9/8/2020 11:49:35 PM
Surr: 1-Bromo-4-fluorobenzene	97.6	85.1 - 111		%Rec	1	9/8/2020 11:49:35 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61706		Analyst: EH
Percent Moisture	24.3	0.500		wt%	1	9/9/2020 8:14:48 AM

JC 9/17/2020

Analytical Report

Work Order: **2009053**
Date Reported: **9/10/2020**

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 12:30:00 PM
Project: MVSC - Harris
Lab ID: 2009053-005
Matrix: Soil
Client Sample ID: **SVE-24-3**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0315	UJ Q	mg/Kg-dry	1	9/9/2020 12:19:44 AM
Chloromethane	ND	0.0788	UJQ	mg/Kg-dry	1	9/9/2020 12:19:44 AM
Vinyl chloride	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Bromomethane	ND	0.0788		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Trichlorofluoromethane (CFC-11)	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Chloroethane	ND	0.0788		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,1-Dichloroethene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Methylene chloride	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
trans-1,2-Dichloroethene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Methyl tert-butyl ether (MTBE)	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,1-Dichloroethane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
cis-1,2-Dichloroethene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Chloroform	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,1,1-Trichloroethane (TCA)	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,1-Dichloropropene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Carbon tetrachloride	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2-Dichloroethane (EDC)	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Benzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Trichloroethene (TCE)	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2-Dichloropropane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Bromodichloromethane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Dibromomethane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
cis-1,3-Dichloropropene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Toluene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
trans-1,3-Dichloropropylene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,1,2-Trichloroethane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,3-Dichloropropane	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Tetrachloroethene (PCE)	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Dibromochloromethane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2-Dibromoethane (EDB)	ND	0.00788		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Chlorobenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,1,1,2-Tetrachloroethane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Ethylbenzene	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
m,p-Xylene	ND	0.0788		mg/Kg-dry	1	9/9/2020 12:19:44 AM
o-Xylene	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Styrene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Isopropylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Bromoform	ND	0.0788		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,1,2,2-Tetrachloroethane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM

Client: PES Environmental, Inc. **Collection Date:** 8/31/2020 12:30:00 PM
Project: MVSC - Harris
Lab ID: 2009053-005 **Matrix:** Soil
Client Sample ID: SVE-24-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Bromobenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,3,5-Trimethylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
2-Chlorotoluene	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
4-Chlorotoluene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
tert-Butylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2,3-Trichloropropane	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2,4-Trichlorobenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
sec-Butylbenzene	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
4-Isopropyltoluene	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,3-Dichlorobenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,4-Dichlorobenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
n-Butylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2-Dichlorobenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2-Dibromo-3-chloropropane	ND	0.788		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2,4-Trimethylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Hexachloro-1,3-butadiene	ND	0.0394		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Naphthalene	ND	0.0788		mg/Kg-dry	1	9/9/2020 12:19:44 AM
1,2,3-Trichlorobenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:19:44 AM
Surr: Dibromofluoromethane	99.7	83.3 - 111		%Rec	1	9/9/2020 12:19:44 AM
Surr: Toluene-d8	98.0	87.9 - 111		%Rec	1	9/9/2020 12:19:44 AM
Surr: 1-Bromo-4-fluorobenzene	98.1	85.1 - 111		%Rec	1	9/9/2020 12:19:44 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61706		Analyst: EH
Percent Moisture	18.0	0.500		wt%	1	9/9/2020 8:14:48 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 1:20:00 PM
Project: MVSC - Harris
Lab ID: 2009053-006
Matrix: Soil
Client Sample ID: **SVE-21-12**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0252	UJ Q	mg/Kg-dry	1	9/9/2020 12:49:53 AM
Chloromethane	ND	0.0630	UJQ	mg/Kg-dry	1	9/9/2020 12:49:53 AM
Vinyl chloride	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Bromomethane	ND	0.0630		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Trichlorofluoromethane (CFC-11)	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Chloroethane	ND	0.0630		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,1-Dichloroethene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Methylene chloride	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
trans-1,2-Dichloroethene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Methyl tert-butyl ether (MTBE)	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,1-Dichloroethane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
cis-1,2-Dichloroethene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Chloroform	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,1,1-Trichloroethane (TCA)	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,1-Dichloropropene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Carbon tetrachloride	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2-Dichloroethane (EDC)	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Benzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Trichloroethene (TCE)	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2-Dichloropropane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Bromodichloromethane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Dibromomethane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
cis-1,3-Dichloropropene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Toluene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
trans-1,3-Dichloropropylene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,1,2-Trichloroethane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,3-Dichloropropane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Tetrachloroethene (PCE)	0.0381	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Dibromochloromethane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2-Dibromoethane (EDB)	ND	0.00630		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Chlorobenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,1,1,2-Tetrachloroethane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Ethylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
m,p-Xylene	ND	0.0630		mg/Kg-dry	1	9/9/2020 12:49:53 AM
o-Xylene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Styrene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Isopropylbenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Bromoform	ND	0.0630		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,1,2,2-Tetrachloroethane	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM

Client: PES Environmental, Inc. **Collection Date:** 8/31/2020 1:20:00 PM
Project: MVSC - Harris
Lab ID: 2009053-006 **Matrix:** Soil
Client Sample ID: SVE-21-12

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Bromobenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,3,5-Trimethylbenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
2-Chlorotoluene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
4-Chlorotoluene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
tert-Butylbenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2,3-Trichloropropane	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2,4-Trichlorobenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
sec-Butylbenzene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
4-Isopropyltoluene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,3-Dichlorobenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,4-Dichlorobenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
n-Butylbenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2-Dichlorobenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2-Dibromo-3-chloropropane	ND	0.630		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2,4-Trimethylbenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Hexachloro-1,3-butadiene	ND	0.0315		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Naphthalene	ND	0.0630		mg/Kg-dry	1	9/9/2020 12:49:53 AM
1,2,3-Trichlorobenzene	ND	0.0252		mg/Kg-dry	1	9/9/2020 12:49:53 AM
Surr: Dibromofluoromethane	98.6	83.3 - 111		%Rec	1	9/9/2020 12:49:53 AM
Surr: Toluene-d8	97.2	87.9 - 111		%Rec	1	9/9/2020 12:49:53 AM
Surr: 1-Bromo-4-fluorobenzene	97.4	85.1 - 111		%Rec	1	9/9/2020 12:49:53 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61706		Analyst: EH
Percent Moisture	19.6	0.500		wt%	1	9/9/2020 8:14:48 AM

JC 9/17/2020

Analytical Report

Work Order: **2009053**
Date Reported: **9/10/2020**

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 2:30:00 PM
Project: MVSC - Harris
Lab ID: 2009053-007
Matrix: Soil
Client Sample ID: **SVE-21-25**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0297	UJ Q	mg/Kg-dry	1	9/9/2020 1:20:02 AM
Chloromethane	ND	0.0742	UJ Q	mg/Kg-dry	1	9/9/2020 1:20:02 AM
Vinyl chloride	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Bromomethane	ND	0.0742		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Trichlorofluoromethane (CFC-11)	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Chloroethane	ND	0.0742		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,1-Dichloroethene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Methylene chloride	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
trans-1,2-Dichloroethene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Methyl tert-butyl ether (MTBE)	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,1-Dichloroethane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
cis-1,2-Dichloroethene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Chloroform	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,1,1-Trichloroethane (TCA)	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,1-Dichloropropene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Carbon tetrachloride	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2-Dichloroethane (EDC)	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Benzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Trichloroethene (TCE)	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2-Dichloropropane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Bromodichloromethane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Dibromomethane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
cis-1,3-Dichloropropene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Toluene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
trans-1,3-Dichloropropylene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,1,2-Trichloroethane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,3-Dichloropropane	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Tetrachloroethene (PCE)	0.0558	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Dibromochloromethane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2-Dibromoethane (EDB)	ND	0.00742		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Chlorobenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,1,1,2-Tetrachloroethane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Ethylbenzene	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
m,p-Xylene	ND	0.0742		mg/Kg-dry	1	9/9/2020 1:20:02 AM
o-Xylene	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Styrene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Isopropylbenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Bromoform	ND	0.0742		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,1,2,2-Tetrachloroethane	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM

Analytical Report

Work Order: **2009053**
Date Reported: **9/10/2020**

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 2:30:00 PM
Project: MVSC - Harris
Lab ID: 2009053-007
Matrix: Soil
Client Sample ID: SVE-21-25

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Bromobenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,3,5-Trimethylbenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
2-Chlorotoluene	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
4-Chlorotoluene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
tert-Butylbenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2,3-Trichloropropane	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2,4-Trichlorobenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
sec-Butylbenzene	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
4-Isopropyltoluene	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,3-Dichlorobenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,4-Dichlorobenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
n-Butylbenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2-Dichlorobenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2-Dibromo-3-chloropropane	ND	0.742		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2,4-Trimethylbenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Hexachloro-1,3-butadiene	ND	0.0371		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Naphthalene	ND	0.0742		mg/Kg-dry	1	9/9/2020 1:20:02 AM
1,2,3-Trichlorobenzene	ND	0.0297		mg/Kg-dry	1	9/9/2020 1:20:02 AM
Surr: Dibromofluoromethane	98.0	83.3 - 111		%Rec	1	9/9/2020 1:20:02 AM
Surr: Toluene-d8	99.2	87.9 - 111		%Rec	1	9/9/2020 1:20:02 AM
Surr: 1-Bromo-4-fluorobenzene	98.2	85.1 - 111		%Rec	1	9/9/2020 1:20:02 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61706		Analyst: EH
Percent Moisture	20.5	0.500		wt%	1	9/9/2020 8:14:48 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 8/31/2020 3:00:00 PM
Project: MVSC - Harris
Lab ID: 2009053-008
Matrix: Soil
Client Sample ID: **SVE-21-35**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0270	UJ Q	mg/Kg-dry	1	9/9/2020 1:50:12 AM
Chloromethane	ND	0.0675	UJ Q	mg/Kg-dry	1	9/9/2020 1:50:12 AM
Vinyl chloride	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Bromomethane	ND	0.0675		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Trichlorofluoromethane (CFC-11)	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Chloroethane	ND	0.0675		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,1-Dichloroethene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Methylene chloride	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
trans-1,2-Dichloroethene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Methyl tert-butyl ether (MTBE)	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,1-Dichloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
cis-1,2-Dichloroethene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Chloroform	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,1,1-Trichloroethane (TCA)	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,1-Dichloropropene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Carbon tetrachloride	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2-Dichloroethane (EDC)	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Benzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Trichloroethene (TCE)	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2-Dichloropropane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Bromodichloromethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Dibromomethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
cis-1,3-Dichloropropene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Toluene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
trans-1,3-Dichloropropylene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,1,2-Trichloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,3-Dichloropropane	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Tetrachloroethene (PCE)	0.135	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Dibromochloromethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2-Dibromoethane (EDB)	ND	0.00675		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Chlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,1,1,2-Tetrachloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Ethylbenzene	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
m,p-Xylene	ND	0.0675		mg/Kg-dry	1	9/9/2020 1:50:12 AM
o-Xylene	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Styrene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Isopropylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Bromoform	ND	0.0675		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,1,2,2-Tetrachloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM

Client: PES Environmental, Inc. **Collection Date:** 8/31/2020 3:00:00 PM
Project: MVSC - Harris
Lab ID: 2009053-008 **Matrix:** Soil
Client Sample ID: SVE-21-35

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Bromobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,3,5-Trimethylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
2-Chlorotoluene	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
4-Chlorotoluene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
tert-Butylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2,3-Trichloropropane	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2,4-Trichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
sec-Butylbenzene	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
4-Isopropyltoluene	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,3-Dichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,4-Dichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
n-Butylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2-Dichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2-Dibromo-3-chloropropane	ND	0.675		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2,4-Trimethylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Hexachloro-1,3-butadiene	ND	0.0337		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Naphthalene	ND	0.0675		mg/Kg-dry	1	9/9/2020 1:50:12 AM
1,2,3-Trichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 1:50:12 AM
Surr: Dibromofluoromethane	98.2	83.3 - 111		%Rec	1	9/9/2020 1:50:12 AM
Surr: Toluene-d8	98.5	87.9 - 111		%Rec	1	9/9/2020 1:50:12 AM
Surr: 1-Bromo-4-fluorobenzene	96.3	85.1 - 111		%Rec	1	9/9/2020 1:50:12 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	16.7	0.500		wt%	1	9/9/2020 9:20:54 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 8:10:00 AM
Project: MVSC - Harris
Lab ID: 2009053-010
Matrix: Soil
Client Sample ID: **SVE-22-2**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0284	UJ Q	mg/Kg-dry	1	9/9/2020 2:20:19 AM
Chloromethane	ND	0.0710	UJ Q	mg/Kg-dry	1	9/9/2020 2:20:19 AM
Vinyl chloride	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Bromomethane	ND	0.0710		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Trichlorofluoromethane (CFC-11)	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Chloroethane	ND	0.0710		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,1-Dichloroethene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Methylene chloride	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
trans-1,2-Dichloroethene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Methyl tert-butyl ether (MTBE)	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,1-Dichloroethane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
cis-1,2-Dichloroethene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Chloroform	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,1,1-Trichloroethane (TCA)	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,1-Dichloropropene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Carbon tetrachloride	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2-Dichloroethane (EDC)	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Benzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Trichloroethene (TCE)	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2-Dichloropropane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Bromodichloromethane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Dibromomethane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
cis-1,3-Dichloropropene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Toluene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
trans-1,3-Dichloropropylene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,1,2-Trichloroethane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,3-Dichloropropane	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Tetrachloroethene (PCE)	0.0320	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Dibromochloromethane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2-Dibromoethane (EDB)	ND	0.00710		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Chlorobenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,1,1,2-Tetrachloroethane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Ethylbenzene	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
m,p-Xylene	ND	0.0710		mg/Kg-dry	1	9/9/2020 2:20:19 AM
o-Xylene	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Styrene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Isopropylbenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Bromoform	ND	0.0710		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,1,2,2-Tetrachloroethane	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 8:10:00 AM
Project: MVSC - Harris
Lab ID: 2009053-010
Matrix: Soil
Client Sample ID: SVE-22-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Bromobenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,3,5-Trimethylbenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
2-Chlorotoluene	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
4-Chlorotoluene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
tert-Butylbenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2,3-Trichloropropane	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2,4-Trichlorobenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
sec-Butylbenzene	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
4-Isopropyltoluene	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,3-Dichlorobenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,4-Dichlorobenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
n-Butylbenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2-Dichlorobenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2-Dibromo-3-chloropropane	ND	0.710		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2,4-Trimethylbenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Hexachloro-1,3-butadiene	ND	0.0355		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Naphthalene	ND	0.0710		mg/Kg-dry	1	9/9/2020 2:20:19 AM
1,2,3-Trichlorobenzene	ND	0.0284		mg/Kg-dry	1	9/9/2020 2:20:19 AM
Surr: Dibromofluoromethane	99.1	83.3 - 111		%Rec	1	9/9/2020 2:20:19 AM
Surr: Toluene-d8	99.1	87.9 - 111		%Rec	1	9/9/2020 2:20:19 AM
Surr: 1-Bromo-4-fluorobenzene	97.4	85.1 - 111		%Rec	1	9/9/2020 2:20:19 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	13.1	0.500		wt%	1	9/9/2020 9:20:54 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 9:25:00 AM
Project: MVSC - Harris
Lab ID: 2009053-011
Matrix: Soil
Client Sample ID: **SVE-22-26**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0225	UJ Q	mg/Kg-dry	1	9/9/2020 2:50:29 AM
Chloromethane	ND	0.0564	UJ Q	mg/Kg-dry	1	9/9/2020 2:50:29 AM
Vinyl chloride	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Bromomethane	ND	0.0564		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Trichlorofluoromethane (CFC-11)	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Chloroethane	ND	0.0564		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,1-Dichloroethene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Methylene chloride	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
trans-1,2-Dichloroethene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Methyl tert-butyl ether (MTBE)	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,1-Dichloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
cis-1,2-Dichloroethene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Chloroform	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,1,1-Trichloroethane (TCA)	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,1-Dichloropropene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Carbon tetrachloride	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2-Dichloroethane (EDC)	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Benzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Trichloroethene (TCE)	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2-Dichloropropane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Bromodichloromethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Dibromomethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
cis-1,3-Dichloropropene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Toluene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
trans-1,3-Dichloropropylene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,1,2-Trichloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,3-Dichloropropane	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Tetrachloroethene (PCE)	0.102	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Dibromochloromethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2-Dibromoethane (EDB)	ND	0.00564		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Chlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,1,1,2-Tetrachloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Ethylbenzene	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
m,p-Xylene	ND	0.0564		mg/Kg-dry	1	9/9/2020 2:50:29 AM
o-Xylene	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Styrene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Isopropylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Bromoform	ND	0.0564		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,1,2,2-Tetrachloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM

Client: PES Environmental, Inc. **Collection Date:** 9/1/2020 9:25:00 AM
Project: MVSC - Harris
Lab ID: 2009053-011 **Matrix:** Soil
Client Sample ID: SVE-22-26

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Bromobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,3,5-Trimethylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
2-Chlorotoluene	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
4-Chlorotoluene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
tert-Butylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2,3-Trichloropropane	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2,4-Trichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
sec-Butylbenzene	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
4-Isopropyltoluene	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,3-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,4-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
n-Butylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2-Dibromo-3-chloropropane	ND	0.564		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2,4-Trimethylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Hexachloro-1,3-butadiene	ND	0.0282		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Naphthalene	ND	0.0564		mg/Kg-dry	1	9/9/2020 2:50:29 AM
1,2,3-Trichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 2:50:29 AM
Surr: Dibromofluoromethane	98.8	83.3 - 111		%Rec	1	9/9/2020 2:50:29 AM
Surr: Toluene-d8	98.4	87.9 - 111		%Rec	1	9/9/2020 2:50:29 AM
Surr: 1-Bromo-4-fluorobenzene	96.7	85.1 - 111		%Rec	1	9/9/2020 2:50:29 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	9.81	0.500		wt%	1	9/9/2020 9:20:54 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 9:35:00 AM
Project: MVSC - Harris
Lab ID: 2009053-012
Matrix: Soil
Client Sample ID: **SVE-22-32**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0200	UJ Q	mg/Kg-dry	1	9/9/2020 3:20:36 AM
Chloromethane	ND	0.0500	UJ Q	mg/Kg-dry	1	9/9/2020 3:20:36 AM
Vinyl chloride	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Bromomethane	ND	0.0500		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Trichlorofluoromethane (CFC-11)	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Chloroethane	ND	0.0500		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,1-Dichloroethene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Methylene chloride	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
trans-1,2-Dichloroethene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Methyl tert-butyl ether (MTBE)	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,1-Dichloroethane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
cis-1,2-Dichloroethene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Chloroform	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,1,1-Trichloroethane (TCA)	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,1-Dichloropropene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Carbon tetrachloride	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2-Dichloroethane (EDC)	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Benzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Trichloroethene (TCE)	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2-Dichloropropane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Bromodichloromethane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Dibromomethane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
cis-1,3-Dichloropropene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Toluene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
trans-1,3-Dichloropropylene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,1,2-Trichloroethane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,3-Dichloropropane	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Tetrachloroethene (PCE)	0.105	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Dibromochloromethane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2-Dibromoethane (EDB)	ND	0.00500		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Chlorobenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,1,1,2-Tetrachloroethane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Ethylbenzene	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
m,p-Xylene	ND	0.0500		mg/Kg-dry	1	9/9/2020 3:20:36 AM
o-Xylene	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Styrene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Isopropylbenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Bromoform	ND	0.0500		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,1,2,2-Tetrachloroethane	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM

Client: PES Environmental, Inc. **Collection Date:** 9/1/2020 9:35:00 AM
Project: MVSC - Harris
Lab ID: 2009053-012 **Matrix:** Soil
Client Sample ID: SVE-22-32

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
n-Propylbenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Bromobenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,3,5-Trimethylbenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
2-Chlorotoluene	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
4-Chlorotoluene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
tert-Butylbenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2,3-Trichloropropane	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2,4-Trichlorobenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
sec-Butylbenzene	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
4-Isopropyltoluene	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,3-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,4-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
n-Butylbenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2-Dibromo-3-chloropropane	ND	0.500		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2,4-Trimethylbenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Hexachloro-1,3-butadiene	ND	0.0250		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Naphthalene	ND	0.0500		mg/Kg-dry	1	9/9/2020 3:20:36 AM
1,2,3-Trichlorobenzene	ND	0.0200		mg/Kg-dry	1	9/9/2020 3:20:36 AM
Surr: Dibromofluoromethane	97.8	83.3 - 111		%Rec	1	9/9/2020 3:20:36 AM
Surr: Toluene-d8	98.4	87.9 - 111		%Rec	1	9/9/2020 3:20:36 AM
Surr: 1-Bromo-4-fluorobenzene	97.4	85.1 - 111		%Rec	1	9/9/2020 3:20:36 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R61711 Analyst: EH

Percent Moisture	5.67	0.500		wt%	1	9/9/2020 9:20:54 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 9:55:00 AM
Project: MVSC - Harris
Lab ID: 2009053-013
Matrix: Soil
Client Sample ID: **SVE-23-2**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0270	UJ Q	mg/Kg-dry	1	9/9/2020 3:50:45 AM
Chloromethane	ND	0.0674	UJ Q	mg/Kg-dry	1	9/9/2020 3:50:45 AM
Vinyl chloride	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Bromomethane	ND	0.0674		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Trichlorofluoromethane (CFC-11)	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Chloroethane	ND	0.0674		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,1-Dichloroethene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Methylene chloride	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
trans-1,2-Dichloroethene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Methyl tert-butyl ether (MTBE)	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,1-Dichloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
cis-1,2-Dichloroethene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Chloroform	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,1,1-Trichloroethane (TCA)	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,1-Dichloropropene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Carbon tetrachloride	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2-Dichloroethane (EDC)	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Benzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Trichloroethene (TCE)	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2-Dichloropropane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Bromodichloromethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Dibromomethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
cis-1,3-Dichloropropene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Toluene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
trans-1,3-Dichloropropylene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,1,2-Trichloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,3-Dichloropropane	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Tetrachloroethene (PCE)	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Dibromochloromethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2-Dibromoethane (EDB)	ND	0.00674		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Chlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,1,1,2-Tetrachloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Ethylbenzene	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
m,p-Xylene	ND	0.0674		mg/Kg-dry	1	9/9/2020 3:50:45 AM
o-Xylene	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Styrene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Isopropylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Bromoform	ND	0.0674		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,1,2,2-Tetrachloroethane	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM

Client: PES Environmental, Inc. **Collection Date:** 9/1/2020 9:55:00 AM
Project: MVSC - Harris
Lab ID: 2009053-013 **Matrix:** Soil
Client Sample ID: SVE-23-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Bromobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,3,5-Trimethylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
2-Chlorotoluene	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
4-Chlorotoluene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
tert-Butylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2,3-Trichloropropane	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2,4-Trichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
sec-Butylbenzene	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
4-Isopropyltoluene	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,3-Dichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,4-Dichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
n-Butylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2-Dichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2-Dibromo-3-chloropropane	ND	0.674		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2,4-Trimethylbenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Hexachloro-1,3-butadiene	ND	0.0337		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Naphthalene	ND	0.0674		mg/Kg-dry	1	9/9/2020 3:50:45 AM
1,2,3-Trichlorobenzene	ND	0.0270		mg/Kg-dry	1	9/9/2020 3:50:45 AM
Surr: Dibromofluoromethane	98.4	83.3 - 111		%Rec	1	9/9/2020 3:50:45 AM
Surr: Toluene-d8	98.4	87.9 - 111		%Rec	1	9/9/2020 3:50:45 AM
Surr: 1-Bromo-4-fluorobenzene	96.9	85.1 - 111		%Rec	1	9/9/2020 3:50:45 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	18.8	0.500		wt%	1	9/9/2020 9:20:54 AM

JC 9/17/2020

Analytical Report

Work Order: **2009053**
Date Reported: **9/10/2020**

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 11:25:00 AM
Project: MVSC - Harris
Lab ID: 2009053-014
Matrix: Soil
Client Sample ID: SVE-23-19

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0225	UJ Q	mg/Kg-dry	1	9/9/2020 6:21:29 AM
Chloromethane	ND	0.0563	UJ Q	mg/Kg-dry	1	9/9/2020 6:21:29 AM
Vinyl chloride	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Bromomethane	ND	0.0563		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Trichlorofluoromethane (CFC-11)	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Chloroethane	ND	0.0563		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,1-Dichloroethene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Methylene chloride	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
trans-1,2-Dichloroethene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Methyl tert-butyl ether (MTBE)	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,1-Dichloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
cis-1,2-Dichloroethene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Chloroform	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,1,1-Trichloroethane (TCA)	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,1-Dichloropropene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Carbon tetrachloride	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2-Dichloroethane (EDC)	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Benzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Trichloroethene (TCE)	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2-Dichloropropane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Bromodichloromethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Dibromomethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
cis-1,3-Dichloropropene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Toluene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
trans-1,3-Dichloropropylene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,1,2-Trichloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,3-Dichloropropane	ND	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Tetrachloroethene (PCE)	0.0252	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Dibromochloromethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2-Dibromoethane (EDB)	ND	0.00563		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Chlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,1,1,2-Tetrachloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Ethylbenzene	ND	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
m,p-Xylene	ND	0.0563		mg/Kg-dry	1	9/9/2020 6:21:29 AM
o-Xylene	ND	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Styrene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Isopropylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Bromoform	ND	0.0563		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,1,2,2-Tetrachloroethane	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM

JC 9/17/2020

Client: PES Environmental, Inc. **Collection Date:** 9/1/2020 11:25:00 AM
Project: MVSC - Harris
Lab ID: 2009053-014 **Matrix:** Soil
Client Sample ID: SVE-23-19

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Bromobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,3,5-Trimethylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
2-Chlorotoluene	ND	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
4-Chlorotoluene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
tert-Butylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2,3-Trichloropropane	ND	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2,4-Trichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
sec-Butylbenzene	ND	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
4-Isopropyltoluene	ND	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,3-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,4-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
n-Butylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2-Dichlorobenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2-Dibromo-3-chloropropane	ND	0.563		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2,4-Trimethylbenzene	ND	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Hexachloro-1,3-butadiene	0.0313	0.0281		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Naphthalene	ND	0.0563		mg/Kg-dry	1	9/9/2020 6:21:29 AM
1,2,3-Trichlorobenzene	0.0254	0.0225		mg/Kg-dry	1	9/9/2020 6:21:29 AM
Surr: Dibromofluoromethane	101	83.3 - 111		%Rec	1	9/9/2020 6:21:29 AM
Surr: Toluene-d8	99.3	87.9 - 111		%Rec	1	9/9/2020 6:21:29 AM
Surr: 1-Bromo-4-fluorobenzene	97.8	85.1 - 111		%Rec	1	9/9/2020 6:21:29 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	4.42	0.500		wt%	1	9/9/2020 9:20:54 AM

JC 9/17/2020

Analytical Report

Work Order: **2009053**
Date Reported: **9/10/2020**

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 11:20:00 AM
Project: MVSC - Harris
Lab ID: 2009053-015
Matrix: Soil
Client Sample ID: **SVE-23-25**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0206	UJ Q	mg/Kg-dry	1	9/9/2020 6:51:39 AM
Chloromethane	ND	0.0515	UJ Q	mg/Kg-dry	1	9/9/2020 6:51:39 AM
Vinyl chloride	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Bromomethane	ND	0.0515		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Trichlorofluoromethane (CFC-11)	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Chloroethane	ND	0.0515		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,1-Dichloroethene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Methylene chloride	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
trans-1,2-Dichloroethene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Methyl tert-butyl ether (MTBE)	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,1-Dichloroethane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
cis-1,2-Dichloroethene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Chloroform	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,1,1-Trichloroethane (TCA)	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,1-Dichloropropene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Carbon tetrachloride	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2-Dichloroethane (EDC)	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Benzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Trichloroethene (TCE)	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2-Dichloropropane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Bromodichloromethane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Dibromomethane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
cis-1,3-Dichloropropene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Toluene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
trans-1,3-Dichloropropylene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,1,2-Trichloroethane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,3-Dichloropropane	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Tetrachloroethene (PCE)	0.0489	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Dibromochloromethane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2-Dibromoethane (EDB)	ND	0.00515		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Chlorobenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,1,1,2-Tetrachloroethane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Ethylbenzene	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
m,p-Xylene	ND	0.0515		mg/Kg-dry	1	9/9/2020 6:51:39 AM
o-Xylene	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Styrene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Isopropylbenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Bromoform	ND	0.0515		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,1,2,2-Tetrachloroethane	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM

Client: PES Environmental, Inc. **Collection Date:** 9/1/2020 11:20:00 AM
Project: MVSC - Harris
Lab ID: 2009053-015 **Matrix:** Soil
Client Sample ID: SVE-23-25

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Bromobenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,3,5-Trimethylbenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
2-Chlorotoluene	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
4-Chlorotoluene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
tert-Butylbenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2,3-Trichloropropane	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2,4-Trichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
sec-Butylbenzene	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
4-Isopropyltoluene	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,3-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,4-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
n-Butylbenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2-Dibromo-3-chloropropane	ND	0.515		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2,4-Trimethylbenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Hexachloro-1,3-butadiene	ND	0.0258		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Naphthalene	ND	0.0515		mg/Kg-dry	1	9/9/2020 6:51:39 AM
1,2,3-Trichlorobenzene	ND	0.0206		mg/Kg-dry	1	9/9/2020 6:51:39 AM
Surr: Dibromofluoromethane	99.2	83.3 - 111		%Rec	1	9/9/2020 6:51:39 AM
Surr: Toluene-d8	97.6	87.9 - 111		%Rec	1	9/9/2020 6:51:39 AM
Surr: 1-Bromo-4-fluorobenzene	96.8	85.1 - 111		%Rec	1	9/9/2020 6:51:39 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	9.14	0.500		wt%	1	9/9/2020 9:20:54 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 3:20:00 PM
Project: MVSC - Harris
Lab ID: 2009053-016
Matrix: Soil
Client Sample ID: **SVE-24-8**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0215	UJ Q	mg/Kg-dry	1	9/9/2020 7:21:48 AM
Chloromethane	ND	0.0537	UJ Q	mg/Kg-dry	1	9/9/2020 7:21:48 AM
Vinyl chloride	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Bromomethane	ND	0.0537		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Trichlorofluoromethane (CFC-11)	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Chloroethane	ND	0.0537		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,1-Dichloroethene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Methylene chloride	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
trans-1,2-Dichloroethene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Methyl tert-butyl ether (MTBE)	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,1-Dichloroethane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
cis-1,2-Dichloroethene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Chloroform	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,1,1-Trichloroethane (TCA)	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,1-Dichloropropene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Carbon tetrachloride	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2-Dichloroethane (EDC)	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Benzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Trichloroethene (TCE)	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2-Dichloropropane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Bromodichloromethane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Dibromomethane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
cis-1,3-Dichloropropene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Toluene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
trans-1,3-Dichloropropylene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,1,2-Trichloroethane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,3-Dichloropropane	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Tetrachloroethene (PCE)	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Dibromochloromethane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2-Dibromoethane (EDB)	ND	0.00537		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Chlorobenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,1,1,2-Tetrachloroethane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Ethylbenzene	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
m,p-Xylene	ND	0.0537		mg/Kg-dry	1	9/9/2020 7:21:48 AM
o-Xylene	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Styrene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Isopropylbenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Bromoform	ND	0.0537		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,1,2,2-Tetrachloroethane	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 3:20:00 PM
Project: MVSC - Harris
Lab ID: 2009053-016
Matrix: Soil
Client Sample ID: **SVE-24-8**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Bromobenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,3,5-Trimethylbenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
2-Chlorotoluene	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
4-Chlorotoluene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
tert-Butylbenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2,3-Trichloropropane	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2,4-Trichlorobenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
sec-Butylbenzene	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
4-Isopropyltoluene	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,3-Dichlorobenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,4-Dichlorobenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
n-Butylbenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2-Dichlorobenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2-Dibromo-3-chloropropane	ND	0.537		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2,4-Trimethylbenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Hexachloro-1,3-butadiene	ND	0.0268		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Naphthalene	ND	0.0537		mg/Kg-dry	1	9/9/2020 7:21:48 AM
1,2,3-Trichlorobenzene	ND	0.0215		mg/Kg-dry	1	9/9/2020 7:21:48 AM
Surr: Dibromofluoromethane	103	83.3 - 111		%Rec	1	9/9/2020 7:21:48 AM
Surr: Toluene-d8	98.9	87.9 - 111		%Rec	1	9/9/2020 7:21:48 AM
Surr: 1-Bromo-4-fluorobenzene	96.7	85.1 - 111		%Rec	1	9/9/2020 7:21:48 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	15.4	0.500		wt%	1	9/9/2020 9:20:54 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 3:30:00 PM
Project: MVSC - Harris
Lab ID: 2009053-017
Matrix: Soil
Client Sample ID: **SVE-24-12**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0245	UJ Q	mg/Kg-dry	1	9/9/2020 8:22:07 AM
Chloromethane	ND	0.0613	UJ Q	mg/Kg-dry	1	9/9/2020 8:22:07 AM
Vinyl chloride	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Bromomethane	ND	0.0613		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Trichlorofluoromethane (CFC-11)	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Chloroethane	ND	0.0613		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,1-Dichloroethene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Methylene chloride	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
trans-1,2-Dichloroethene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Methyl tert-butyl ether (MTBE)	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,1-Dichloroethane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
cis-1,2-Dichloroethene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Chloroform	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,1,1-Trichloroethane (TCA)	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,1-Dichloropropene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Carbon tetrachloride	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2-Dichloroethane (EDC)	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Benzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Trichloroethene (TCE)	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2-Dichloropropane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Bromodichloromethane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Dibromomethane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
cis-1,3-Dichloropropene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Toluene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
trans-1,3-Dichloropropylene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,1,2-Trichloroethane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,3-Dichloropropane	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Tetrachloroethene (PCE)	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Dibromochloromethane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2-Dibromoethane (EDB)	ND	0.00613		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Chlorobenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,1,1,2-Tetrachloroethane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Ethylbenzene	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
m,p-Xylene	ND	0.0613		mg/Kg-dry	1	9/9/2020 8:22:07 AM
o-Xylene	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Styrene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Isopropylbenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Bromoform	ND	0.0613		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,1,2,2-Tetrachloroethane	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM

Client: PES Environmental, Inc. **Collection Date:** 9/1/2020 3:30:00 PM
Project: MVSC - Harris
Lab ID: 2009053-017 **Matrix:** Soil
Client Sample ID: SVE-24-12

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Bromobenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,3,5-Trimethylbenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
2-Chlorotoluene	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
4-Chlorotoluene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
tert-Butylbenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2,3-Trichloropropane	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2,4-Trichlorobenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
sec-Butylbenzene	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
4-Isopropyltoluene	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,3-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,4-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
n-Butylbenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2-Dichlorobenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2-Dibromo-3-chloropropane	ND	0.613		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2,4-Trimethylbenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Hexachloro-1,3-butadiene	ND	0.0307		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Naphthalene	ND	0.0613		mg/Kg-dry	1	9/9/2020 8:22:07 AM
1,2,3-Trichlorobenzene	ND	0.0245		mg/Kg-dry	1	9/9/2020 8:22:07 AM
Surr: Dibromofluoromethane	102	83.3 - 111		%Rec	1	9/9/2020 8:22:07 AM
Surr: Toluene-d8	98.7	87.9 - 111		%Rec	1	9/9/2020 8:22:07 AM
Surr: 1-Bromo-4-fluorobenzene	96.5	85.1 - 111		%Rec	1	9/9/2020 8:22:07 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	20.4	0.500		wt%	1	9/9/2020 9:20:54 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 9:45:00 AM
Project: MVSC - Harris
Lab ID: 2009053-018
Matrix: Soil
Client Sample ID: **SVE-25-2**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0269	UJ Q	mg/Kg-dry	1	9/9/2020 8:52:16 AM
Chloromethane	ND	0.0671	UJ Q	mg/Kg-dry	1	9/9/2020 8:52:16 AM
Vinyl chloride	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Bromomethane	ND	0.0671		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Trichlorofluoromethane (CFC-11)	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Chloroethane	ND	0.0671		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,1-Dichloroethene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Methylene chloride	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
trans-1,2-Dichloroethene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Methyl tert-butyl ether (MTBE)	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,1-Dichloroethane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
cis-1,2-Dichloroethene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Chloroform	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,1,1-Trichloroethane (TCA)	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,1-Dichloropropene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Carbon tetrachloride	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2-Dichloroethane (EDC)	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Benzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Trichloroethene (TCE)	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2-Dichloropropane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Bromodichloromethane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Dibromomethane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
cis-1,3-Dichloropropene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Toluene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
trans-1,3-Dichloropropylene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,1,2-Trichloroethane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,3-Dichloropropane	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Tetrachloroethene (PCE)	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Dibromochloromethane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2-Dibromoethane (EDB)	ND	0.00671		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Chlorobenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,1,1,2-Tetrachloroethane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Ethylbenzene	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
m,p-Xylene	ND	0.0671		mg/Kg-dry	1	9/9/2020 8:52:16 AM
o-Xylene	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Styrene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Isopropylbenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Bromoform	ND	0.0671		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,1,2,2-Tetrachloroethane	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM

Client: PES Environmental, Inc.
Collection Date: 9/1/2020 9:45:00 AM
Project: MVSC - Harris
Lab ID: 2009053-018
Matrix: Soil
Client Sample ID: SVE-25-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Bromobenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,3,5-Trimethylbenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
2-Chlorotoluene	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
4-Chlorotoluene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
tert-Butylbenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2,3-Trichloropropane	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2,4-Trichlorobenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
sec-Butylbenzene	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
4-Isopropyltoluene	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,3-Dichlorobenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,4-Dichlorobenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
n-Butylbenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2-Dichlorobenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2-Dibromo-3-chloropropane	ND	0.671		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2,4-Trimethylbenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Hexachloro-1,3-butadiene	ND	0.0336		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Naphthalene	ND	0.0671		mg/Kg-dry	1	9/9/2020 8:52:16 AM
1,2,3-Trichlorobenzene	ND	0.0269		mg/Kg-dry	1	9/9/2020 8:52:16 AM
Surr: Dibromofluoromethane	102	83.3 - 111		%Rec	1	9/9/2020 8:52:16 AM
Surr: Toluene-d8	98.8	87.9 - 111		%Rec	1	9/9/2020 8:52:16 AM
Surr: 1-Bromo-4-fluorobenzene	98.1	85.1 - 111		%Rec	1	9/9/2020 8:52:16 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	16.7	0.500		wt%	1	9/9/2020 9:20:54 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 9:30:00 AM
Project: MVSC - Harris
Lab ID: 2009053-019
Matrix: Soil
Client Sample ID: SVE-25-11.5

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0224	UJ Q	mg/Kg-dry	1	9/9/2020 9:22:26 AM
Chloromethane	ND	0.0559	UJ Q	mg/Kg-dry	1	9/9/2020 9:22:26 AM
Vinyl chloride	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Bromomethane	ND	0.0559		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Trichlorofluoromethane (CFC-11)	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Chloroethane	ND	0.0559		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,1-Dichloroethene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Methylene chloride	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
trans-1,2-Dichloroethene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Methyl tert-butyl ether (MTBE)	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,1-Dichloroethane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
cis-1,2-Dichloroethene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Chloroform	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,1,1-Trichloroethane (TCA)	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,1-Dichloropropene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Carbon tetrachloride	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2-Dichloroethane (EDC)	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Benzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Trichloroethene (TCE)	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2-Dichloropropane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Bromodichloromethane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Dibromomethane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
cis-1,3-Dichloropropene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Toluene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
trans-1,3-Dichloropropylene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,1,2-Trichloroethane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,3-Dichloropropane	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Tetrachloroethene (PCE)	0.0373	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Dibromochloromethane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2-Dibromoethane (EDB)	ND	0.00559		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Chlorobenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,1,1,2-Tetrachloroethane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Ethylbenzene	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
m,p-Xylene	ND	0.0559		mg/Kg-dry	1	9/9/2020 9:22:26 AM
o-Xylene	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Styrene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Isopropylbenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Bromoform	ND	0.0559		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,1,2,2-Tetrachloroethane	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM

Client: PES Environmental, Inc. **Collection Date:** 9/2/2020 9:30:00 AM
Project: MVSC - Harris
Lab ID: 2009053-019 **Matrix:** Soil
Client Sample ID: SVE-25-11.5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Bromobenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,3,5-Trimethylbenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
2-Chlorotoluene	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
4-Chlorotoluene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
tert-Butylbenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2,3-Trichloropropane	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2,4-Trichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
sec-Butylbenzene	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
4-Isopropyltoluene	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,3-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,4-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
n-Butylbenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2-Dibromo-3-chloropropane	ND	0.559		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2,4-Trimethylbenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Hexachloro-1,3-butadiene	ND	0.0280		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Naphthalene	ND	0.0559		mg/Kg-dry	1	9/9/2020 9:22:26 AM
1,2,3-Trichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/9/2020 9:22:26 AM
Surr: Dibromofluoromethane	93.2	83.3 - 111		%Rec	1	9/9/2020 9:22:26 AM
Surr: Toluene-d8	94.7	87.9 - 111		%Rec	1	9/9/2020 9:22:26 AM
Surr: 1-Bromo-4-fluorobenzene	103	85.1 - 111		%Rec	1	9/9/2020 9:22:26 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	9.74	0.500		wt%	1	9/9/2020 9:20:54 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 10:35:00 AM
Project: MVSC - Harris
Lab ID: 2009053-020
Matrix: Soil
Client Sample ID: SVE-25-43.5

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0198	UJ Q	mg/Kg-dry	1	9/9/2020 9:52:37 AM
Chloromethane	ND	0.0494	UJ Q	mg/Kg-dry	1	9/9/2020 9:52:37 AM
Vinyl chloride	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Bromomethane	ND	0.0494		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Trichlorofluoromethane (CFC-11)	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Chloroethane	ND	0.0494		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,1-Dichloroethene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Methylene chloride	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
trans-1,2-Dichloroethene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Methyl tert-butyl ether (MTBE)	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,1-Dichloroethane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
cis-1,2-Dichloroethene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Chloroform	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,1,1-Trichloroethane (TCA)	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,1-Dichloropropene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Carbon tetrachloride	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2-Dichloroethane (EDC)	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Benzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Trichloroethene (TCE)	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2-Dichloropropane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Bromodichloromethane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Dibromomethane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
cis-1,3-Dichloropropene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Toluene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
trans-1,3-Dichloropropylene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,1,2-Trichloroethane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,3-Dichloropropane	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Tetrachloroethene (PCE)	0.0632	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Dibromochloromethane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2-Dibromoethane (EDB)	ND	0.00494		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Chlorobenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,1,1,2-Tetrachloroethane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Ethylbenzene	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
m,p-Xylene	ND	0.0494		mg/Kg-dry	1	9/9/2020 9:52:37 AM
o-Xylene	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Styrene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Isopropylbenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Bromoform	ND	0.0494		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,1,2,2-Tetrachloroethane	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 10:35:00 AM
Project: MVSC - Harris
Lab ID: 2009053-020
Matrix: Soil
Client Sample ID: **SVE-25-43.5**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Bromobenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,3,5-Trimethylbenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
2-Chlorotoluene	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
4-Chlorotoluene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
tert-Butylbenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2,3-Trichloropropane	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2,4-Trichlorobenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
sec-Butylbenzene	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
4-Isopropyltoluene	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,3-Dichlorobenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,4-Dichlorobenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
n-Butylbenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2-Dichlorobenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2-Dibromo-3-chloropropane	ND	0.494		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2,4-Trimethylbenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Hexachloro-1,3-butadiene	ND	0.0247		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Naphthalene	ND	0.0494		mg/Kg-dry	1	9/9/2020 9:52:37 AM
1,2,3-Trichlorobenzene	ND	0.0198		mg/Kg-dry	1	9/9/2020 9:52:37 AM
Surr: Dibromofluoromethane	105	83.3 - 111		%Rec	1	9/9/2020 9:52:37 AM
Surr: Toluene-d8	98.9	87.9 - 111		%Rec	1	9/9/2020 9:52:37 AM
Surr: 1-Bromo-4-fluorobenzene	97.9	85.1 - 111		%Rec	1	9/9/2020 9:52:37 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	5.27	0.500		wt%	1	9/9/2020 9:20:54 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 10:55:00 AM
Project: MVSC - Harris
Lab ID: 2009053-021
Matrix: Soil
Client Sample ID: SVE-25-49

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29604 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0211	UJQ	mg/Kg-dry	1	9/9/2020 10:22:47 AM
Chloromethane	ND	0.0528	UJ Q	mg/Kg-dry	1	9/9/2020 10:22:47 AM
Vinyl chloride	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Bromomethane	ND	0.0528		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Trichlorofluoromethane (CFC-11)	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Chloroethane	ND	0.0528		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,1-Dichloroethene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Methylene chloride	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
trans-1,2-Dichloroethene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Methyl tert-butyl ether (MTBE)	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,1-Dichloroethane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
cis-1,2-Dichloroethene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Chloroform	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,1,1-Trichloroethane (TCA)	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,1-Dichloropropene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Carbon tetrachloride	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2-Dichloroethane (EDC)	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Benzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Trichloroethene (TCE)	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2-Dichloropropane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Bromodichloromethane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Dibromomethane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
cis-1,3-Dichloropropene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Toluene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
trans-1,3-Dichloropropylene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,1,2-Trichloroethane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,3-Dichloropropane	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Tetrachloroethene (PCE)	0.0422	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Dibromochloromethane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2-Dibromoethane (EDB)	ND	0.00528		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Chlorobenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,1,1,2-Tetrachloroethane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Ethylbenzene	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
m,p-Xylene	ND	0.0528		mg/Kg-dry	1	9/9/2020 10:22:47 AM
o-Xylene	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Styrene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Isopropylbenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Bromoform	ND	0.0528		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,1,2,2-Tetrachloroethane	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM

Analytical Report

Work Order: **2009053**
Date Reported: **9/10/2020**

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 10:55:00 AM
Project: MVSC - Harris
Lab ID: 2009053-021
Matrix: Soil
Client Sample ID: SVE-25-49

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29604		Analyst: KT
n-Propylbenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Bromobenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,3,5-Trimethylbenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
2-Chlorotoluene	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
4-Chlorotoluene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
tert-Butylbenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2,3-Trichloropropane	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2,4-Trichlorobenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
sec-Butylbenzene	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
4-Isopropyltoluene	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,3-Dichlorobenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,4-Dichlorobenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
n-Butylbenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2-Dichlorobenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2-Dibromo-3-chloropropane	ND	0.528		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2,4-Trimethylbenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Hexachloro-1,3-butadiene	ND	0.0264		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Naphthalene	ND	0.0528		mg/Kg-dry	1	9/9/2020 10:22:47 AM
1,2,3-Trichlorobenzene	ND	0.0211		mg/Kg-dry	1	9/9/2020 10:22:47 AM
Surr: Dibromofluoromethane	100	83.3 - 111		%Rec	1	9/9/2020 10:22:47 AM
Surr: Toluene-d8	98.1	87.9 - 111		%Rec	1	9/9/2020 10:22:47 AM
Surr: 1-Bromo-4-fluorobenzene	96.4	85.1 - 111		%Rec	1	9/9/2020 10:22:47 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)				Batch ID: R61711		Analyst: EH
Percent Moisture	4.23	0.500		wt%	1	9/9/2020 9:20:54 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 9:25:00 AM
Project: MVSC - Harris
Lab ID: 2009053-022
Matrix: Soil
Client Sample ID: **TRENCH-25**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29610 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Chloromethane	ND	0.0601	UJ Q	mg/Kg-dry	1	9/8/2020 7:59:19 PM
Vinyl chloride	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Bromomethane	ND	0.0601		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Trichlorofluoromethane (CFC-11)	ND	0.0240	UJQ	mg/Kg-dry	1	9/8/2020 7:59:19 PM
Chloroethane	ND	0.0601		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,1-Dichloroethene	ND	0.0240	UJ Q	mg/Kg-dry	1	9/8/2020 7:59:19 PM
Methylene chloride	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
trans-1,2-Dichloroethene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Methyl tert-butyl ether (MTBE)	ND	0.0240	UJQ	mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,1-Dichloroethane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
cis-1,2-Dichloroethene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Chloroform	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,1,1-Trichloroethane (TCA)	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,1-Dichloropropene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Carbon tetrachloride	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2-Dichloroethane (EDC)	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Benzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Trichloroethene (TCE)	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2-Dichloropropane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Bromodichloromethane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Dibromomethane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
cis-1,3-Dichloropropene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Toluene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
trans-1,3-Dichloropropylene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,1,2-Trichloroethane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,3-Dichloropropane	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Tetrachloroethene (PCE)	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Dibromochloromethane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2-Dibromoethane (EDB)	ND	0.00601		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Chlorobenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,1,1,2-Tetrachloroethane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Ethylbenzene	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
m,p-Xylene	ND	0.0601		mg/Kg-dry	1	9/8/2020 7:59:19 PM
o-Xylene	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Styrene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Isopropylbenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Bromoform	ND	0.0601		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,1,2,2-Tetrachloroethane	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM

Client: PES Environmental, Inc. **Collection Date:** 9/2/2020 9:25:00 AM
Project: MVSC - Harris
Lab ID: 2009053-022 **Matrix:** Soil
Client Sample ID: TRENCH-25

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29610 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
n-Propylbenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Bromobenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,3,5-Trimethylbenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
2-Chlorotoluene	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
4-Chlorotoluene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
tert-Butylbenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2,3-Trichloropropane	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2,4-Trichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
sec-Butylbenzene	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
4-Isopropyltoluene	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,3-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,4-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
n-Butylbenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2-Dibromo-3-chloropropane	ND	0.601		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2,4-Trimethylbenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Hexachloro-1,3-butadiene	ND	0.0300		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Naphthalene	ND	0.0601		mg/Kg-dry	1	9/8/2020 7:59:19 PM
1,2,3-Trichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/8/2020 7:59:19 PM
Surr: Dibromofluoromethane	93.9	83.3 - 111		%Rec	1	9/8/2020 7:59:19 PM
Surr: Toluene-d8	108	87.9 - 111		%Rec	1	9/8/2020 7:59:19 PM
Surr: 1-Bromo-4-fluorobenzene	94.6	85.1 - 111		%Rec	1	9/8/2020 7:59:19 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R61711 Analyst: EH

Percent Moisture	17.7	0.500		wt%	1	9/9/2020 9:20:54 AM

JC 9/17/2020

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 3:45:00 PM
Project: MVSC - Harris
Lab ID: 2009053-023
Matrix: Water
Client Sample ID: DRUM-090220

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29612 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Chloromethane	ND	2.00		µg/L	1	9/10/2020 2:55:40 AM
Vinyl chloride	ND	0.200		µg/L	1	9/10/2020 2:55:40 AM
Bromomethane	ND	1.00	UJ Q	µg/L	1	9/10/2020 2:55:40 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Chloroethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Methylene chloride	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Chloroform	1.72	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Carbon tetrachloride	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Benzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	9/10/2020 2:55:40 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Bromodichloromethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Dibromomethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Toluene	3.98	1.00		µg/L	1	9/10/2020 2:55:40 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Dibromochloromethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	9/10/2020 2:55:40 AM
Chlorobenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Ethylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
m,p-Xylene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
o-Xylene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Styrene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Isopropylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Bromoform	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM

Client: PES Environmental, Inc.
Collection Date: 9/2/2020 3:45:00 PM
Project: MVSC - Harris
Lab ID: 2009053-023
Matrix: Water
Client Sample ID: **DRUM-090220**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29612 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
n-Propylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Bromobenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
2-Chlorotoluene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
4-Chlorotoluene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
tert-Butylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	9/10/2020 2:55:40 AM
sec-Butylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
n-Butylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	9/10/2020 2:55:40 AM
Naphthalene	ND	1.00		µg/L	1	9/10/2020 2:55:40 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	9/10/2020 2:55:40 AM
Surr: Dibromofluoromethane	101	83.7 - 117		%Rec	1	9/10/2020 2:55:40 AM
Surr: Toluene-d8	95.5	87.6 - 113		%Rec	1	9/10/2020 2:55:40 AM
Surr: 1-Bromo-4-fluorobenzene	104	81.2 - 113		%Rec	1	9/10/2020 2:55:40 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

JC 9/17/2020

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

PES Environmental, Inc.
Matt Dahl
1215 Fourth Avenue, Suite 1350
Seattle, WA 98161

RE: MVSC
Work Order Number: 2009260

January 05, 2021

Attention Matt Dahl:

Fremont Analytical, Inc. received 20 sample(s) on 9/17/2020 for the analyses presented in the following report.

Sample Moisture (Percent Moisture)
Volatile Organic Compounds by EPA Method 8260D
Volatile Organic Compounds by EPA Method 8260D SIM

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,



Brianna Barnes
Project Manager

Date: *01/05/2021*

CLIENT: PES Environmental, Inc.
Project: MVSC
Work Order: 2009260

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2009260-001	Ex-1-1.5	09/17/2020 8:45 AM	09/17/2020 1:33 PM
2009260-002	Ex-1-4	09/17/2020 8:50 AM	09/17/2020 1:33 PM
2009260-003	Ex-2-1	09/17/2020 8:55 AM	09/17/2020 1:33 PM
2009260-004	Ex-2-4	09/17/2020 9:00 AM	09/17/2020 1:33 PM
2009260-005	Ex-3-3	09/17/2020 9:10 AM	09/17/2020 1:33 PM
2009260-006	Ex-3-4	09/17/2020 9:15 AM	09/17/2020 1:33 PM
2009260-007	Ex-4-2	09/17/2020 9:35 AM	09/17/2020 1:33 PM
2009260-008	Ex-4-4	09/17/2020 9:40 AM	09/17/2020 1:33 PM
2009260-009	Ex-5-2	09/17/2020 9:20 AM	09/17/2020 1:33 PM
2009260-010	Ex-6-3	09/17/2020 9:55 AM	09/17/2020 1:33 PM
2009260-011	Ex-7-2	09/17/2020 10:05 AM	09/17/2020 1:33 PM
2009260-012	Ex-8-1.5	09/17/2020 10:15 AM	09/17/2020 1:33 PM
2009260-013	Ex-9-3	09/17/2020 10:25 AM	09/17/2020 1:33 PM
2009260-014	Ex-10-3	09/17/2020 10:30 AM	09/17/2020 1:33 PM
2009260-015	Ex-15-2	09/17/2020 10:50 AM	09/17/2020 1:33 PM
2009260-016	Ex-14-2	09/17/2020 10:55 AM	09/17/2020 1:33 PM
2009260-017	Ex-13-2	09/17/2020 11:05 AM	09/17/2020 1:33 PM
2009260-018	Ex-12-2	09/17/2020 11:10 AM	09/17/2020 1:33 PM
2009260-019	Ex-11-2	09/17/2020 11:15 AM	09/17/2020 1:33 PM
2009260-020	TRIP BLANK	09/15/2020 7:05 AM	09/17/2020 1:33 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2009260**
Date: **1/5/2021**

CLIENT: PES Environmental, Inc.
Project: MVSC

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

1/5/2021: Revision 1 includes addition of MEK data as requested by client.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 8:45:00 AM
Project: MVSC
Lab ID: 2009260-001 **Matrix:** Soil
Client Sample ID: **Ex-1-1.5**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29706		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Chloromethane	ND	0.0693		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Vinyl chloride	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Bromomethane	ND	0.0693		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Trichlorofluoromethane (CFC-11)	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Chloroethane	ND	0.0693		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,1-Dichloroethene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Methylene chloride	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
trans-1,2-Dichloroethene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Methyl tert-butyl ether (MTBE)	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,1-Dichloroethane	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
cis-1,2-Dichloroethene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
(MEK) 2-Butanone	ND	0.347		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Chloroform	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,1,1-Trichloroethane (TCA)	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,1-Dichloropropene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Carbon tetrachloride	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,2-Dichloroethane (EDC)	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Benzene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Trichloroethene (TCE)	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,2-Dichloropropane	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Bromodichloromethane	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Dibromomethane	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
cis-1,3-Dichloropropene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Toluene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
trans-1,3-Dichloropropylene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,1,2-Trichloroethane	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,3-Dichloropropane	ND	0.0347		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Tetrachloroethene (PCE)	0.144	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Dibromochloromethane	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,2-Dibromoethane (EDB)	ND	0.00693		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Chlorobenzene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,1,1,2-Tetrachloroethane	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Ethylbenzene	ND	0.0347		mg/Kg-dry	1	9/17/2020 6:11:17 PM
m,p-Xylene	ND	0.0693		mg/Kg-dry	1	9/17/2020 6:11:17 PM
o-Xylene	ND	0.0347		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Styrene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Isopropylbenzene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Bromoform	ND	0.0693		mg/Kg-dry	1	9/17/2020 6:11:17 PM

Analytical Report

Work Order: **2009260**
Date Reported: **1/5/2021**

Client: PES Environmental, Inc.
Collection Date: 9/17/2020 8:45:00 AM
Project: MVSC
Lab ID: 2009260-001
Matrix: Soil
Client Sample ID: **Ex-1-1.5**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29706		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
n-Propylbenzene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Bromobenzene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,3,5-Trimethylbenzene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
2-Chlorotoluene	ND	0.0347		mg/Kg-dry	1	9/17/2020 6:11:17 PM
4-Chlorotoluene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
tert-Butylbenzene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,2,3-Trichloropropane	ND	0.0347		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,2,4-Trichlorobenzene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
sec-Butylbenzene	ND	0.0347		mg/Kg-dry	1	9/17/2020 6:11:17 PM
4-Isopropyltoluene	ND	0.0347		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,3-Dichlorobenzene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,4-Dichlorobenzene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
n-Butylbenzene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,2-Dichlorobenzene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,2-Dibromo-3-chloropropane	ND	0.693		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,2,4-Trimethylbenzene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Hexachloro-1,3-butadiene	ND	0.0347		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Naphthalene	ND	0.0693		mg/Kg-dry	1	9/17/2020 6:11:17 PM
1,2,3-Trichlorobenzene	ND	0.0277		mg/Kg-dry	1	9/17/2020 6:11:17 PM
Surr: Dibromofluoromethane	101	85.2 - 113		%Rec	1	9/17/2020 6:11:17 PM
Surr: Toluene-d8	99.9	88.5 - 110		%Rec	1	9/17/2020 6:11:17 PM
Surr: 1-Bromo-4-fluorobenzene	97.0	88.6 - 109		%Rec	1	9/17/2020 6:11:17 PM
Sample Moisture (Percent Moisture)				Batch ID: R61930		Analyst: CJ
Percent Moisture	14.2	0.500		wt%	1	9/18/2020 10:36:51 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 8:50:00 AM
Project: MVSC
Lab ID: 2009260-002 **Matrix:** Soil
Client Sample ID: **Ex-1-4**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29706		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Chloromethane	ND	0.0605		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Vinyl chloride	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Bromomethane	ND	0.0605		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Trichlorofluoromethane (CFC-11)	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Chloroethane	ND	0.0605		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,1-Dichloroethene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Methylene chloride	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
trans-1,2-Dichloroethene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Methyl tert-butyl ether (MTBE)	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,1-Dichloroethane	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
cis-1,2-Dichloroethene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
(MEK) 2-Butanone	ND	0.302		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Chloroform	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,1,1-Trichloroethane (TCA)	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,1-Dichloropropene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Carbon tetrachloride	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,2-Dichloroethane (EDC)	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Benzene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Trichloroethene (TCE)	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,2-Dichloropropane	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Bromodichloromethane	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Dibromomethane	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
cis-1,3-Dichloropropene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Toluene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
trans-1,3-Dichloropropylene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,1,2-Trichloroethane	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,3-Dichloropropane	ND	0.0302		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Tetrachloroethene (PCE)	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Dibromochloromethane	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,2-Dibromoethane (EDB)	ND	0.00605		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Chlorobenzene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,1,1,2-Tetrachloroethane	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Ethylbenzene	ND	0.0302		mg/Kg-dry	1	9/17/2020 6:41:25 PM
m,p-Xylene	ND	0.0605		mg/Kg-dry	1	9/17/2020 6:41:25 PM
o-Xylene	ND	0.0302		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Styrene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Isopropylbenzene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Bromoform	ND	0.0605		mg/Kg-dry	1	9/17/2020 6:41:25 PM

Analytical Report

Work Order: **2009260**
Date Reported: **1/5/2021**

Client: PES Environmental, Inc.
Collection Date: 9/17/2020 8:50:00 AM
Project: MVSC
Lab ID: 2009260-002
Matrix: Soil
Client Sample ID: **Ex-1-4**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29706		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
n-Propylbenzene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Bromobenzene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,3,5-Trimethylbenzene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
2-Chlorotoluene	ND	0.0302		mg/Kg-dry	1	9/17/2020 6:41:25 PM
4-Chlorotoluene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
tert-Butylbenzene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,2,3-Trichloropropane	ND	0.0302		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,2,4-Trichlorobenzene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
sec-Butylbenzene	ND	0.0302		mg/Kg-dry	1	9/17/2020 6:41:25 PM
4-Isopropyltoluene	ND	0.0302		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,3-Dichlorobenzene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,4-Dichlorobenzene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
n-Butylbenzene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,2-Dichlorobenzene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,2-Dibromo-3-chloropropane	ND	0.605		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,2,4-Trimethylbenzene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Hexachloro-1,3-butadiene	ND	0.0302		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Naphthalene	ND	0.0605		mg/Kg-dry	1	9/17/2020 6:41:25 PM
1,2,3-Trichlorobenzene	ND	0.0242		mg/Kg-dry	1	9/17/2020 6:41:25 PM
Surr: Dibromofluoromethane	99.6	85.2 - 113		%Rec	1	9/17/2020 6:41:25 PM
Surr: Toluene-d8	100	88.5 - 110		%Rec	1	9/17/2020 6:41:25 PM
Surr: 1-Bromo-4-fluorobenzene	96.8	88.6 - 109		%Rec	1	9/17/2020 6:41:25 PM
Sample Moisture (Percent Moisture)				Batch ID: R61930		Analyst: CJ
Percent Moisture	4.64	0.500		wt%	1	9/18/2020 10:36:51 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 8:55:00 AM
Project: MVSC
Lab ID: 2009260-003 **Matrix:** Soil
Client Sample ID: **Ex-2-1**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29706 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Chloromethane	ND	0.0582		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Vinyl chloride	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Bromomethane	ND	0.0582		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Trichlorofluoromethane (CFC-11)	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Chloroethane	ND	0.0582		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,1-Dichloroethene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Methylene chloride	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
trans-1,2-Dichloroethene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Methyl tert-butyl ether (MTBE)	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,1-Dichloroethane	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
cis-1,2-Dichloroethene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
(MEK) 2-Butanone	ND	0.291		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Chloroform	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,1,1-Trichloroethane (TCA)	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,1-Dichloropropene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Carbon tetrachloride	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,2-Dichloroethane (EDC)	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Benzene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Trichloroethene (TCE)	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,2-Dichloropropane	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Bromodichloromethane	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Dibromomethane	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
cis-1,3-Dichloropropene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Toluene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
trans-1,3-Dichloropropylene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,1,2-Trichloroethane	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,3-Dichloropropane	ND	0.0291		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Tetrachloroethene (PCE)	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Dibromochloromethane	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,2-Dibromoethane (EDB)	ND	0.00582		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Chlorobenzene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,1,1,2-Tetrachloroethane	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Ethylbenzene	ND	0.0291		mg/Kg-dry	1	9/17/2020 7:11:33 PM
m,p-Xylene	ND	0.0582		mg/Kg-dry	1	9/17/2020 7:11:33 PM
o-Xylene	ND	0.0291		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Styrene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Isopropylbenzene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Bromoform	ND	0.0582		mg/Kg-dry	1	9/17/2020 7:11:33 PM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 8:55:00 AM
Project: MVSC
Lab ID: 2009260-003 **Matrix:** Soil
Client Sample ID: **Ex-2-1**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29706		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
n-Propylbenzene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Bromobenzene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,3,5-Trimethylbenzene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
2-Chlorotoluene	ND	0.0291		mg/Kg-dry	1	9/17/2020 7:11:33 PM
4-Chlorotoluene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
tert-Butylbenzene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,2,3-Trichloropropane	ND	0.0291		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,2,4-Trichlorobenzene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
sec-Butylbenzene	ND	0.0291		mg/Kg-dry	1	9/17/2020 7:11:33 PM
4-Isopropyltoluene	ND	0.0291		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,3-Dichlorobenzene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,4-Dichlorobenzene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
n-Butylbenzene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,2-Dichlorobenzene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,2-Dibromo-3-chloropropane	ND	0.582		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,2,4-Trimethylbenzene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Hexachloro-1,3-butadiene	ND	0.0291		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Naphthalene	ND	0.0582		mg/Kg-dry	1	9/17/2020 7:11:33 PM
1,2,3-Trichlorobenzene	ND	0.0233		mg/Kg-dry	1	9/17/2020 7:11:33 PM
Surr: Dibromofluoromethane	98.4	85.2 - 113		%Rec	1	9/17/2020 7:11:33 PM
Surr: Toluene-d8	99.1	88.5 - 110		%Rec	1	9/17/2020 7:11:33 PM
Surr: 1-Bromo-4-fluorobenzene	96.0	88.6 - 109		%Rec	1	9/17/2020 7:11:33 PM
Sample Moisture (Percent Moisture)				Batch ID: R61930		Analyst: CJ
Percent Moisture	5.06	0.500		wt%	1	9/18/2020 10:36:51 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 9:00:00 AM
Project: MVSC
Lab ID: 2009260-004 **Matrix:** Soil
Client Sample ID: **Ex-2-4**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29706 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Chloromethane	ND	0.0650		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Vinyl chloride	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Bromomethane	ND	0.0650		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Trichlorofluoromethane (CFC-11)	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Chloroethane	ND	0.0650		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,1-Dichloroethene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Methylene chloride	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
trans-1,2-Dichloroethene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Methyl tert-butyl ether (MTBE)	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,1-Dichloroethane	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
cis-1,2-Dichloroethene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
(MEK) 2-Butanone	ND	0.325		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Chloroform	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,1,1-Trichloroethane (TCA)	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,1-Dichloropropene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Carbon tetrachloride	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,2-Dichloroethane (EDC)	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Benzene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Trichloroethene (TCE)	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,2-Dichloropropane	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Bromodichloromethane	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Dibromomethane	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
cis-1,3-Dichloropropene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Toluene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
trans-1,3-Dichloropropylene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,1,2-Trichloroethane	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,3-Dichloropropane	ND	0.0325		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Tetrachloroethene (PCE)	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Dibromochloromethane	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,2-Dibromoethane (EDB)	ND	0.00650		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Chlorobenzene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,1,1,2-Tetrachloroethane	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Ethylbenzene	ND	0.0325		mg/Kg-dry	1	9/17/2020 7:41:39 PM
m,p-Xylene	ND	0.0650		mg/Kg-dry	1	9/17/2020 7:41:39 PM
o-Xylene	ND	0.0325		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Styrene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Isopropylbenzene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Bromoform	ND	0.0650		mg/Kg-dry	1	9/17/2020 7:41:39 PM

Analytical Report

Work Order: **2009260**
Date Reported: **1/5/2021**

Client: PES Environmental, Inc.
Collection Date: 9/17/2020 9:00:00 AM
Project: MVSC
Lab ID: 2009260-004
Matrix: Soil
Client Sample ID: **Ex-2-4**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29706		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
n-Propylbenzene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Bromobenzene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,3,5-Trimethylbenzene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
2-Chlorotoluene	ND	0.0325		mg/Kg-dry	1	9/17/2020 7:41:39 PM
4-Chlorotoluene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
tert-Butylbenzene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,2,3-Trichloropropane	ND	0.0325		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,2,4-Trichlorobenzene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
sec-Butylbenzene	ND	0.0325		mg/Kg-dry	1	9/17/2020 7:41:39 PM
4-Isopropyltoluene	ND	0.0325		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,3-Dichlorobenzene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,4-Dichlorobenzene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
n-Butylbenzene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,2-Dichlorobenzene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,2-Dibromo-3-chloropropane	ND	0.650		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,2,4-Trimethylbenzene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Hexachloro-1,3-butadiene	ND	0.0325		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Naphthalene	ND	0.0650		mg/Kg-dry	1	9/17/2020 7:41:39 PM
1,2,3-Trichlorobenzene	ND	0.0260		mg/Kg-dry	1	9/17/2020 7:41:39 PM
Surr: Dibromofluoromethane	101	85.2 - 113		%Rec	1	9/17/2020 7:41:39 PM
Surr: Toluene-d8	99.8	88.5 - 110		%Rec	1	9/17/2020 7:41:39 PM
Surr: 1-Bromo-4-fluorobenzene	97.3	88.6 - 109		%Rec	1	9/17/2020 7:41:39 PM
Sample Moisture (Percent Moisture)				Batch ID: R61930		Analyst: CJ
Percent Moisture	17.2	0.500		wt%	1	9/18/2020 10:36:51 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 9:10:00 AM
Project: MVSC
Lab ID: 2009260-005 **Matrix:** Soil
Client Sample ID: **Ex-3-3**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29706 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Chloromethane	ND	0.0599		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Vinyl chloride	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Bromomethane	ND	0.0599		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Trichlorofluoromethane (CFC-11)	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Chloroethane	ND	0.0599		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,1-Dichloroethene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Methylene chloride	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
trans-1,2-Dichloroethene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Methyl tert-butyl ether (MTBE)	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,1-Dichloroethane	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
cis-1,2-Dichloroethene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
(MEK) 2-Butanone	ND	0.299		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Chloroform	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,1,1-Trichloroethane (TCA)	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,1-Dichloropropene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Carbon tetrachloride	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,2-Dichloroethane (EDC)	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Benzene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Trichloroethene (TCE)	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,2-Dichloropropane	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Bromodichloromethane	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Dibromomethane	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
cis-1,3-Dichloropropene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Toluene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
trans-1,3-Dichloropropylene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,1,2-Trichloroethane	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,3-Dichloropropane	ND	0.0299		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Tetrachloroethene (PCE)	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Dibromochloromethane	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,2-Dibromoethane (EDB)	ND	0.00599		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Chlorobenzene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,1,1,2-Tetrachloroethane	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Ethylbenzene	ND	0.0299		mg/Kg-dry	1	9/17/2020 8:11:46 PM
m,p-Xylene	ND	0.0599		mg/Kg-dry	1	9/17/2020 8:11:46 PM
o-Xylene	ND	0.0299		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Styrene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Isopropylbenzene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Bromoform	ND	0.0599		mg/Kg-dry	1	9/17/2020 8:11:46 PM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 9:10:00 AM
Project: MVSC
Lab ID: 2009260-005 **Matrix:** Soil
Client Sample ID: **Ex-3-3**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29706		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
n-Propylbenzene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Bromobenzene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,3,5-Trimethylbenzene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
2-Chlorotoluene	ND	0.0299		mg/Kg-dry	1	9/17/2020 8:11:46 PM
4-Chlorotoluene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
tert-Butylbenzene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,2,3-Trichloropropane	ND	0.0299		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,2,4-Trichlorobenzene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
sec-Butylbenzene	ND	0.0299		mg/Kg-dry	1	9/17/2020 8:11:46 PM
4-Isopropyltoluene	ND	0.0299		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,3-Dichlorobenzene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,4-Dichlorobenzene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
n-Butylbenzene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,2-Dichlorobenzene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,2-Dibromo-3-chloropropane	ND	0.599		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,2,4-Trimethylbenzene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Hexachloro-1,3-butadiene	ND	0.0299		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Naphthalene	ND	0.0599		mg/Kg-dry	1	9/17/2020 8:11:46 PM
1,2,3-Trichlorobenzene	ND	0.0239		mg/Kg-dry	1	9/17/2020 8:11:46 PM
Surr: Dibromofluoromethane	98.5	85.2 - 113		%Rec	1	9/17/2020 8:11:46 PM
Surr: Toluene-d8	100	88.5 - 110		%Rec	1	9/17/2020 8:11:46 PM
Surr: 1-Bromo-4-fluorobenzene	96.3	88.6 - 109		%Rec	1	9/17/2020 8:11:46 PM
Sample Moisture (Percent Moisture)				Batch ID: R61930		Analyst: CJ
Percent Moisture	14.0	0.500		wt%	1	9/18/2020 10:36:51 AM

Client: PES Environmental, Inc.
Collection Date: 9/17/2020 9:15:00 AM
Project: MVSC
Lab ID: 2009260-006
Matrix: Soil
Client Sample ID: **Ex-3-4**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29706 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Chloromethane	ND	0.0601		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Vinyl chloride	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Bromomethane	ND	0.0601		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Trichlorofluoromethane (CFC-11)	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Chloroethane	ND	0.0601		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,1-Dichloroethene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Methylene chloride	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
trans-1,2-Dichloroethene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Methyl tert-butyl ether (MTBE)	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,1-Dichloroethane	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
cis-1,2-Dichloroethene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
(MEK) 2-Butanone	ND	0.300		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Chloroform	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,1,1-Trichloroethane (TCA)	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,1-Dichloropropene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Carbon tetrachloride	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,2-Dichloroethane (EDC)	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Benzene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Trichloroethene (TCE)	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,2-Dichloropropane	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Bromodichloromethane	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Dibromomethane	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
cis-1,3-Dichloropropene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Toluene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
trans-1,3-Dichloropropylene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,1,2-Trichloroethane	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,3-Dichloropropane	ND	0.0300		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Tetrachloroethene (PCE)	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Dibromochloromethane	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,2-Dibromoethane (EDB)	ND	0.00601		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Chlorobenzene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,1,1,2-Tetrachloroethane	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Ethylbenzene	ND	0.0300		mg/Kg-dry	1	9/17/2020 8:41:55 PM
m,p-Xylene	ND	0.0601		mg/Kg-dry	1	9/17/2020 8:41:55 PM
o-Xylene	ND	0.0300		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Styrene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Isopropylbenzene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Bromoform	ND	0.0601		mg/Kg-dry	1	9/17/2020 8:41:55 PM

Analytical Report

Work Order: **2009260**
Date Reported: **1/5/2021**

Client: PES Environmental, Inc.
Collection Date: 9/17/2020 9:15:00 AM
Project: MVSC
Lab ID: 2009260-006
Matrix: Soil
Client Sample ID: **Ex-3-4**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29706		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
n-Propylbenzene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Bromobenzene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,3,5-Trimethylbenzene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
2-Chlorotoluene	ND	0.0300		mg/Kg-dry	1	9/17/2020 8:41:55 PM
4-Chlorotoluene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
tert-Butylbenzene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,2,3-Trichloropropane	ND	0.0300		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,2,4-Trichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
sec-Butylbenzene	ND	0.0300		mg/Kg-dry	1	9/17/2020 8:41:55 PM
4-Isopropyltoluene	ND	0.0300		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,3-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,4-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
n-Butylbenzene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,2-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,2-Dibromo-3-chloropropane	ND	0.601		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,2,4-Trimethylbenzene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Hexachloro-1,3-butadiene	ND	0.0300		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Naphthalene	ND	0.0601		mg/Kg-dry	1	9/17/2020 8:41:55 PM
1,2,3-Trichlorobenzene	ND	0.0240		mg/Kg-dry	1	9/17/2020 8:41:55 PM
Surr: Dibromofluoromethane	100	85.2 - 113		%Rec	1	9/17/2020 8:41:55 PM
Surr: Toluene-d8	99.8	88.5 - 110		%Rec	1	9/17/2020 8:41:55 PM
Surr: 1-Bromo-4-fluorobenzene	95.2	88.6 - 109		%Rec	1	9/17/2020 8:41:55 PM
Sample Moisture (Percent Moisture)				Batch ID: R61930		Analyst: CJ
Percent Moisture	15.1	0.500		wt%	1	9/18/2020 10:36:51 AM

Client: PES Environmental, Inc.
Collection Date: 9/17/2020 9:35:00 AM
Project: MVSC
Lab ID: 2009260-007
Matrix: Soil
Client Sample ID: **Ex-4-2**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29706		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Chloromethane	ND	0.0641		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Vinyl chloride	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Bromomethane	ND	0.0641		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Trichlorofluoromethane (CFC-11)	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Chloroethane	ND	0.0641		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,1-Dichloroethene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Methylene chloride	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
trans-1,2-Dichloroethene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Methyl tert-butyl ether (MTBE)	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,1-Dichloroethane	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
cis-1,2-Dichloroethene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
(MEK) 2-Butanone	ND	0.320		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Chloroform	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,1,1-Trichloroethane (TCA)	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,1-Dichloropropene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Carbon tetrachloride	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,2-Dichloroethane (EDC)	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Benzene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Trichloroethene (TCE)	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,2-Dichloropropane	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Bromodichloromethane	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Dibromomethane	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
cis-1,3-Dichloropropene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Toluene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
trans-1,3-Dichloropropylene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,1,2-Trichloroethane	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,3-Dichloropropane	ND	0.0320		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Tetrachloroethene (PCE)	0.130	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Dibromochloromethane	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,2-Dibromoethane (EDB)	ND	0.00641		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Chlorobenzene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,1,1,2-Tetrachloroethane	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Ethylbenzene	ND	0.0320		mg/Kg-dry	1	9/17/2020 9:12:02 PM
m,p-Xylene	ND	0.0641		mg/Kg-dry	1	9/17/2020 9:12:02 PM
o-Xylene	ND	0.0320		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Styrene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Isopropylbenzene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Bromoform	ND	0.0641		mg/Kg-dry	1	9/17/2020 9:12:02 PM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 9:35:00 AM
Project: MVSC
Lab ID: 2009260-007 **Matrix:** Soil
Client Sample ID: **Ex-4-2**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29706		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
n-Propylbenzene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Bromobenzene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,3,5-Trimethylbenzene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
2-Chlorotoluene	ND	0.0320		mg/Kg-dry	1	9/17/2020 9:12:02 PM
4-Chlorotoluene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
tert-Butylbenzene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,2,3-Trichloropropane	ND	0.0320		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,2,4-Trichlorobenzene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
sec-Butylbenzene	ND	0.0320		mg/Kg-dry	1	9/17/2020 9:12:02 PM
4-Isopropyltoluene	ND	0.0320		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,3-Dichlorobenzene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,4-Dichlorobenzene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
n-Butylbenzene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,2-Dichlorobenzene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,2-Dibromo-3-chloropropane	ND	0.641		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,2,4-Trimethylbenzene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Hexachloro-1,3-butadiene	ND	0.0320		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Naphthalene	ND	0.0641		mg/Kg-dry	1	9/17/2020 9:12:02 PM
1,2,3-Trichlorobenzene	ND	0.0256		mg/Kg-dry	1	9/17/2020 9:12:02 PM
Surr: Dibromofluoromethane	101	85.2 - 113		%Rec	1	9/17/2020 9:12:02 PM
Surr: Toluene-d8	99.2	88.5 - 110		%Rec	1	9/17/2020 9:12:02 PM
Surr: 1-Bromo-4-fluorobenzene	96.2	88.6 - 109		%Rec	1	9/17/2020 9:12:02 PM
Sample Moisture (Percent Moisture)				Batch ID: R61930		Analyst: CJ
Percent Moisture	18.3	0.500		wt%	1	9/18/2020 10:36:51 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 9:40:00 AM
Project: MVSC
Lab ID: 2009260-008 **Matrix:** Soil
Client Sample ID: **Ex-4-4**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29706 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Chloromethane	ND	0.0560		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Vinyl chloride	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Bromomethane	ND	0.0560		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Trichlorofluoromethane (CFC-11)	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Chloroethane	ND	0.0560		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,1-Dichloroethene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Methylene chloride	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
trans-1,2-Dichloroethene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Methyl tert-butyl ether (MTBE)	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,1-Dichloroethane	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
cis-1,2-Dichloroethene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
(MEK) 2-Butanone	ND	0.280		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Chloroform	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,1,1-Trichloroethane (TCA)	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,1-Dichloropropene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Carbon tetrachloride	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,2-Dichloroethane (EDC)	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Benzene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Trichloroethene (TCE)	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,2-Dichloropropane	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Bromodichloromethane	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Dibromomethane	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
cis-1,3-Dichloropropene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Toluene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
trans-1,3-Dichloropropylene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,1,2-Trichloroethane	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,3-Dichloropropane	ND	0.0280		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Tetrachloroethene (PCE)	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Dibromochloromethane	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,2-Dibromoethane (EDB)	ND	0.00560		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Chlorobenzene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,1,1,2-Tetrachloroethane	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Ethylbenzene	ND	0.0280		mg/Kg-dry	1	9/17/2020 9:42:11 PM
m,p-Xylene	ND	0.0560		mg/Kg-dry	1	9/17/2020 9:42:11 PM
o-Xylene	ND	0.0280		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Styrene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Isopropylbenzene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Bromoform	ND	0.0560		mg/Kg-dry	1	9/17/2020 9:42:11 PM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 9:40:00 AM
Project: MVSC
Lab ID: 2009260-008 **Matrix:** Soil
Client Sample ID: **Ex-4-4**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29706		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
n-Propylbenzene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Bromobenzene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,3,5-Trimethylbenzene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
2-Chlorotoluene	ND	0.0280		mg/Kg-dry	1	9/17/2020 9:42:11 PM
4-Chlorotoluene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
tert-Butylbenzene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,2,3-Trichloropropane	ND	0.0280		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,2,4-Trichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
sec-Butylbenzene	ND	0.0280		mg/Kg-dry	1	9/17/2020 9:42:11 PM
4-Isopropyltoluene	ND	0.0280		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,3-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,4-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
n-Butylbenzene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,2-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,2-Dibromo-3-chloropropane	ND	0.560		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,2,4-Trimethylbenzene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Hexachloro-1,3-butadiene	ND	0.0280		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Naphthalene	ND	0.0560		mg/Kg-dry	1	9/17/2020 9:42:11 PM
1,2,3-Trichlorobenzene	ND	0.0224		mg/Kg-dry	1	9/17/2020 9:42:11 PM
Surr: Dibromofluoromethane	99.6	85.2 - 113		%Rec	1	9/17/2020 9:42:11 PM
Surr: Toluene-d8	100	88.5 - 110		%Rec	1	9/17/2020 9:42:11 PM
Surr: 1-Bromo-4-fluorobenzene	95.9	88.6 - 109		%Rec	1	9/17/2020 9:42:11 PM
Sample Moisture (Percent Moisture)				Batch ID: R61930		Analyst: CJ
Percent Moisture	15.4	0.500		wt%	1	9/18/2020 10:36:51 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 9:20:00 AM
Project: MVSC
Lab ID: 2009260-009 **Matrix:** Soil
Client Sample ID: **Ex-5-2**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 29706 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Chloromethane	ND	0.0593		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Vinyl chloride	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Bromomethane	ND	0.0593		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Trichlorofluoromethane (CFC-11)	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Chloroethane	ND	0.0593		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,1-Dichloroethene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Methylene chloride	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
trans-1,2-Dichloroethene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Methyl tert-butyl ether (MTBE)	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,1-Dichloroethane	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
cis-1,2-Dichloroethene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
(MEK) 2-Butanone	ND	0.297		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Chloroform	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,1,1-Trichloroethane (TCA)	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,1-Dichloropropene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Carbon tetrachloride	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,2-Dichloroethane (EDC)	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Benzene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Trichloroethene (TCE)	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,2-Dichloropropane	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Bromodichloromethane	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Dibromomethane	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
cis-1,3-Dichloropropene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Toluene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
trans-1,3-Dichloropropylene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,1,2-Trichloroethane	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,3-Dichloropropane	ND	0.0297		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Tetrachloroethene (PCE)	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Dibromochloromethane	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,2-Dibromoethane (EDB)	ND	0.00593		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Chlorobenzene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,1,1,2-Tetrachloroethane	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Ethylbenzene	ND	0.0297		mg/Kg-dry	1	9/17/2020 10:12:19 PM
m,p-Xylene	ND	0.0593		mg/Kg-dry	1	9/17/2020 10:12:19 PM
o-Xylene	ND	0.0297		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Styrene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Isopropylbenzene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Bromoform	ND	0.0593		mg/Kg-dry	1	9/17/2020 10:12:19 PM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 9:20:00 AM
Project: MVSC
Lab ID: 2009260-009 **Matrix:** Soil
Client Sample ID: **Ex-5-2**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29706		Analyst: KT
1,1,2,2-Tetrachloroethane	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
n-Propylbenzene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Bromobenzene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,3,5-Trimethylbenzene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
2-Chlorotoluene	ND	0.0297		mg/Kg-dry	1	9/17/2020 10:12:19 PM
4-Chlorotoluene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
tert-Butylbenzene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,2,3-Trichloropropane	ND	0.0297		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,2,4-Trichlorobenzene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
sec-Butylbenzene	ND	0.0297		mg/Kg-dry	1	9/17/2020 10:12:19 PM
4-Isopropyltoluene	ND	0.0297		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,3-Dichlorobenzene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,4-Dichlorobenzene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
n-Butylbenzene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,2-Dichlorobenzene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,2-Dibromo-3-chloropropane	ND	0.593		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,2,4-Trimethylbenzene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Hexachloro-1,3-butadiene	ND	0.0297		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Naphthalene	ND	0.0593		mg/Kg-dry	1	9/17/2020 10:12:19 PM
1,2,3-Trichlorobenzene	ND	0.0237		mg/Kg-dry	1	9/17/2020 10:12:19 PM
Surr: Dibromofluoromethane	101	85.2 - 113		%Rec	1	9/17/2020 10:12:19 PM
Surr: Toluene-d8	100	88.5 - 110		%Rec	1	9/17/2020 10:12:19 PM
Surr: 1-Bromo-4-fluorobenzene	96.1	88.6 - 109		%Rec	1	9/17/2020 10:12:19 PM
Sample Moisture (Percent Moisture)				Batch ID: R61930		Analyst: CJ
Percent Moisture	15.8	0.500		wt%	1	9/18/2020 10:36:51 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 9:55:00 AM
Project: MVSC
Lab ID: 2009260-010 **Matrix:** Soil
Client Sample ID: **Ex-6-3**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM				Batch ID: 29719		Analyst: CR
Vinyl chloride	ND	0.00659		mg/Kg-dry	1	9/18/2020 6:25:59 PM
1,1-Dichloroethene (DCE)	ND	0.00555		mg/Kg-dry	1	9/18/2020 6:25:59 PM
Methylene chloride	ND	0.0472		mg/Kg-dry	1	9/18/2020 6:25:59 PM
trans-1,2-Dichloroethene	ND	0.0110		mg/Kg-dry	1	9/18/2020 6:25:59 PM
Methyl tert-butyl ether (MTBE)	ND	0.00789		mg/Kg-dry	1	9/18/2020 6:25:59 PM
1,1-Dichloroethane	ND	0.00468		mg/Kg-dry	1	9/18/2020 6:25:59 PM
cis-1,2-Dichloroethene	ND	0.00523		mg/Kg-dry	1	9/18/2020 6:25:59 PM
1,1,1-Trichloroethane (TCA)	ND	0.00386		mg/Kg-dry	1	9/18/2020 6:25:59 PM
1,2-Dichloroethane (EDC)	ND	0.00160		mg/Kg-dry	1	9/18/2020 6:25:59 PM
Benzene	ND	0.00605		mg/Kg-dry	1	9/18/2020 6:25:59 PM
Trichloroethene (TCE)	ND	0.00689		mg/Kg-dry	1	9/18/2020 6:25:59 PM
Toluene	ND	0.0293		mg/Kg-dry	1	9/18/2020 6:25:59 PM
1,1,2-Trichloroethane	ND	0.00161		mg/Kg-dry	1	9/18/2020 6:25:59 PM
Tetrachloroethylene (PCE)	ND	0.00565		mg/Kg-dry	1	9/18/2020 6:25:59 PM
1,2-Dibromoethane (EDB)	ND	0.00161		mg/Kg-dry	1	9/18/2020 6:25:59 PM
Ethylbenzene	ND	0.00943		mg/Kg-dry	1	9/18/2020 6:25:59 PM
m,p-Xylene	ND	0.0108		mg/Kg-dry	1	9/18/2020 6:25:59 PM
o-Xylene	ND	0.00331		mg/Kg-dry	1	9/18/2020 6:25:59 PM
1,4-Dioxane	ND	4.42		mg/Kg-dry	1	9/18/2020 6:25:59 PM
1,2-Dibromo-3-chloropropane	ND	0.0141		mg/Kg-dry	1	9/18/2020 6:25:59 PM
Hexachloro-1,3-butadiene	ND	0.00723		mg/Kg-dry	1	9/18/2020 6:25:59 PM
Surr: Dibromofluoromethane	101	76.8 - 130		%Rec	1	9/18/2020 6:25:59 PM
Surr: Toluene-d8	99.6	83.3 - 117		%Rec	1	9/18/2020 6:25:59 PM
Surr: 1-Bromo-4-fluorobenzene	100	82.6 - 115		%Rec	1	9/18/2020 6:25:59 PM
Sample Moisture (Percent Moisture)				Batch ID: R61930		Analyst: CJ
Percent Moisture	19.2	0.500		wt%	1	9/18/2020 10:36:51 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 10:05:00 AM
Project: MVSC
Lab ID: 2009260-011 **Matrix:** Soil
Client Sample ID: **Ex-7-2**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM				Batch ID: 29719		Analyst: CR
Vinyl chloride	ND	0.00723		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,1-Dichloroethene (DCE)	ND	0.00609		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Methylene chloride	ND	0.0517		mg/Kg-dry	1	9/18/2020 7:32:59 PM
trans-1,2-Dichloroethene	ND	0.0121		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Methyl tert-butyl ether (MTBE)	ND	0.00865		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,1-Dichloroethane	ND	0.00513		mg/Kg-dry	1	9/18/2020 7:32:59 PM
cis-1,2-Dichloroethene	ND	0.00573		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,1,1-Trichloroethane (TCA)	ND	0.00423		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,2-Dichloroethane (EDC)	ND	0.00175		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Benzene	ND	0.00663		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Trichloroethene (TCE)	ND	0.00755		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Toluene	ND	0.0322		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,1,2-Trichloroethane	ND	0.00176		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Tetrachloroethylene (PCE)	ND	0.00620		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,2-Dibromoethane (EDB)	ND	0.00177		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Ethylbenzene	ND	0.0103		mg/Kg-dry	1	9/18/2020 7:32:59 PM
m,p-Xylene	ND	0.0118		mg/Kg-dry	1	9/18/2020 7:32:59 PM
o-Xylene	ND	0.00363		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,4-Dioxane	ND	4.85		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,2-Dibromo-3-chloropropane	ND	0.0155		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Hexachloro-1,3-butadiene	ND	0.00793		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Surr: Dibromofluoromethane	101	76.8 - 130		%Rec	1	9/18/2020 7:32:59 PM
Surr: Toluene-d8	98.8	83.3 - 117		%Rec	1	9/18/2020 7:32:59 PM
Surr: 1-Bromo-4-fluorobenzene	99.6	82.6 - 115		%Rec	1	9/18/2020 7:32:59 PM
Sample Moisture (Percent Moisture)				Batch ID: R61930		Analyst: CJ
Percent Moisture	23.2	0.500		wt%	1	9/18/2020 10:36:51 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 10:15:00 AM
Project: MVSC
Lab ID: 2009260-012 **Matrix:** Soil
Client Sample ID: **Ex-8-1.5**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM				Batch ID: 29719		Analyst: CR
Vinyl chloride	ND	0.00737		mg/Kg-dry	1	9/18/2020 8:06:28 PM
1,1-Dichloroethene (DCE)	ND	0.00621		mg/Kg-dry	1	9/18/2020 8:06:28 PM
Methylene chloride	ND	0.0527		mg/Kg-dry	1	9/18/2020 8:06:28 PM
trans-1,2-Dichloroethene	ND	0.0123		mg/Kg-dry	1	9/18/2020 8:06:28 PM
Methyl tert-butyl ether (MTBE)	ND	0.00882		mg/Kg-dry	1	9/18/2020 8:06:28 PM
1,1-Dichloroethane	ND	0.00523		mg/Kg-dry	1	9/18/2020 8:06:28 PM
cis-1,2-Dichloroethene	ND	0.00585		mg/Kg-dry	1	9/18/2020 8:06:28 PM
1,1,1-Trichloroethane (TCA)	ND	0.00431		mg/Kg-dry	1	9/18/2020 8:06:28 PM
1,2-Dichloroethane (EDC)	ND	0.00179		mg/Kg-dry	1	9/18/2020 8:06:28 PM
Benzene	ND	0.00677		mg/Kg-dry	1	9/18/2020 8:06:28 PM
Trichloroethene (TCE)	ND	0.00770		mg/Kg-dry	1	9/18/2020 8:06:28 PM
Toluene	ND	0.0328		mg/Kg-dry	1	9/18/2020 8:06:28 PM
1,1,2-Trichloroethane	ND	0.00180		mg/Kg-dry	1	9/18/2020 8:06:28 PM
Tetrachloroethylene (PCE)	ND	0.00632		mg/Kg-dry	1	9/18/2020 8:06:28 PM
1,2-Dibromoethane (EDB)	ND	0.00180		mg/Kg-dry	1	9/18/2020 8:06:28 PM
Ethylbenzene	ND	0.0105		mg/Kg-dry	1	9/18/2020 8:06:28 PM
m,p-Xylene	ND	0.0121		mg/Kg-dry	1	9/18/2020 8:06:28 PM
o-Xylene	ND	0.00371		mg/Kg-dry	1	9/18/2020 8:06:28 PM
1,4-Dioxane	ND	4.94		mg/Kg-dry	1	9/18/2020 8:06:28 PM
1,2-Dibromo-3-chloropropane	ND	0.0158		mg/Kg-dry	1	9/18/2020 8:06:28 PM
Hexachloro-1,3-butadiene	ND	0.00809		mg/Kg-dry	1	9/18/2020 8:06:28 PM
Surr: Dibromofluoromethane	100	76.8 - 130		%Rec	1	9/18/2020 8:06:28 PM
Surr: Toluene-d8	98.4	83.3 - 117		%Rec	1	9/18/2020 8:06:28 PM
Surr: 1-Bromo-4-fluorobenzene	98.8	82.6 - 115		%Rec	1	9/18/2020 8:06:28 PM
Sample Moisture (Percent Moisture)				Batch ID: R61930		Analyst: CJ
Percent Moisture	7.76	0.500		wt%	1	9/18/2020 10:36:51 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 10:25:00 AM
Project: MVSC
Lab ID: 2009260-013 **Matrix:** Soil
Client Sample ID: **Ex-9-3**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM				Batch ID: 29719		Analyst: CR
Vinyl chloride	ND	0.00777		mg/Kg-dry	1	9/18/2020 8:39:57 PM
1,1-Dichloroethene (DCE)	ND	0.00654		mg/Kg-dry	1	9/18/2020 8:39:57 PM
Methylene chloride	ND	0.0556		mg/Kg-dry	1	9/18/2020 8:39:57 PM
trans-1,2-Dichloroethene	ND	0.0130		mg/Kg-dry	1	9/18/2020 8:39:57 PM
Methyl tert-butyl ether (MTBE)	ND	0.00930		mg/Kg-dry	1	9/18/2020 8:39:57 PM
1,1-Dichloroethane	ND	0.00552		mg/Kg-dry	1	9/18/2020 8:39:57 PM
cis-1,2-Dichloroethene	ND	0.00617		mg/Kg-dry	1	9/18/2020 8:39:57 PM
1,1,1-Trichloroethane (TCA)	ND	0.00455		mg/Kg-dry	1	9/18/2020 8:39:57 PM
1,2-Dichloroethane (EDC)	ND	0.00189		mg/Kg-dry	1	9/18/2020 8:39:57 PM
Benzene	ND	0.00713		mg/Kg-dry	1	9/18/2020 8:39:57 PM
Trichloroethene (TCE)	ND	0.00812		mg/Kg-dry	1	9/18/2020 8:39:57 PM
Toluene	ND	0.0346		mg/Kg-dry	1	9/18/2020 8:39:57 PM
1,1,2-Trichloroethane	ND	0.00189		mg/Kg-dry	1	9/18/2020 8:39:57 PM
Tetrachloroethylene (PCE)	ND	0.00666		mg/Kg-dry	1	9/18/2020 8:39:57 PM
1,2-Dibromoethane (EDB)	ND	0.00190		mg/Kg-dry	1	9/18/2020 8:39:57 PM
Ethylbenzene	ND	0.0111		mg/Kg-dry	1	9/18/2020 8:39:57 PM
m,p-Xylene	ND	0.0127		mg/Kg-dry	1	9/18/2020 8:39:57 PM
o-Xylene	ND	0.00391		mg/Kg-dry	1	9/18/2020 8:39:57 PM
1,4-Dioxane	ND	5.21		mg/Kg-dry	1	9/18/2020 8:39:57 PM
1,2-Dibromo-3-chloropropane	ND	0.0166		mg/Kg-dry	1	9/18/2020 8:39:57 PM
Hexachloro-1,3-butadiene	ND	0.00853		mg/Kg-dry	1	9/18/2020 8:39:57 PM
Surr: Dibromofluoromethane	93.8	76.8 - 130		%Rec	1	9/18/2020 8:39:57 PM
Surr: Toluene-d8	98.7	83.3 - 117		%Rec	1	9/18/2020 8:39:57 PM
Surr: 1-Bromo-4-fluorobenzene	97.6	82.6 - 115		%Rec	1	9/18/2020 8:39:57 PM
Sample Moisture (Percent Moisture)				Batch ID: R61930		Analyst: CJ
Percent Moisture	11.4	0.500		wt%	1	9/18/2020 10:36:51 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 10:30:00 AM
Project: MVSC
Lab ID: 2009260-014 **Matrix:** Soil
Client Sample ID: **Ex-10-3**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM				Batch ID: 29719		Analyst: CR
Vinyl chloride	ND	0.00686		mg/Kg-dry	1	9/18/2020 9:13:27 PM
1,1-Dichloroethene (DCE)	ND	0.00578		mg/Kg-dry	1	9/18/2020 9:13:27 PM
Methylene chloride	ND	0.0491		mg/Kg-dry	1	9/18/2020 9:13:27 PM
trans-1,2-Dichloroethene	ND	0.0115		mg/Kg-dry	1	9/18/2020 9:13:27 PM
Methyl tert-butyl ether (MTBE)	ND	0.00821		mg/Kg-dry	1	9/18/2020 9:13:27 PM
1,1-Dichloroethane	ND	0.00487		mg/Kg-dry	1	9/18/2020 9:13:27 PM
cis-1,2-Dichloroethene	ND	0.00544		mg/Kg-dry	1	9/18/2020 9:13:27 PM
1,1,1-Trichloroethane (TCA)	ND	0.00402		mg/Kg-dry	1	9/18/2020 9:13:27 PM
1,2-Dichloroethane (EDC)	ND	0.00166		mg/Kg-dry	1	9/18/2020 9:13:27 PM
Benzene	ND	0.00630		mg/Kg-dry	1	9/18/2020 9:13:27 PM
Trichloroethene (TCE)	ND	0.00717		mg/Kg-dry	1	9/18/2020 9:13:27 PM
Toluene	ND	0.0305		mg/Kg-dry	1	9/18/2020 9:13:27 PM
1,1,2-Trichloroethane	ND	0.00167		mg/Kg-dry	1	9/18/2020 9:13:27 PM
Tetrachloroethylene (PCE)	ND	0.00588		mg/Kg-dry	1	9/18/2020 9:13:27 PM
1,2-Dibromoethane (EDB)	ND	0.00168		mg/Kg-dry	1	9/18/2020 9:13:27 PM
Ethylbenzene	ND	0.00982		mg/Kg-dry	1	9/18/2020 9:13:27 PM
m,p-Xylene	ND	0.0112		mg/Kg-dry	1	9/18/2020 9:13:27 PM
o-Xylene	ND	0.00345		mg/Kg-dry	1	9/18/2020 9:13:27 PM
1,4-Dioxane	ND	4.60		mg/Kg-dry	1	9/18/2020 9:13:27 PM
1,2-Dibromo-3-chloropropane	ND	0.0147		mg/Kg-dry	1	9/18/2020 9:13:27 PM
Hexachloro-1,3-butadiene	ND	0.00753		mg/Kg-dry	1	9/18/2020 9:13:27 PM
Surr: Dibromofluoromethane	95.3	76.8 - 130		%Rec	1	9/18/2020 9:13:27 PM
Surr: Toluene-d8	98.8	83.3 - 117		%Rec	1	9/18/2020 9:13:27 PM
Surr: 1-Bromo-4-fluorobenzene	97.9	82.6 - 115		%Rec	1	9/18/2020 9:13:27 PM
Sample Moisture (Percent Moisture)				Batch ID: R61957		Analyst: CJ
Percent Moisture	9.28	0.500		wt%	1	9/21/2020 9:09:03 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 10:50:00 AM
Project: MVSC
Lab ID: 2009260-015 **Matrix:** Soil
Client Sample ID: **Ex-15-2**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM				Batch ID: 29719		Analyst: CR
Vinyl chloride	ND	0.00672		mg/Kg-dry	1	9/18/2020 9:46:58 PM
1,1-Dichloroethene (DCE)	ND	0.00565		mg/Kg-dry	1	9/18/2020 9:46:58 PM
Methylene chloride	ND	0.0480		mg/Kg-dry	1	9/18/2020 9:46:58 PM
trans-1,2-Dichloroethene	ND	0.0112		mg/Kg-dry	1	9/18/2020 9:46:58 PM
Methyl tert-butyl ether (MTBE)	ND	0.00803		mg/Kg-dry	1	9/18/2020 9:46:58 PM
1,1-Dichloroethane	ND	0.00477		mg/Kg-dry	1	9/18/2020 9:46:58 PM
cis-1,2-Dichloroethene	ND	0.00533		mg/Kg-dry	1	9/18/2020 9:46:58 PM
1,1,1-Trichloroethane (TCA)	ND	0.00393		mg/Kg-dry	1	9/18/2020 9:46:58 PM
1,2-Dichloroethane (EDC)	ND	0.00163		mg/Kg-dry	1	9/18/2020 9:46:58 PM
Benzene	ND	0.00616		mg/Kg-dry	1	9/18/2020 9:46:58 PM
Trichloroethene (TCE)	ND	0.00701		mg/Kg-dry	1	9/18/2020 9:46:58 PM
Toluene	ND	0.0299		mg/Kg-dry	1	9/18/2020 9:46:58 PM
1,1,2-Trichloroethane	ND	0.00164		mg/Kg-dry	1	9/18/2020 9:46:58 PM
Tetrachloroethylene (PCE)	ND	0.00576		mg/Kg-dry	1	9/18/2020 9:46:58 PM
1,2-Dibromoethane (EDB)	ND	0.00164		mg/Kg-dry	1	9/18/2020 9:46:58 PM
Ethylbenzene	ND	0.00961		mg/Kg-dry	1	9/18/2020 9:46:58 PM
m,p-Xylene	ND	0.0110		mg/Kg-dry	1	9/18/2020 9:46:58 PM
o-Xylene	ND	0.00338		mg/Kg-dry	1	9/18/2020 9:46:58 PM
1,4-Dioxane	ND	4.50		mg/Kg-dry	1	9/18/2020 9:46:58 PM
1,2-Dibromo-3-chloropropane	ND	0.0144		mg/Kg-dry	1	9/18/2020 9:46:58 PM
Hexachloro-1,3-butadiene	ND	0.00736		mg/Kg-dry	1	9/18/2020 9:46:58 PM
Surr: Dibromofluoromethane	102	76.8 - 130		%Rec	1	9/18/2020 9:46:58 PM
Surr: Toluene-d8	99.7	83.3 - 117		%Rec	1	9/18/2020 9:46:58 PM
Surr: 1-Bromo-4-fluorobenzene	101	82.6 - 115		%Rec	1	9/18/2020 9:46:58 PM
Sample Moisture (Percent Moisture)				Batch ID: R61957		Analyst: CJ
Percent Moisture	15.5	0.500		wt%	1	9/21/2020 9:09:03 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 10:55:00 AM
Project: MVSC
Lab ID: 2009260-016 **Matrix:** Soil
Client Sample ID: **Ex-14-2**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM				Batch ID: 29719		Analyst: CR
Vinyl chloride	ND	0.00710		mg/Kg-dry	1	9/18/2020 10:20:27 PM
1,1-Dichloroethene (DCE)	ND	0.00598		mg/Kg-dry	1	9/18/2020 10:20:27 PM
Methylene chloride	ND	0.0508		mg/Kg-dry	1	9/18/2020 10:20:27 PM
trans-1,2-Dichloroethene	ND	0.0119		mg/Kg-dry	1	9/18/2020 10:20:27 PM
Methyl tert-butyl ether (MTBE)	ND	0.00849		mg/Kg-dry	1	9/18/2020 10:20:27 PM
1,1-Dichloroethane	ND	0.00504		mg/Kg-dry	1	9/18/2020 10:20:27 PM
cis-1,2-Dichloroethene	ND	0.00563		mg/Kg-dry	1	9/18/2020 10:20:27 PM
1,1,1-Trichloroethane (TCA)	ND	0.00415		mg/Kg-dry	1	9/18/2020 10:20:27 PM
1,2-Dichloroethane (EDC)	ND	0.00172		mg/Kg-dry	1	9/18/2020 10:20:27 PM
Benzene	ND	0.00651		mg/Kg-dry	1	9/18/2020 10:20:27 PM
Trichloroethene (TCE)	ND	0.00742		mg/Kg-dry	1	9/18/2020 10:20:27 PM
Toluene	ND	0.0316		mg/Kg-dry	1	9/18/2020 10:20:27 PM
1,1,2-Trichloroethane	ND	0.00173		mg/Kg-dry	1	9/18/2020 10:20:27 PM
Tetrachloroethylene (PCE)	ND	0.00608		mg/Kg-dry	1	9/18/2020 10:20:27 PM
1,2-Dibromoethane (EDB)	ND	0.00174		mg/Kg-dry	1	9/18/2020 10:20:27 PM
Ethylbenzene	ND	0.0102		mg/Kg-dry	1	9/18/2020 10:20:27 PM
m,p-Xylene	ND	0.0116		mg/Kg-dry	1	9/18/2020 10:20:27 PM
o-Xylene	ND	0.00357		mg/Kg-dry	1	9/18/2020 10:20:27 PM
1,4-Dioxane	ND	4.76		mg/Kg-dry	1	9/18/2020 10:20:27 PM
1,2-Dibromo-3-chloropropane	ND	0.0152		mg/Kg-dry	1	9/18/2020 10:20:27 PM
Hexachloro-1,3-butadiene	ND	0.00779		mg/Kg-dry	1	9/18/2020 10:20:27 PM
Surr: Dibromofluoromethane	101	76.8 - 130		%Rec	1	9/18/2020 10:20:27 PM
Surr: Toluene-d8	99.8	83.3 - 117		%Rec	1	9/18/2020 10:20:27 PM
Surr: 1-Bromo-4-fluorobenzene	101	82.6 - 115		%Rec	1	9/18/2020 10:20:27 PM
Sample Moisture (Percent Moisture)				Batch ID: R61957		Analyst: CJ
Percent Moisture	9.03	0.500		wt%	1	9/21/2020 9:09:03 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 11:05:00 AM
Project: MVSC
Lab ID: 2009260-017 **Matrix:** Soil
Client Sample ID: **Ex-13-2**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM				Batch ID: 29719		Analyst: CR
Vinyl chloride	ND	0.00749		mg/Kg-dry	1	9/18/2020 10:53:57 PM
1,1-Dichloroethene (DCE)	ND	0.00631		mg/Kg-dry	1	9/18/2020 10:53:57 PM
Methylene chloride	ND	0.0536		mg/Kg-dry	1	9/18/2020 10:53:57 PM
trans-1,2-Dichloroethene	ND	0.0125		mg/Kg-dry	1	9/18/2020 10:53:57 PM
Methyl tert-butyl ether (MTBE)	ND	0.00897		mg/Kg-dry	1	9/18/2020 10:53:57 PM
1,1-Dichloroethane	ND	0.00532		mg/Kg-dry	1	9/18/2020 10:53:57 PM
cis-1,2-Dichloroethene	ND	0.00594		mg/Kg-dry	1	9/18/2020 10:53:57 PM
1,1,1-Trichloroethane (TCA)	ND	0.00439		mg/Kg-dry	1	9/18/2020 10:53:57 PM
1,2-Dichloroethane (EDC)	ND	0.00182		mg/Kg-dry	1	9/18/2020 10:53:57 PM
Benzene	ND	0.00688		mg/Kg-dry	1	9/18/2020 10:53:57 PM
Trichloroethene (TCE)	ND	0.00783		mg/Kg-dry	1	9/18/2020 10:53:57 PM
Toluene	ND	0.0333		mg/Kg-dry	1	9/18/2020 10:53:57 PM
1,1,2-Trichloroethane	ND	0.00183		mg/Kg-dry	1	9/18/2020 10:53:57 PM
Tetrachloroethylene (PCE)	ND	0.00642		mg/Kg-dry	1	9/18/2020 10:53:57 PM
1,2-Dibromoethane (EDB)	ND	0.00183		mg/Kg-dry	1	9/18/2020 10:53:57 PM
Ethylbenzene	ND	0.0107		mg/Kg-dry	1	9/18/2020 10:53:57 PM
m,p-Xylene	ND	0.0123		mg/Kg-dry	1	9/18/2020 10:53:57 PM
o-Xylene	ND	0.00377		mg/Kg-dry	1	9/18/2020 10:53:57 PM
1,4-Dioxane	ND	5.03		mg/Kg-dry	1	9/18/2020 10:53:57 PM
1,2-Dibromo-3-chloropropane	ND	0.0161		mg/Kg-dry	1	9/18/2020 10:53:57 PM
Hexachloro-1,3-butadiene	ND	0.00822		mg/Kg-dry	1	9/18/2020 10:53:57 PM
Surr: Dibromofluoromethane	94.3	76.8 - 130		%Rec	1	9/18/2020 10:53:57 PM
Surr: Toluene-d8	98.0	83.3 - 117		%Rec	1	9/18/2020 10:53:57 PM
Surr: 1-Bromo-4-fluorobenzene	98.1	82.6 - 115		%Rec	1	9/18/2020 10:53:57 PM
Sample Moisture (Percent Moisture)				Batch ID: R61957		Analyst: CJ
Percent Moisture	6.45	0.500		wt%	1	9/21/2020 9:09:03 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 11:10:00 AM
Project: MVSC
Lab ID: 2009260-018 **Matrix:** Soil
Client Sample ID: **Ex-12-2**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM				Batch ID: 29719		Analyst: CR
Vinyl chloride	ND	0.00707		mg/Kg-dry	1	9/18/2020 11:27:27 PM
1,1-Dichloroethene (DCE)	ND	0.00595		mg/Kg-dry	1	9/18/2020 11:27:27 PM
Methylene chloride	ND	0.0505		mg/Kg-dry	1	9/18/2020 11:27:27 PM
trans-1,2-Dichloroethene	ND	0.0118		mg/Kg-dry	1	9/18/2020 11:27:27 PM
Methyl tert-butyl ether (MTBE)	ND	0.00846		mg/Kg-dry	1	9/18/2020 11:27:27 PM
1,1-Dichloroethane	ND	0.00502		mg/Kg-dry	1	9/18/2020 11:27:27 PM
cis-1,2-Dichloroethene	ND	0.00561		mg/Kg-dry	1	9/18/2020 11:27:27 PM
1,1,1-Trichloroethane (TCA)	ND	0.00414		mg/Kg-dry	1	9/18/2020 11:27:27 PM
1,2-Dichloroethane (EDC)	ND	0.00171		mg/Kg-dry	1	9/18/2020 11:27:27 PM
Benzene	ND	0.00649		mg/Kg-dry	1	9/18/2020 11:27:27 PM
Trichloroethene (TCE)	ND	0.00738		mg/Kg-dry	1	9/18/2020 11:27:27 PM
Toluene	ND	0.0314		mg/Kg-dry	1	9/18/2020 11:27:27 PM
1,1,2-Trichloroethane	ND	0.00172		mg/Kg-dry	1	9/18/2020 11:27:27 PM
Tetrachloroethylene (PCE)	ND	0.00606		mg/Kg-dry	1	9/18/2020 11:27:27 PM
1,2-Dibromoethane (EDB)	ND	0.00173		mg/Kg-dry	1	9/18/2020 11:27:27 PM
Ethylbenzene	ND	0.0101		mg/Kg-dry	1	9/18/2020 11:27:27 PM
m,p-Xylene	ND	0.0116		mg/Kg-dry	1	9/18/2020 11:27:27 PM
o-Xylene	ND	0.00355		mg/Kg-dry	1	9/18/2020 11:27:27 PM
1,4-Dioxane	ND	4.74		mg/Kg-dry	1	9/18/2020 11:27:27 PM
1,2-Dibromo-3-chloropropane	ND	0.0151		mg/Kg-dry	1	9/18/2020 11:27:27 PM
Hexachloro-1,3-butadiene	ND	0.00775		mg/Kg-dry	1	9/18/2020 11:27:27 PM
Surr: Dibromofluoromethane	102	76.8 - 130		%Rec	1	9/18/2020 11:27:27 PM
Surr: Toluene-d8	99.6	83.3 - 117		%Rec	1	9/18/2020 11:27:27 PM
Surr: 1-Bromo-4-fluorobenzene	99.8	82.6 - 115		%Rec	1	9/18/2020 11:27:27 PM
Sample Moisture (Percent Moisture)				Batch ID: R61957		Analyst: CJ
Percent Moisture	7.41	0.500		wt%	1	9/21/2020 9:09:03 AM

Client: PES Environmental, Inc. **Collection Date:** 9/17/2020 11:15:00 AM
Project: MVSC
Lab ID: 2009260-019 **Matrix:** Soil
Client Sample ID: **Ex-11-2**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM				Batch ID: 29719		Analyst: CR
Vinyl chloride	ND	0.00750		mg/Kg-dry	1	9/19/2020 12:00:57 AM
1,1-Dichloroethene (DCE)	ND	0.00631		mg/Kg-dry	1	9/19/2020 12:00:57 AM
Methylene chloride	ND	0.0536		mg/Kg-dry	1	9/19/2020 12:00:57 AM
trans-1,2-Dichloroethene	ND	0.0125		mg/Kg-dry	1	9/19/2020 12:00:57 AM
Methyl tert-butyl ether (MTBE)	ND	0.00897		mg/Kg-dry	1	9/19/2020 12:00:57 AM
1,1-Dichloroethane	ND	0.00532		mg/Kg-dry	1	9/19/2020 12:00:57 AM
cis-1,2-Dichloroethene	ND	0.00594		mg/Kg-dry	1	9/19/2020 12:00:57 AM
1,1,1-Trichloroethane (TCA)	ND	0.00439		mg/Kg-dry	1	9/19/2020 12:00:57 AM
1,2-Dichloroethane (EDC)	ND	0.00182		mg/Kg-dry	1	9/19/2020 12:00:57 AM
Benzene	ND	0.00688		mg/Kg-dry	1	9/19/2020 12:00:57 AM
Trichloroethene (TCE)	ND	0.00783		mg/Kg-dry	1	9/19/2020 12:00:57 AM
Toluene	ND	0.0333		mg/Kg-dry	1	9/19/2020 12:00:57 AM
1,1,2-Trichloroethane	ND	0.00183		mg/Kg-dry	1	9/19/2020 12:00:57 AM
Tetrachloroethylene (PCE)	ND	0.00642		mg/Kg-dry	1	9/19/2020 12:00:57 AM
1,2-Dibromoethane (EDB)	ND	0.00183		mg/Kg-dry	1	9/19/2020 12:00:57 AM
Ethylbenzene	ND	0.0107		mg/Kg-dry	1	9/19/2020 12:00:57 AM
m,p-Xylene	ND	0.0123		mg/Kg-dry	1	9/19/2020 12:00:57 AM
o-Xylene	ND	0.00377		mg/Kg-dry	1	9/19/2020 12:00:57 AM
1,4-Dioxane	ND	5.03		mg/Kg-dry	1	9/19/2020 12:00:57 AM
1,2-Dibromo-3-chloropropane	ND	0.0161		mg/Kg-dry	1	9/19/2020 12:00:57 AM
Hexachloro-1,3-butadiene	ND	0.00822		mg/Kg-dry	1	9/19/2020 12:00:57 AM
Surr: Dibromofluoromethane	101	76.8 - 130		%Rec	1	9/19/2020 12:00:57 AM
Surr: Toluene-d8	98.9	83.3 - 117		%Rec	1	9/19/2020 12:00:57 AM
Surr: 1-Bromo-4-fluorobenzene	99.4	82.6 - 115		%Rec	1	9/19/2020 12:00:57 AM
Sample Moisture (Percent Moisture)				Batch ID: R61957		Analyst: CJ
Percent Moisture	10.3	0.500		wt%	1	9/21/2020 9:09:03 AM

Client: PES Environmental, Inc. **Collection Date:** 9/15/2020 7:05:00 AM
Project: MVSC
Lab ID: 2009260-020 **Matrix:** Soil
Client Sample ID: **TRIP BLANK**

Volatile Organic Compounds by EPA Method 8260D Batch ID: 29734 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Chloromethane	ND	0.0500		mg/Kg	1	9/21/2020 9:40:02 AM
Vinyl chloride	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Bromomethane	ND	0.0500		mg/Kg	1	9/21/2020 9:40:02 AM
Trichlorofluoromethane (CFC-11)	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Chloroethane	ND	0.0500		mg/Kg	1	9/21/2020 9:40:02 AM
1,1-Dichloroethene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Methylene chloride	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
trans-1,2-Dichloroethene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Methyl tert-butyl ether (MTBE)	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
1,1-Dichloroethane	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
cis-1,2-Dichloroethene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
(MEK) 2-Butanone	ND	0.250		mg/Kg	1	9/21/2020 9:40:02 AM
Chloroform	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
1,1,1-Trichloroethane (TCA)	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
1,1-Dichloropropene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Carbon tetrachloride	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
1,2-Dichloroethane (EDC)	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Benzene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Trichloroethene (TCE)	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
1,2-Dichloropropane	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Bromodichloromethane	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Dibromomethane	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
cis-1,3-Dichloropropene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Toluene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
trans-1,3-Dichloropropylene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
1,1,2-Trichloroethane	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
1,3-Dichloropropane	ND	0.0250		mg/Kg	1	9/21/2020 9:40:02 AM
Tetrachloroethene (PCE)	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Dibromochloromethane	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
1,2-Dibromoethane (EDB)	ND	0.00500		mg/Kg	1	9/21/2020 9:40:02 AM
Chlorobenzene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
1,1,1,2-Tetrachloroethane	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Ethylbenzene	ND	0.0250		mg/Kg	1	9/21/2020 9:40:02 AM
m,p-Xylene	ND	0.0500		mg/Kg	1	9/21/2020 9:40:02 AM
o-Xylene	ND	0.0250		mg/Kg	1	9/21/2020 9:40:02 AM
Styrene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Isopropylbenzene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Bromoform	ND	0.0500		mg/Kg	1	9/21/2020 9:40:02 AM

Analytical Report

Work Order: **2009260**
Date Reported: **1/5/2021**

Client: PES Environmental, Inc.
Collection Date: 9/15/2020 7:05:00 AM
Project: MVSC
Lab ID: 2009260-020
Matrix: Soil
Client Sample ID: **TRIP BLANK**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 29734		Analyst: CR
1,1,2,2-Tetrachloroethane	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
n-Propylbenzene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Bromobenzene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
1,3,5-Trimethylbenzene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
2-Chlorotoluene	ND	0.0250		mg/Kg	1	9/21/2020 9:40:02 AM
4-Chlorotoluene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
tert-Butylbenzene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
1,2,3-Trichloropropane	ND	0.0250		mg/Kg	1	9/21/2020 9:40:02 AM
1,2,4-Trichlorobenzene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
sec-Butylbenzene	ND	0.0250		mg/Kg	1	9/21/2020 9:40:02 AM
4-Isopropyltoluene	ND	0.0250		mg/Kg	1	9/21/2020 9:40:02 AM
1,3-Dichlorobenzene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
1,4-Dichlorobenzene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
n-Butylbenzene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
1,2-Dichlorobenzene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
1,2-Dibromo-3-chloropropane	ND	0.500		mg/Kg	1	9/21/2020 9:40:02 AM
1,2,4-Trimethylbenzene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Hexachloro-1,3-butadiene	ND	0.0250		mg/Kg	1	9/21/2020 9:40:02 AM
Naphthalene	ND	0.0500		mg/Kg	1	9/21/2020 9:40:02 AM
1,2,3-Trichlorobenzene	ND	0.0200		mg/Kg	1	9/21/2020 9:40:02 AM
Surr: Dibromofluoromethane	96.2	85.2 - 113		%Rec	1	9/21/2020 9:40:02 AM
Surr: Toluene-d8	100	88.5 - 110		%Rec	1	9/21/2020 9:40:02 AM
Surr: 1-Bromo-4-fluorobenzene	97.4	88.6 - 109		%Rec	1	9/21/2020 9:40:02 AM

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-29706** SampType: **LCS** Units: **mg/Kg** Prep Date: **9/17/2020** RunNo: **61925**
Client ID: **LCSS** Batch ID: **29706** Analysis Date: **9/17/2020** SeqNo: **1241787**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.805	0.0200	1.000	0	80.5	26.1	178				
Chloromethane	0.826	0.0500	1.000	0	82.6	51.6	141				
Vinyl chloride	0.952	0.0200	1.000	0	95.2	66	131				
Bromomethane	1.76	0.0500	1.000	0	176	41	160				S
Trichlorofluoromethane (CFC-11)	1.00	0.0200	1.000	0	100	61.2	145				
Chloroethane	1.08	0.0500	1.000	0	108	55.2	150				
1,1-Dichloroethene	1.01	0.0200	1.000	0	101	63.4	139				
Methylene chloride	1.02	0.0200	1.000	0	102	77.7	117				
trans-1,2-Dichloroethene	1.02	0.0200	1.000	0	102	80.5	116				
Methyl tert-butyl ether (MTBE)	1.04	0.0200	1.000	0	104	77.1	118				
1,1-Dichloroethane	1.02	0.0200	1.000	0	102	79.6	116				
cis-1,2-Dichloroethene	1.03	0.0200	1.000	0	103	81.8	114				
(MEK) 2-Butanone	2.59	0.250	2.500	0	104	61.4	133				
Chloroform	1.01	0.0200	1.000	0	101	81.7	115				
1,1,1-Trichloroethane (TCA)	1.04	0.0200	1.000	0	104	80.3	119				
1,1-Dichloropropene	1.04	0.0200	1.000	0	104	79.6	118				
Carbon tetrachloride	1.02	0.0200	1.000	0	102	78.6	121				
1,2-Dichloroethane (EDC)	1.03	0.0200	1.000	0	103	78.8	120				
Benzene	1.04	0.0200	1.000	0	104	79.4	116				
Trichloroethene (TCE)	1.03	0.0200	1.000	0	103	80.8	117				
1,2-Dichloropropane	1.03	0.0200	1.000	0	103	77.1	117				
Bromodichloromethane	1.02	0.0200	1.000	0	102	82.5	117				
Dibromomethane	1.02	0.0200	1.000	0	102	81.4	116				
cis-1,3-Dichloropropene	1.02	0.0200	1.000	0	102	77.3	119				
Toluene	1.03	0.0200	1.000	0	103	80.5	115				
trans-1,3-Dichloropropylene	1.02	0.0200	1.000	0	102	78.4	121				
1,1,2-Trichloroethane	1.04	0.0200	1.000	0	104	78.1	116				
1,3-Dichloropropane	1.03	0.0250	1.000	0	103	76.6	118				
Tetrachloroethene (PCE)	1.05	0.0200	1.000	0	105	81.8	116				
Dibromochloromethane	1.01	0.0200	1.000	0	101	81.2	117				

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-29706** SampType: **LCS** Units: **mg/Kg** Prep Date: **9/17/2020** RunNo: **61925**
Client ID: **LCSS** Batch ID: **29706** Analysis Date: **9/17/2020** SeqNo: **1241787**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromoethane (EDB)	1.02	0.00500	1.000	0	102	77.5	118				
Chlorobenzene	1.10	0.0200	1.000	0	110	81.8	113				
1,1,1,2-Tetrachloroethane	1.10	0.0200	1.000	0	110	81.9	116				
Ethylbenzene	1.11	0.0250	1.000	0	111	81.6	116				
m,p-Xylene	2.26	0.0500	2.000	0	113	83.2	115				
o-Xylene	1.11	0.0250	1.000	0	111	82.5	114				
Styrene	1.11	0.0200	1.000	0	111	82	114				
Isopropylbenzene	1.12	0.0200	1.000	0	112	82.2	116				
Bromoform	1.09	0.0500	1.000	0	109	74.1	127				
1,1,2,2-Tetrachloroethane	1.09	0.0200	1.000	0	109	69.9	124				
n-Propylbenzene	1.14	0.0200	1.000	0	114	82.1	118				
Bromobenzene	1.10	0.0200	1.000	0	110	83.4	113				
1,3,5-Trimethylbenzene	1.12	0.0200	1.000	0	112	82.1	117				
2-Chlorotoluene	1.11	0.0250	1.000	0	111	82	115				
4-Chlorotoluene	1.12	0.0200	1.000	0	112	81.9	116				
tert-Butylbenzene	1.12	0.0200	1.000	0	112	81.8	117				
1,2,3-Trichloropropane	1.10	0.0250	1.000	0	110	72.9	124				
1,2,4-Trichlorobenzene	1.09	0.0200	1.000	0	109	75.8	121				
sec-Butylbenzene	1.12	0.0250	1.000	0	112	81.5	118				
4-Isopropyltoluene	1.13	0.0250	1.000	0	113	82.2	118				
1,3-Dichlorobenzene	1.11	0.0200	1.000	0	111	80.2	119				
1,4-Dichlorobenzene	1.11	0.0200	1.000	0	111	79.8	118				
n-Butylbenzene	1.13	0.0200	1.000	0	113	82.1	120				
1,2-Dichlorobenzene	1.11	0.0200	1.000	0	111	80.3	117				
1,2-Dibromo-3-chloropropane	1.08	0.500	1.000	0	108	68.7	132				
1,2,4-Trimethylbenzene	1.15	0.0200	1.000	0	115	82.1	118				
Hexachloro-1,3-butadiene	1.12	0.0250	1.000	0	112	81.4	122				
Naphthalene	1.08	0.0500	1.000	0	108	63.3	132				
1,2,3-Trichlorobenzene	1.09	0.0200	1.000	0	109	65.4	125				
Surr: Dibromofluoromethane	1.12		1.250		89.6	85.2	113				

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-29706**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **9/17/2020**	RunNo: **61925**
Client ID: **LCSS**	Batch ID: **29706**		Analysis Date: **9/17/2020**	SeqNo: **1241787**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	1.14		1.250		91.5	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.23		1.250		98.8	88.6	109				

Sample ID: **MB-29706**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **9/17/2020**	RunNo: **61925**
Client ID: **MBLKS**	Batch ID: **29706**		Analysis Date: **9/17/2020**	SeqNo: **1241785**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0200									
Chloromethane	ND	0.0500									
Vinyl chloride	ND	0.0200									
Bromomethane	ND	0.0500									
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0500									
1,1-Dichloroethene	ND	0.0200									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0200									
1,1-Dichloroethane	ND	0.0200									
cis-1,2-Dichloroethene	ND	0.0200									
(MEK) 2-Butanone	ND	0.250									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0200									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0200									
1,2-Dichloroethane (EDC)	ND	0.0200									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0200									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0200									

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-29706** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/17/2020** RunNo: **61925**
Client ID: **MBLKS** Batch ID: **29706** Analysis Date: **9/17/2020** SeqNo: **1241785**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0200									
1,1,2-Trichloroethane	ND	0.0200									
1,3-Dichloropropane	ND	0.0250									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0200									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0200									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0200									
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0200									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0250									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0250									
1,2,4-Trichlorobenzene	ND	0.0200									
sec-Butylbenzene	ND	0.0250									
4-Isopropyltoluene	ND	0.0250									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-29706** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/17/2020** RunNo: **61925**
Client ID: **MBLKS** Batch ID: **29706** Analysis Date: **9/17/2020** SeqNo: **1241785**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.500									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachloro-1,3-butadiene	ND	0.0250									
Naphthalene	ND	0.0500									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: Dibromofluoromethane	1.22		1.250		97.3	85.2	113				
Surr: Toluene-d8	1.23		1.250		98.6	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.22		1.250		97.3	88.6	109				

Sample ID: **2009212-004BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/17/2020** RunNo: **61925**
Client ID: **BATCH** Batch ID: **29706** Analysis Date: **9/17/2020** SeqNo: **1241764**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0186						0		30	
Chloromethane	ND	0.0466						0		30	
Vinyl chloride	ND	0.0186						0		30	
Bromomethane	ND	0.0466						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0186						0		30	
Chloroethane	ND	0.0466						0		30	
1,1-Dichloroethene	ND	0.0186						0		30	
Methylene chloride	ND	0.0186						0		30	
trans-1,2-Dichloroethene	ND	0.0186						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0186						0		30	
1,1-Dichloroethane	ND	0.0186						0		30	
cis-1,2-Dichloroethene	ND	0.0186						0		30	
(MEK) 2-Butanone	ND	0.233						0		30	
Chloroform	ND	0.0186						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0186						0		30	
1,1-Dichloropropene	ND	0.0186						0		30	

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009212-004BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/17/2020** RunNo: **61925**
Client ID: **BATCH** Batch ID: **29706** Analysis Date: **9/17/2020** SeqNo: **1241764**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon tetrachloride	ND	0.0186						0		30	
1,2-Dichloroethane (EDC)	ND	0.0186						0		30	
Benzene	ND	0.0186						0		30	
Trichloroethene (TCE)	ND	0.0186						0		30	
1,2-Dichloropropane	ND	0.0186						0		30	
Bromodichloromethane	ND	0.0186						0		30	
Dibromomethane	ND	0.0186						0		30	
cis-1,3-Dichloropropene	ND	0.0186						0		30	
Toluene	ND	0.0186						0		30	
trans-1,3-Dichloropropylene	ND	0.0186						0		30	
1,1,2-Trichloroethane	ND	0.0186						0		30	
1,3-Dichloropropane	ND	0.0233						0		30	
Tetrachloroethene (PCE)	0.573	0.0186						0.5874	2.39	30	
Dibromochloromethane	ND	0.0186						0		30	
1,2-Dibromoethane (EDB)	ND	0.00466						0		30	
Chlorobenzene	ND	0.0186						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0186						0		30	
Ethylbenzene	ND	0.0233						0		30	
m,p-Xylene	ND	0.0466						0		30	
o-Xylene	ND	0.0233						0		30	
Styrene	ND	0.0186						0		30	
Isopropylbenzene	ND	0.0186						0		30	
Bromoform	ND	0.0466						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0186						0		30	
n-Propylbenzene	ND	0.0186						0		30	
Bromobenzene	ND	0.0186						0		30	
1,3,5-Trimethylbenzene	ND	0.0186						0		30	
2-Chlorotoluene	ND	0.0233						0		30	
4-Chlorotoluene	ND	0.0186						0		30	
tert-Butylbenzene	ND	0.0186						0		30	

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009212-004BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/17/2020** RunNo: **61925**
Client ID: **BATCH** Batch ID: **29706** Analysis Date: **9/17/2020** SeqNo: **1241764**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichloropropane	ND	0.0233						0		30	
1,2,4-Trichlorobenzene	ND	0.0186						0		30	
sec-Butylbenzene	ND	0.0233						0		30	
4-Isopropyltoluene	ND	0.0233						0		30	
1,3-Dichlorobenzene	ND	0.0186						0		30	
1,4-Dichlorobenzene	ND	0.0186						0		30	
n-Butylbenzene	ND	0.0186						0		30	
1,2-Dichlorobenzene	ND	0.0186						0		30	
1,2-Dibromo-3-chloropropane	ND	0.466						0		30	
1,2,4-Trimethylbenzene	ND	0.0186						0		30	
Hexachloro-1,3-butadiene	ND	0.0233						0		30	
Naphthalene	ND	0.0466						0		30	
1,2,3-Trichlorobenzene	ND	0.0186						0		30	
Surr: Dibromofluoromethane	1.13		1.165		97.2	85.2	113		0		
Surr: Toluene-d8	1.16		1.165		99.4	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	1.15		1.165		98.6	88.6	109		0		

Sample ID: **2009212-005BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/17/2020** RunNo: **61925**
Client ID: **BATCH** Batch ID: **29706** Analysis Date: **9/17/2020** SeqNo: **1241767**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.05	0.0222	1.108	0	95.0	9.44	188				
Chloromethane	1.08	0.0554	1.108	0	97.4	40.6	156				
Vinyl chloride	1.27	0.0222	1.108	0	115	52.8	150				
Bromomethane	2.51	0.0554	1.108	0	226	41	165				S
Trichlorofluoromethane (CFC-11)	1.32	0.0222	1.108	0	119	53.7	157				
Chloroethane	1.45	0.0554	1.108	0	131	29.9	178				
1,1-Dichloroethene	1.34	0.0222	1.108	0	121	62.9	149				
Methylene chloride	1.31	0.0222	1.108	0	118	74.3	126				
trans-1,2-Dichloroethene	1.33	0.0222	1.108	0	120	73.1	130				

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009212-005BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/17/2020** RunNo: **61925**
Client ID: **BATCH** Batch ID: **29706** Analysis Date: **9/17/2020** SeqNo: **1241767**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.28	0.0222	1.108	0	116	71.8	123				
1,1-Dichloroethane	1.32	0.0222	1.108	0	119	73	128				
cis-1,2-Dichloroethene	1.32	0.0222	1.108	0	119	77.5	125				
(MEK) 2-Butanone	3.32	0.277	2.770	0	120	55.4	146				
Chloroform	1.30	0.0222	1.108	0	117	76.8	127				
1,1,1-Trichloroethane (TCA)	1.33	0.0222	1.108	0	120	71.4	134				
1,1-Dichloropropene	1.37	0.0222	1.108	0	124	69	133				
Carbon tetrachloride	1.33	0.0222	1.108	0	120	67.5	136				
1,2-Dichloroethane (EDC)	1.29	0.0222	1.108	0	117	73.9	128				
Benzene	1.32	0.0222	1.108	0	119	74.6	126				
Trichloroethene (TCE)	1.41	0.0222	1.108	0.08695	119	72	133				
1,2-Dichloropropane	1.29	0.0222	1.108	0	116	73.5	125				
Bromodichloromethane	1.28	0.0222	1.108	0	116	77.1	125				
Dibromomethane	1.31	0.0222	1.108	0	118	79.6	122				
cis-1,3-Dichloropropene	1.27	0.0222	1.108	0	115	71.8	122				
Toluene	1.34	0.0222	1.108	0	121	72.6	127				
trans-1,3-Dichloropropylene	1.27	0.0222	1.108	0	115	71.1	125				
1,1,2-Trichloroethane	1.30	0.0222	1.108	0	118	75.6	123				
1,3-Dichloropropane	1.27	0.0277	1.108	0	115	74.4	122				
Tetrachloroethene (PCE)	6.72	0.0222	1.108	5.632	97.8	72.7	128				
Dibromochloromethane	1.27	0.0222	1.108	0	115	78.3	120				
1,2-Dibromoethane (EDB)	1.28	0.00554	1.108	0	116	76.1	121				
Chlorobenzene	1.31	0.0222	1.108	0	118	74.9	124				
1,1,1,2-Tetrachloroethane	1.28	0.0222	1.108	0	115	75.3	126				
Ethylbenzene	1.34	0.0277	1.108	0	121	77.3	126				
m,p-Xylene	2.71	0.0554	2.216	0	122	78.5	126				
o-Xylene	1.34	0.0277	1.108	0	121	79.4	123				
Styrene	1.33	0.0222	1.108	0	120	80	122				
Isopropylbenzene	1.37	0.0222	1.108	0	124	77.3	128				
Bromoform	1.26	0.0554	1.108	0	113	68.7	131				

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009212-005BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/17/2020** RunNo: **61925**
Client ID: **BATCH** Batch ID: **29706** Analysis Date: **9/17/2020** SeqNo: **1241767**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	1.28	0.0222	1.108	0	116	58.2	134				
n-Propylbenzene	1.38	0.0222	1.108	0	125	76	130				
Bromobenzene	1.31	0.0222	1.108	0	119	80.3	123				
1,3,5-Trimethylbenzene	1.37	0.0222	1.108	0	123	75.8	128				
2-Chlorotoluene	1.34	0.0277	1.108	0	121	78.6	127				
4-Chlorotoluene	1.35	0.0222	1.108	0	122	79	126				
tert-Butylbenzene	1.36	0.0222	1.108	0	123	77.7	130				
1,2,3-Trichloropropane	1.29	0.0277	1.108	0	116	60.3	139				
1,2,4-Trichlorobenzene	1.27	0.0222	1.108	0	115	75.1	128				
sec-Butylbenzene	1.37	0.0277	1.108	0	124	76.2	132				
4-Isopropyltoluene	1.37	0.0277	1.108	0	124	77.3	130				
1,3-Dichlorobenzene	1.32	0.0222	1.108	0	119	77.2	127				
1,4-Dichlorobenzene	1.32	0.0222	1.108	0	119	76.7	125				
n-Butylbenzene	1.35	0.0222	1.108	0	122	74.8	133				
1,2-Dichlorobenzene	1.33	0.0222	1.108	0	120	77.5	125				
1,2-Dibromo-3-chloropropane	1.22	0.554	1.108	0	110	59.9	139				
1,2,4-Trimethylbenzene	1.37	0.0222	1.108	0	124	68.4	135				
Hexachloro-1,3-butadiene	1.37	0.0277	1.108	0	124	71	145				
Naphthalene	1.25	0.0554	1.108	0	113	64.3	140				
1,2,3-Trichlorobenzene	1.30	0.0222	1.108	0	117	67.2	133				
Surr: Dibromofluoromethane	1.38		1.385		99.9	85.2	113				
Surr: Toluene-d8	1.40		1.385		101	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.42		1.385		103	88.6	109				

NOTES:
S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID: **2009212-005BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/17/2020** RunNo: **61925**
Client ID: **BATCH** Batch ID: **29706** Analysis Date: **9/17/2020** SeqNo: **1241768**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.10	0.0222	1.108	0	99.7	9.44	188	1.052	4.82	30	

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009212-005BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/17/2020** RunNo: **61925**
Client ID: **BATCH** Batch ID: **29706** Analysis Date: **9/17/2020** SeqNo: **1241768**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	1.10	0.0554	1.108	0	99.5	40.6	156	1.080	2.12	30	
Vinyl chloride	1.30	0.0222	1.108	0	118	52.8	150	1.274	2.32	30	
Bromomethane	2.41	0.0554	1.108	0	218	41	165	2.507	3.87	30	S
Trichlorofluoromethane (CFC-11)	1.38	0.0222	1.108	0	124	53.7	157	1.322	3.97	30	
Chloroethane	1.52	0.0554	1.108	0	137	29.9	178	1.448	5.09	30	
1,1-Dichloroethene	1.35	0.0222	1.108	0	122	62.9	149	1.336	1.26	30	
Methylene chloride	1.31	0.0222	1.108	0	118	74.3	126	1.306	0.355	30	
trans-1,2-Dichloroethene	1.35	0.0222	1.108	0	122	73.1	130	1.333	1.65	30	
Methyl tert-butyl ether (MTBE)	1.30	0.0222	1.108	0	117	71.8	123	1.281	1.29	30	
1,1-Dichloroethane	1.33	0.0222	1.108	0	120	73	128	1.317	0.724	30	
cis-1,2-Dichloroethene	1.33	0.0222	1.108	0	120	77.5	125	1.318	0.763	30	
(MEK) 2-Butanone	3.34	0.277	2.770	0	121	55.4	146	3.317	0	30	
Chloroform	1.33	0.0222	1.108	0	120	76.8	127	1.298	2.49	30	
1,1,1-Trichloroethane (TCA)	1.37	0.0222	1.108	0	123	71.4	134	1.334	2.35	30	
1,1-Dichloropropene	1.41	0.0222	1.108	0	127	69	133	1.371	2.61	30	
Carbon tetrachloride	1.37	0.0222	1.108	0	124	67.5	136	1.327	3.47	30	
1,2-Dichloroethane (EDC)	1.31	0.0222	1.108	0	118	73.9	128	1.293	1.32	30	
Benzene	1.35	0.0222	1.108	0	122	74.6	126	1.315	2.59	30	
Trichloroethene (TCE)	1.42	0.0222	1.108	0.08695	120	72	133	1.407	1.02	30	
1,2-Dichloropropane	1.31	0.0222	1.108	0	118	73.5	125	1.289	1.62	30	
Bromodichloromethane	1.33	0.0222	1.108	0	120	77.1	125	1.281	3.61	30	
Dibromomethane	1.30	0.0222	1.108	0	117	79.6	122	1.312	1.04	30	
cis-1,3-Dichloropropene	1.33	0.0222	1.108	0	120	71.8	122	1.272	4.10	30	
Toluene	1.36	0.0222	1.108	0	123	72.6	127	1.341	1.27	30	
trans-1,3-Dichloropropylene	1.31	0.0222	1.108	0	118	71.1	125	1.269	2.79	30	
1,1,2-Trichloroethane	1.31	0.0222	1.108	0	118	75.6	123	1.302	0.814	30	
1,3-Dichloropropane	1.29	0.0277	1.108	0	116	74.4	122	1.275	0.807	30	
Tetrachloroethene (PCE)	6.66	0.0222	1.108	5.632	92.9	72.7	128	6.716	0.806	30	
Dibromochloromethane	1.30	0.0222	1.108	0	117	78.3	120	1.270	2.23	30	
1,2-Dibromoethane (EDB)	1.32	0.00554	1.108	0	119	76.1	121	1.283	2.62	30	

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009212-005BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/17/2020** RunNo: **61925**
Client ID: **BATCH** Batch ID: **29706** Analysis Date: **9/17/2020** SeqNo: **1241768**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	1.34	0.0222	1.108	0	121	74.9	124	1.311	1.94	30	
1,1,1,2-Tetrachloroethane	1.31	0.0222	1.108	0	118	75.3	126	1.280	2.22	30	
Ethylbenzene	1.37	0.0277	1.108	0	124	77.3	126	1.344	2.27	30	
m,p-Xylene	2.76	0.0554	2.216	0	124	78.5	126	2.713	1.65	30	
o-Xylene	1.36	0.0277	1.108	0	122	79.4	123	1.342	1.02	30	
Styrene	1.35	0.0222	1.108	0	122	80	122	1.331	1.40	30	
Isopropylbenzene	1.40	0.0222	1.108	0	127	77.3	128	1.369	2.41	30	
Bromoform	1.28	0.0554	1.108	0	115	68.7	131	1.257	1.72	30	
1,1,2,2-Tetrachloroethane	1.30	0.0222	1.108	0	117	58.2	134	1.282	1.04	30	
n-Propylbenzene	1.40	0.0222	1.108	0	127	76	130	1.381	1.63	30	
Bromobenzene	1.33	0.0222	1.108	0	120	80.3	123	1.314	1.25	30	
1,3,5-Trimethylbenzene	1.39	0.0222	1.108	0	125	75.8	128	1.366	1.42	30	
2-Chlorotoluene	1.37	0.0277	1.108	0	123	78.6	127	1.343	1.86	30	
4-Chlorotoluene	1.37	0.0222	1.108	0	123	79	126	1.349	1.39	30	
tert-Butylbenzene	1.39	0.0222	1.108	0	126	77.7	130	1.361	2.48	30	
1,2,3-Trichloropropane	1.31	0.0277	1.108	0	118	60.3	139	1.288	1.40	30	
1,2,4-Trichlorobenzene	1.34	0.0222	1.108	0	121	75.1	128	1.269	5.19	30	
sec-Butylbenzene	1.41	0.0277	1.108	0	127	76.2	132	1.375	2.57	30	
4-Isopropyltoluene	1.40	0.0277	1.108	0	127	77.3	130	1.373	2.19	30	
1,3-Dichlorobenzene	1.36	0.0222	1.108	0	122	77.2	127	1.323	2.49	30	
1,4-Dichlorobenzene	1.35	0.0222	1.108	0	122	76.7	125	1.320	2.03	30	
n-Butylbenzene	1.41	0.0222	1.108	0	127	74.8	133	1.353	3.95	30	
1,2-Dichlorobenzene	1.36	0.0222	1.108	0	123	77.5	125	1.330	2.04	30	
1,2-Dibromo-3-chloropropane	1.33	0.554	1.108	0	120	59.9	139	1.217	8.54	30	
1,2,4-Trimethylbenzene	1.39	0.0222	1.108	0	125	68.4	135	1.369	1.49	30	
Hexachloro-1,3-butadiene	1.44	0.0277	1.108	0	130	71	145	1.373	4.80	30	
Naphthalene	1.32	0.0554	1.108	0	119	64.3	140	1.252	5.50	30	
1,2,3-Trichlorobenzene	1.36	0.0222	1.108	0	123	67.2	133	1.300	4.54	30	
Surr: Dibromofluoromethane	1.38		1.385		99.7	85.2	113		0		
Surr: Toluene-d8	1.40		1.385		101	88.5	110		0		

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009212-005BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/17/2020** RunNo: **61925**
Client ID: **BATCH** Batch ID: **29706** Analysis Date: **9/17/2020** SeqNo: **1241768**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	1.41		1.385		102	88.6	109		0		

NOTES:
S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID: **LCS-29734** SampType: **LCS** Units: **mg/Kg** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **LCSS** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243093**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.957	0.0200	1.000	0	95.7	26.1	178				
Chloromethane	0.843	0.0500	1.000	0	84.3	51.6	141				
Vinyl chloride	0.964	0.0200	1.000	0	96.4	66	131				
Bromomethane	1.86	0.0500	1.000	0	186	41	160				S
Trichlorofluoromethane (CFC-11)	0.999	0.0200	1.000	0	99.9	61.2	145				
Chloroethane	1.18	0.0500	1.000	0	118	55.2	150				
1,1-Dichloroethene	0.994	0.0200	1.000	0	99.4	63.4	139				
Acetone	3.01	0.250	2.500	0	120	62.5	137				
Methylene chloride	0.973	0.0200	1.000	0	97.3	77.7	117				
Carbon disulfide	1.02	0.0250	1.000	0	102	73.7	128				
Acrylonitrile	0.977	0.0250	1.000	0	97.7	75.8	121				
trans-1,2-Dichloroethene	0.992	0.0200	1.000	0	99.2	80.5	116				
Methyl tert-butyl ether (MTBE)	0.999	0.0200	1.000	0	99.9	77.1	118				
1,1-Dichloroethane	0.986	0.0200	1.000	0	98.6	79.6	116				
2,2-Dichloropropane	1.10	0.0500	1.000	0	110	75	138				
cis-1,2-Dichloroethene	0.983	0.0200	1.000	0	98.3	81.8	114				
(MEK) 2-Butanone	2.52	0.250	2.500	0	101	61.4	133				
Chloroform	0.973	0.0200	1.000	0	97.3	81.7	115				
Bromochloromethane	0.992	0.0200	1.000	0	99.2	83.4	113				
1,1,1-Trichloroethane (TCA)	0.997	0.0200	1.000	0	99.7	80.3	119				
1,1-Dichloropropene	0.981	0.0200	1.000	0	98.1	79.6	118				
Carbon tetrachloride	0.989	0.0200	1.000	0	98.9	78.6	121				
1,2-Dichloroethane (EDC)	0.990	0.0200	1.000	0	99.0	78.8	120				

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-29734** SampType: **LCS** Units: **mg/Kg** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **LCSS** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243093**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.982	0.0200	1.000	0	98.2	79.4	116				
Trichloroethene (TCE)	0.986	0.0200	1.000	0	98.6	80.8	117				
1,2-Dichloropropane	0.976	0.0200	1.000	0	97.6	77.1	117				
Bromodichloromethane	0.995	0.0200	1.000	0	99.5	82.5	117				
Dibromomethane	0.999	0.0200	1.000	0	99.9	81.4	116				
cis-1,3-Dichloropropene	0.997	0.0200	1.000	0	99.7	77.3	119				
Toluene	1.01	0.0200	1.000	0	101	80.5	115				
trans-1,3-Dichloropropylene	1.00	0.0200	1.000	0	100	78.4	121				
Methyl Isobutyl Ketone (MIBK)	2.45	0.250	2.500	0	97.8	56.5	138				
1,1,2-Trichloroethane	0.997	0.0200	1.000	0	99.7	78.1	116				
1,3-Dichloropropane	0.976	0.0250	1.000	0	97.6	76.6	118				
Tetrachloroethene (PCE)	0.997	0.0200	1.000	0	99.7	81.8	116				
Dibromochloromethane	0.999	0.0200	1.000	0	99.9	81.2	117				
1,2-Dibromoethane (EDB)	1.00	0.00500	1.000	0	100	77.5	118				
methyl n-butyl ketone	2.62	0.250	2.500	0	105	57.5	137				
Chlorobenzene	0.981	0.0200	1.000	0	98.1	81.8	113				
1,1,1,2-Tetrachloroethane	0.989	0.0200	1.000	0	98.9	81.9	116				
Ethylbenzene	1.01	0.0250	1.000	0	101	81.6	116				
m,p-Xylene	2.02	0.0500	2.000	0	101	83.2	115				
o-Xylene	0.992	0.0250	1.000	0	99.2	82.5	114				
Styrene	1.00	0.0200	1.000	0	100	82	114				
Isopropylbenzene	1.01	0.0200	1.000	0	101	82.2	116				
Bromoform	1.00	0.0500	1.000	0	100	74.1	127				
1,1,2,2-Tetrachloroethane	0.918	0.0200	1.000	0	91.8	69.9	124				
n-Propylbenzene	1.00	0.0200	1.000	0	100	82.1	118				
Bromobenzene	1.01	0.0200	1.000	0	101	83.4	113				
1,3,5-Trimethylbenzene	1.00	0.0200	1.000	0	100	82.1	117				
2-Chlorotoluene	1.00	0.0250	1.000	0	100	82	115				
4-Chlorotoluene	1.00	0.0200	1.000	0	100	81.9	116				
tert-Butylbenzene	0.992	0.0200	1.000	0	99.2	81.8	117				

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-29734** SampType: **LCS** Units: **mg/Kg** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **LCSS** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243093**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichloropropane	0.991	0.0250	1.000	0	99.1	72.9	124				
1,2,4-Trichlorobenzene	1.03	0.0200	1.000	0	103	75.8	121				
sec-Butylbenzene	1.00	0.0250	1.000	0	100	81.5	118				
4-Isopropyltoluene	1.00	0.0250	1.000	0	100	82.2	118				
1,3-Dichlorobenzene	1.01	0.0200	1.000	0	101	80.2	119				
1,4-Dichlorobenzene	1.01	0.0200	1.000	0	101	79.8	118				
n-Butylbenzene	0.999	0.0200	1.000	0	99.9	82.1	120				
1,2-Dichlorobenzene	1.00	0.0200	1.000	0	100	80.3	117				
1,2-Dibromo-3-chloropropane	0.999	0.500	1.000	0	99.9	68.7	132				
1,2,4-Trimethylbenzene	1.02	0.0200	1.000	0	102	82.1	118				
Hexachloro-1,3-butadiene	0.989	0.0250	1.000	0	98.9	81.4	122				
Naphthalene	1.05	0.0500	1.000	0	105	63.3	132				
1,2,3-Trichlorobenzene	1.08	0.0200	1.000	0	108	65.4	125				
Surr: Dibromofluoromethane	1.23		1.250		98.4	85.2	113				
Surr: Toluene-d8	1.26		1.250		101	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.29		1.250		103	88.6	109				

NOTES:
S - Outlying spike recovery observed (high bias). Detections will be qualified with a *.

Sample ID: **MB-29734** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **MBLKS** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243094**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0200									
Chloromethane	ND	0.0500									
Vinyl chloride	ND	0.0200									
Bromomethane	ND	0.0500									
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0116									MDL
1,1-Dichloroethene	ND	0.0200									
Methylene chloride	ND	0.0200									

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-29734** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **MBLKS** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243094**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0200									
1,1-Dichloroethane	ND	0.0200									
2,2-Dichloropropane	ND	0.00546									MDL
cis-1,2-Dichloroethene	ND	0.0200									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0200									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0200									
1,2-Dichloroethane (EDC)	ND	0.0200									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0200									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0200									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0200									
1,1,2-Trichloroethane	ND	0.0200									
1,3-Dichloropropane	ND	0.0250									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0200									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0200									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0200									

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-29734** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **MBLKS** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243094**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0200									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0250									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0250									
1,2,4-Trichlorobenzene	ND	0.0200									
sec-Butylbenzene	ND	0.0250									
4-Isopropyltoluene	ND	0.0250									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.500									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachloro-1,3-butadiene	ND	0.0250									
Naphthalene	ND	0.0500									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: Dibromofluoromethane	1.09		1.250		86.8	85.2	113				
Surr: Toluene-d8	1.22		1.250		97.4	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.22		1.250		97.3	88.6	109				

NOTES:
MDL - Analyte reported to Method Detection Limit (MDL)

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009268-005BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **BATCH** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243087**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0202						0		30	
Chloromethane	ND	0.0506						0		30	
Vinyl chloride	ND	0.0202						0		30	
Bromomethane	ND	0.0506						0.05166	200	30	R
Trichlorofluoromethane (CFC-11)	ND	0.0202						0		30	
Chloroethane	ND	0.0506						0		30	
1,1-Dichloroethene	ND	0.0202						0		30	
Acetone	ND	0.253						0		30	
Methylene chloride	ND	0.0202						0		30	
Carbon disulfide	ND	0.0253						0		30	
Acrylonitrile	ND	0.0253						0		30	
trans-1,2-Dichloroethene	ND	0.0202						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0202						0		30	
1,1-Dichloroethane	ND	0.0202						0		30	
2,2-Dichloropropane	ND	0.0506						0		30	
cis-1,2-Dichloroethene	ND	0.0202						0		30	
(MEK) 2-Butanone	ND	0.253						0		30	
Chloroform	ND	0.0202						0		30	
Bromochloromethane	ND	0.0202						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0202						0		30	
1,1-Dichloropropene	ND	0.0202						0		30	
Carbon tetrachloride	ND	0.0202						0		30	
1,2-Dichloroethane (EDC)	ND	0.0202						0		30	
Benzene	ND	0.0202						0		30	
Trichloroethene (TCE)	ND	0.0202						0		30	
1,2-Dichloropropane	ND	0.0202						0		30	
Bromodichloromethane	ND	0.0202						0		30	
Dibromomethane	ND	0.0202						0		30	
cis-1,3-Dichloropropene	ND	0.0202						0		30	
Toluene	ND	0.0202						0		30	

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009268-005BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **BATCH** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243087**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	0.0202						0		30	
Methyl Isobutyl Ketone (MIBK)	ND	0.253						0		30	
1,1,2-Trichloroethane	ND	0.0202						0		30	
1,3-Dichloropropane	ND	0.0253						0		30	
Tetrachloroethene (PCE)	ND	0.0202						0		30	
Dibromochloromethane	ND	0.0202						0		30	
1,2-Dibromoethane (EDB)	ND	0.00506						0		30	
methyl n-butyl ketone	ND	0.253						0		30	
Chlorobenzene	ND	0.0202						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0202						0		30	
Ethylbenzene	ND	0.0253						0		30	
m,p-Xylene	ND	0.0506						0		30	
o-Xylene	ND	0.0253						0		30	
Styrene	ND	0.0202						0		30	
Isopropylbenzene	ND	0.0202						0		30	
Bromoform	ND	0.0506						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0202						0		30	
n-Propylbenzene	ND	0.0202						0		30	
Bromobenzene	ND	0.0202						0		30	
1,3,5-Trimethylbenzene	ND	0.0202						0		30	
2-Chlorotoluene	ND	0.0253						0		30	
4-Chlorotoluene	ND	0.0202						0		30	
tert-Butylbenzene	ND	0.0202						0		30	
1,2,3-Trichloropropane	ND	0.0253						0		30	
1,2,4-Trichlorobenzene	ND	0.0202						0		30	
sec-Butylbenzene	ND	0.0253						0		30	
4-Isopropyltoluene	ND	0.0253						0		30	
1,3-Dichlorobenzene	ND	0.0202						0		30	
1,4-Dichlorobenzene	ND	0.0202						0		30	
n-Butylbenzene	ND	0.0202						0		30	

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009268-005BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **BATCH** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243087**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichlorobenzene	ND	0.0202						0		30	
1,2-Dibromo-3-chloropropane	ND	0.506						0		30	
1,2,4-Trimethylbenzene	ND	0.0202						0		30	
Hexachloro-1,3-butadiene	ND	0.0253						0		30	
Naphthalene	ND	0.0506						0		30	
1,2,3-Trichlorobenzene	ND	0.0202						0		30	
Surr: Dibromofluoromethane	1.21		1.265		95.9	85.2	113		0		
Surr: Toluene-d8	1.25		1.265		98.8	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	1.21		1.265		96.0	88.6	109		0		

NOTES:
R - High RPD observed. The method is in control as indicated by the LCS.

Sample ID: **2009169-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **BATCH** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243084**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0222						0		30	
Chloromethane	ND	0.0555						0		30	
Vinyl chloride	ND	0.0222						0		30	
Bromomethane	ND	0.0555						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0222						0		30	
Chloroethane	ND	0.0555						0		30	
1,1-Dichloroethene	ND	0.0222						0		30	
Acetone	ND	0.277						0		30	
Methylene chloride	ND	0.0222						0		30	
Carbon disulfide	ND	0.0277						0		30	
Acrylonitrile	ND	0.0277						0		30	
trans-1,2-Dichloroethene	ND	0.0222						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0222						0		30	
1,1-Dichloroethane	ND	0.0222						0		30	
2,2-Dichloropropane	ND	0.0555						0		30	

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009169-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **BATCH** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243084**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	ND	0.0222						0		30	
(MEK) 2-Butanone	ND	0.277						0		30	
Chloroform	ND	0.0222						0		30	
Bromochloromethane	ND	0.0222						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0222						0		30	
1,1-Dichloropropene	ND	0.0222						0		30	
Carbon tetrachloride	ND	0.0222						0		30	
1,2-Dichloroethane (EDC)	ND	0.0222						0		30	
Benzene	ND	0.0222						0		30	
Trichloroethene (TCE)	ND	0.0222						0		30	
1,2-Dichloropropane	ND	0.0222						0		30	
Bromodichloromethane	ND	0.0222						0		30	
Dibromomethane	ND	0.0222						0		30	
cis-1,3-Dichloropropene	ND	0.0222						0		30	
Toluene	ND	0.0222						0		30	
trans-1,3-Dichloropropylene	ND	0.0222						0		30	
Methyl Isobutyl Ketone (MIBK)	ND	0.277						0		30	
1,1,2-Trichloroethane	ND	0.0222						0		30	
1,3-Dichloropropane	ND	0.0277						0		30	
Tetrachloroethene (PCE)	ND	0.0222						0		30	
Dibromochloromethane	ND	0.0222						0		30	
1,2-Dibromoethane (EDB)	ND	0.00555						0		30	
methyl n-butyl ketone	ND	0.277						0		30	
Chlorobenzene	ND	0.0222						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0222						0		30	
Ethylbenzene	ND	0.0277						0		30	
m,p-Xylene	ND	0.0555						0		30	
o-Xylene	ND	0.0277						0		30	
Styrene	ND	0.0222						0		30	
Isopropylbenzene	ND	0.0222						0		30	

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009169-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **BATCH** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243084**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	ND	0.0555						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0222						0		30	
n-Propylbenzene	ND	0.0222						0		30	
Bromobenzene	ND	0.0222						0		30	
1,3,5-Trimethylbenzene	ND	0.0222						0		30	
2-Chlorotoluene	ND	0.0277						0		30	
4-Chlorotoluene	ND	0.0222						0		30	
tert-Butylbenzene	ND	0.0222						0		30	
1,2,3-Trichloropropane	ND	0.0277						0		30	
1,2,4-Trichlorobenzene	ND	0.0222						0		30	
sec-Butylbenzene	ND	0.0277						0		30	
4-Isopropyltoluene	ND	0.0277						0		30	
1,3-Dichlorobenzene	ND	0.0222						0		30	
1,4-Dichlorobenzene	ND	0.0222						0		30	
n-Butylbenzene	ND	0.0222						0		30	
1,2-Dichlorobenzene	ND	0.0222						0		30	
1,2-Dibromo-3-chloropropane	ND	0.555						0		30	
1,2,4-Trimethylbenzene	ND	0.0222						0		30	
Hexachloro-1,3-butadiene	ND	0.0277						0		30	
Naphthalene	ND	0.0555						0		30	
1,2,3-Trichlorobenzene	ND	0.0222						0		30	
Surr: Dibromofluoromethane	1.36		1.387		97.9	85.2	113		0		
Surr: Toluene-d8	1.39		1.387		99.9	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	1.31		1.387		94.7	88.6	109		0		

Sample ID: **2009268-006BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **BATCH** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243089**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.08	0.0205	1.026	0	105	9.44	188				

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009268-006BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **BATCH** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243089**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	0.795	0.0513	1.026	0	77.5	40.6	156				
Vinyl chloride	1.01	0.0205	1.026	0	98.2	52.8	150				
Bromomethane	2.21	0.0513	1.026	0	215	41	165				S
Trichlorofluoromethane (CFC-11)	1.10	0.0205	1.026	0	107	53.7	157				
Chloroethane	1.26	0.0513	1.026	0	123	29.9	178				
1,1-Dichloroethene	1.07	0.0205	1.026	0	104	62.9	149				
Acetone	3.43	0.257	2.566	0	134	42.1	175				
Methylene chloride	1.07	0.0205	1.026	0	104	74.3	126				
Carbon disulfide	0.962	0.0257	1.026	0	93.7	66.9	138				
Acrylonitrile	1.07	0.0257	1.026	0	104	67	137				
trans-1,2-Dichloroethene	1.06	0.0205	1.026	0	103	73.1	130				
Methyl tert-butyl ether (MTBE)	1.01	0.0205	1.026	0	98.3	71.8	123				
1,1-Dichloroethane	1.07	0.0205	1.026	0	105	73	128				
2,2-Dichloropropane	1.11	0.0513	1.026	0	108	53.1	140				
cis-1,2-Dichloroethene	1.05	0.0205	1.026	0	103	77.5	125				
(MEK) 2-Butanone	2.71	0.257	2.566	0.1639	99.1	55.4	146				
Chloroform	1.06	0.0205	1.026	0	103	76.8	127				
Bromochloromethane	1.07	0.0205	1.026	0	104	82.6	120				
1,1,1-Trichloroethane (TCA)	1.06	0.0205	1.026	0	104	71.4	134				
1,1-Dichloropropene	1.07	0.0205	1.026	0	104	69	133				
Carbon tetrachloride	1.08	0.0205	1.026	0	105	67.5	136				
1,2-Dichloroethane (EDC)	1.05	0.0205	1.026	0	102	73.9	128				
Benzene	1.08	0.0205	1.026	0	105	74.6	126				
Trichloroethene (TCE)	1.10	0.0205	1.026	0	107	72	133				
1,2-Dichloropropane	1.06	0.0205	1.026	0	103	73.5	125				
Bromodichloromethane	1.04	0.0205	1.026	0	101	77.1	125				
Dibromomethane	1.06	0.0205	1.026	0	103	79.6	122				
cis-1,3-Dichloropropene	1.02	0.0205	1.026	0	99.3	71.8	122				
Toluene	1.08	0.0205	1.026	0	105	72.6	127				
trans-1,3-Dichloropropylene	1.06	0.0205	1.026	0	103	71.1	125				

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009268-006BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **BATCH** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243089**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl Isobutyl Ketone (MIBK)	2.46	0.257	2.566	0	96.0	46.2	152				
1,1,2-Trichloroethane	1.02	0.0205	1.026	0	99.5	75.6	123				
1,3-Dichloropropane	1.05	0.0257	1.026	0	102	74.4	122				
Tetrachloroethene (PCE)	1.09	0.0205	1.026	0	106	72.7	128				
Dibromochloromethane	1.05	0.0205	1.026	0	102	78.3	120				
1,2-Dibromoethane (EDB)	1.05	0.00513	1.026	0	102	76.1	121				
methyl n-butyl ketone	2.57	0.257	2.566	0	100	50.9	142				
Chlorobenzene	1.05	0.0205	1.026	0	102	74.9	124				
1,1,1,2-Tetrachloroethane	1.05	0.0205	1.026	0	102	75.3	126				
Ethylbenzene	1.08	0.0257	1.026	0	105	77.3	126				
m,p-Xylene	2.17	0.0513	2.053	0	106	78.5	126				
o-Xylene	1.07	0.0257	1.026	0	104	79.4	123				
Styrene	1.06	0.0205	1.026	0	103	80	122				
Isopropylbenzene	1.09	0.0205	1.026	0	106	77.3	128				
Bromoform	0.979	0.0513	1.026	0	95.4	68.7	131				
1,1,2,2-Tetrachloroethane	0.930	0.0205	1.026	0	90.6	58.2	134				
n-Propylbenzene	1.10	0.0205	1.026	0	107	76	130				
Bromobenzene	1.06	0.0205	1.026	0	103	80.3	123				
1,3,5-Trimethylbenzene	1.09	0.0205	1.026	0	106	75.8	128				
2-Chlorotoluene	1.08	0.0257	1.026	0	105	78.6	127				
4-Chlorotoluene	1.07	0.0205	1.026	0	105	79	126				
tert-Butylbenzene	1.06	0.0205	1.026	0	103	77.7	130				
1,2,3-Trichloropropane	0.995	0.0257	1.026	0	96.9	60.3	139				
1,2,4-Trichlorobenzene	1.02	0.0205	1.026	0	99.0	75.1	128				
sec-Butylbenzene	1.07	0.0257	1.026	0	104	76.2	132				
4-Isopropyltoluene	1.06	0.0257	1.026	0	104	77.3	130				
1,3-Dichlorobenzene	1.08	0.0205	1.026	0	105	77.2	127				
1,4-Dichlorobenzene	1.07	0.0205	1.026	0	104	76.7	125				
n-Butylbenzene	1.06	0.0205	1.026	0	104	74.8	133				
1,2-Dichlorobenzene	1.07	0.0205	1.026	0	104	77.5	125				

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009268-006BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **BATCH** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243089**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	0.957	0.513	1.026	0	93.2	59.9	139				
1,2,4-Trimethylbenzene	1.10	0.0205	1.026	0	107	68.4	135				
Hexachloro-1,3-butadiene	1.02	0.0257	1.026	0	99.8	71	145				
Naphthalene	1.01	0.0513	1.026	0	98.3	64.3	140				
1,2,3-Trichlorobenzene	1.06	0.0205	1.026	0	104	67.2	133				
Surr: Dibromofluoromethane	1.28		1.283		100	85.2	113				
Surr: Toluene-d8	1.30		1.283		102	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.33		1.283		104	88.6	109				

NOTES:
S - Outlying spike recovery observed (high bias).

Sample ID: **2009268-006BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **BATCH** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243090**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.17	0.0205	1.026	0	114	9.44	188	1.076	8.25	30	
Chloromethane	0.845	0.0513	1.026	0	82.3	40.6	156	0.7949	6.09	30	
Vinyl chloride	1.08	0.0205	1.026	0	105	52.8	150	1.007	6.84	30	
Bromomethane	2.21	0.0513	1.026	0	215	41	165	2.209	0.0563	30	S
Trichlorofluoromethane (CFC-11)	1.15	0.0205	1.026	0	112	53.7	157	1.099	4.86	30	
Chloroethane	1.34	0.0513	1.026	0	131	29.9	178	1.258	6.63	30	
1,1-Dichloroethene	1.15	0.0205	1.026	0	112	62.9	149	1.065	7.44	30	
Acetone	3.08	0.257	2.566	0	120	42.1	175	3.427	10.7	30	
Methylene chloride	1.08	0.0205	1.026	0	105	74.3	126	1.072	0.787	30	
Carbon disulfide	1.04	0.0257	1.026	0	101	66.9	138	0.9617	7.35	30	
Acrylonitrile	1.11	0.0257	1.026	0	108	67	137	1.066	3.77	30	
trans-1,2-Dichloroethene	1.10	0.0205	1.026	0	107	73.1	130	1.061	3.76	30	
Methyl tert-butyl ether (MTBE)	1.01	0.0205	1.026	0	98.2	71.8	123	1.009	0.157	30	
1,1-Dichloroethane	1.11	0.0205	1.026	0	108	73	128	1.074	3.23	30	
2,2-Dichloropropane	1.15	0.0513	1.026	0	112	53.1	140	1.110	3.52	30	
cis-1,2-Dichloroethene	1.10	0.0205	1.026	0	107	77.5	125	1.052	4.34	30	

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009268-006BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **BATCH** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243090**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
(MEK) 2-Butanone	2.74	0.257	2.566	0.1639	100	55.4	146	2.708	1.14	30	
Chloroform	1.08	0.0205	1.026	0	105	76.8	127	1.062	1.91	30	
Bromochloromethane	1.07	0.0205	1.026	0	104	82.6	120	1.065	0.144	30	
1,1,1-Trichloroethane (TCA)	1.11	0.0205	1.026	0	109	71.4	134	1.063	4.75	30	
1,1-Dichloropropene	1.11	0.0205	1.026	0	108	69	133	1.068	3.42	30	
Carbon tetrachloride	1.13	0.0205	1.026	0	110	67.5	136	1.075	4.73	30	
1,2-Dichloroethane (EDC)	1.04	0.0205	1.026	0	101	73.9	128	1.050	0.873	30	
Benzene	1.11	0.0205	1.026	0	108	74.6	126	1.082	2.42	30	
Trichloroethene (TCE)	1.12	0.0205	1.026	0	109	72	133	1.101	1.45	30	
1,2-Dichloropropane	1.08	0.0205	1.026	0	105	73.5	125	1.059	2.00	30	
Bromodichloromethane	1.06	0.0205	1.026	0	103	77.1	125	1.036	2.01	30	
Dibromomethane	1.06	0.0205	1.026	0	104	79.6	122	1.061	0.324	30	
cis-1,3-Dichloropropene	1.04	0.0205	1.026	0	102	71.8	122	1.019	2.41	30	
Toluene	1.12	0.0205	1.026	0	109	72.6	127	1.081	3.29	30	
trans-1,3-Dichloropropylene	1.07	0.0205	1.026	0	104	71.1	125	1.058	1.35	30	
Methyl Isobutyl Ketone (MIBK)	2.46	0.257	2.566	0	95.7	46.2	152	2.463	0.241	30	
1,1,2-Trichloroethane	1.07	0.0205	1.026	0	104	75.6	123	1.021	4.22	30	
1,3-Dichloropropane	1.05	0.0257	1.026	0	102	74.4	122	1.049	0.0518	30	
Tetrachloroethene (PCE)	1.15	0.0205	1.026	0	112	72.7	128	1.092	4.85	30	
Dibromochloromethane	1.08	0.0205	1.026	0	105	78.3	120	1.045	2.93	30	
1,2-Dibromoethane (EDB)	1.07	0.00513	1.026	0	104	76.1	121	1.046	2.26	30	
methyl n-butyl ketone	2.59	0.257	2.566	0	101	50.9	142	2.566	1.00	30	
Chlorobenzene	1.09	0.0205	1.026	0	106	74.9	124	1.046	3.79	30	
1,1,1,2-Tetrachloroethane	1.07	0.0205	1.026	0	104	75.3	126	1.048	1.69	30	
Ethylbenzene	1.12	0.0257	1.026	0	109	77.3	126	1.078	3.80	30	
m,p-Xylene	2.26	0.0513	2.053	0	110	78.5	126	2.170	3.92	30	
o-Xylene	1.10	0.0257	1.026	0	108	79.4	123	1.071	3.07	30	
Styrene	1.08	0.0205	1.026	0	105	80	122	1.056	2.40	30	
Isopropylbenzene	1.13	0.0205	1.026	0	110	77.3	128	1.091	3.33	30	
Bromoform	1.02	0.0513	1.026	0	99.0	68.7	131	0.9792	3.72	30	

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2009268-006BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/21/2020** RunNo: **61970**
Client ID: **BATCH** Batch ID: **29734** Analysis Date: **9/21/2020** SeqNo: **1243090**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	0.936	0.0205	1.026	0	91.2	58.2	134	0.9297	0.629	30	
n-Propylbenzene	1.13	0.0205	1.026	0	111	76	130	1.095	3.56	30	
Bromobenzene	1.09	0.0205	1.026	0	106	80.3	123	1.056	3.37	30	
1,3,5-Trimethylbenzene	1.13	0.0205	1.026	0	110	75.8	128	1.088	4.11	30	
2-Chlorotoluene	1.11	0.0257	1.026	0	108	78.6	127	1.076	2.72	30	
4-Chlorotoluene	1.11	0.0205	1.026	0	108	79	126	1.074	3.07	30	
tert-Butylbenzene	1.12	0.0205	1.026	0	109	77.7	130	1.061	5.27	30	
1,2,3-Trichloropropane	1.00	0.0257	1.026	0	97.7	60.3	139	0.9945	0.801	30	
1,2,4-Trichlorobenzene	1.05	0.0205	1.026	0	102	75.1	128	1.016	3.11	30	
sec-Butylbenzene	1.12	0.0257	1.026	0	109	76.2	132	1.069	4.89	30	
4-Isopropyltoluene	1.11	0.0257	1.026	0	108	77.3	130	1.065	3.90	30	
1,3-Dichlorobenzene	1.11	0.0205	1.026	0	108	77.2	127	1.082	2.42	30	
1,4-Dichlorobenzene	1.09	0.0205	1.026	0	106	76.7	125	1.068	2.28	30	
n-Butylbenzene	1.13	0.0205	1.026	0	110	74.8	133	1.065	6.02	30	
1,2-Dichlorobenzene	1.08	0.0205	1.026	0	105	77.5	125	1.067	1.28	30	
1,2-Dibromo-3-chloropropane	0.911	0.513	1.026	0	88.7	59.9	139	0.9567	4.91	30	
1,2,4-Trimethylbenzene	1.13	0.0205	1.026	0	110	68.4	135	1.098	3.04	30	
Hexachloro-1,3-butadiene	1.10	0.0257	1.026	0	108	71	145	1.024	7.54	30	
Naphthalene	0.995	0.0513	1.026	0	97.0	64.3	140	1.008	1.32	30	
1,2,3-Trichlorobenzene	1.06	0.0205	1.026	0	104	67.2	133	1.063	0.0776	30	
Surr: Dibromofluoromethane	1.28		1.283		99.7	85.2	113		0		
Surr: Toluene-d8	1.30		1.283		102	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	1.34		1.283		105	88.6	109		0		

NOTES:
S - Outlying spike recovery observed (high bias).

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D SIM

Sample ID: **LCS-29719** SampType: **LCS** Units: **mg/Kg** Prep Date: **9/18/2020** RunNo: **61967**
Client ID: **LCSS** Batch ID: **29719** Analysis Date: **9/18/2020** SeqNo: **1242835**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	0.246	0.00597	0.2500	0	98.3	53.2	137				
1,1-Dichloroethene (DCE)	0.257	0.00502	0.2500	0	103	69.3	126				
Methylene chloride	0.254	0.0427	0.2500	0	102	78.6	121				
trans-1,2-Dichloroethene	0.252	0.00998	0.2500	0	101	80.5	121				
Methyl tert-butyl ether (MTBE)	0.240	0.00714	0.2500	0	95.9	67.8	128				
1,1-Dichloroethane	0.254	0.00423	0.2500	0	101	85.5	116				
cis-1,2-Dichloroethene	0.251	0.00473	0.2500	0	100	83.7	117				
1,1,1-Trichloroethane (TCA)	0.257	0.00349	0.2500	0	103	80.1	119				
1,2-Dichloroethane (EDC)	0.248	0.00145	0.2500	0	99.1	78.1	120				
Benzene	0.249	0.00547	0.2500	0	99.5	80.7	118				
Trichloroethene (TCE)	0.251	0.00623	0.2500	0	100	80.2	120				
Toluene	0.250	0.0265	0.2500	0	100	80.3	117				
1,1,2-Trichloroethane	0.245	0.00145	0.2500	0	98.1	71.4	125				
Tetrachloroethylene (PCE)	0.255	0.00511	0.2500	0	102	80.2	119				
1,2-Dibromoethane (EDB)	0.246	0.00146	0.2500	0	98.4	73.5	121				
Ethylbenzene	0.258	0.00854	0.2500	0	103	78	117				
m,p-Xylene	0.520	0.00975	0.5000	0	104	78.4	115				
o-Xylene	0.257	0.00300	0.2500	0	103	79.4	114				
1,4-Dioxane	52.6	4.00	50.00	0	105	68.7	139				
1,2-Dibromo-3-chloropropane	0.251	0.0128	0.2500	0	100	69.5	125				
Hexachloro-1,3-butadiene	0.275	0.00654	0.2500	0	110	68.5	137				B
Surr: Dibromofluoromethane	0.500		0.5000		100	76.8	130				
Surr: Toluene-d8	0.505		0.5000		101	83.3	117				
Surr: 1-Bromo-4-fluorobenzene	0.513		0.5000		103	82.6	115				

Sample ID: **MB-29719** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/18/2020** RunNo: **61967**
Client ID: **MBLKS** Batch ID: **29719** Analysis Date: **9/18/2020** SeqNo: **1242836**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.00597									

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D SIM

Sample ID: **MB-29719** SampType: **MBLK** Units: **mg/Kg** Prep Date: **9/18/2020** RunNo: **61967**
Client ID: **MBLKS** Batch ID: **29719** Analysis Date: **9/18/2020** SeqNo: **1242836**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene (DCE)	ND	0.00502									
Methylene chloride	ND	0.0427									
trans-1,2-Dichloroethene	ND	0.00998									
Methyl tert-butyl ether (MTBE)	ND	0.00714									
1,1-Dichloroethane	ND	0.00423									
cis-1,2-Dichloroethene	ND	0.00473									
1,1,1-Trichloroethane (TCA)	ND	0.00349									
1,2-Dichloroethane (EDC)	ND	0.00145									
Benzene	ND	0.00547									
Trichloroethene (TCE)	ND	0.00623									
Toluene	ND	0.0265									
1,1,2-Trichloroethane	ND	0.00145									
Tetrachloroethylene (PCE)	ND	0.00511									
1,2-Dibromoethane (EDB)	ND	0.00146									
Ethylbenzene	ND	0.00854									
m,p-Xylene	ND	0.00975									
o-Xylene	ND	0.00300									
1,4-Dioxane	ND	4.00									
1,2-Dibromo-3-chloropropane	ND	0.0128									
Hexachloro-1,3-butadiene	0.00825	0.00654									
Surr: Dibromofluoromethane	0.500		0.5000		100	76.8	130				
Surr: Toluene-d8	0.489		0.5000		97.8	83.3	117				
Surr: 1-Bromo-4-fluorobenzene	0.491		0.5000		98.3	82.6	115				

NOTES:
Although Method Blank had detection for Hexachlorobutadiene, samples associated were non-detect.

Sample ID: **2009260-010BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/18/2020** RunNo: **61967**
Client ID: **Ex-6-3** Batch ID: **29719** Analysis Date: **9/18/2020** SeqNo: **1242821**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.00659						0		30	

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D SIM

Sample ID: **2009260-010BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **9/18/2020** RunNo: **61967**
Client ID: **Ex-6-3** Batch ID: **29719** Analysis Date: **9/18/2020** SeqNo: **1242821**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene (DCE)	ND	0.00555						0		30	
Methylene chloride	ND	0.0472						0		30	
trans-1,2-Dichloroethene	ND	0.0110						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.00789						0		30	
1,1-Dichloroethane	ND	0.00468						0		30	
cis-1,2-Dichloroethene	ND	0.00523						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.00386						0		30	
1,2-Dichloroethane (EDC)	ND	0.00160						0		30	
Benzene	ND	0.00605						0		30	
Trichloroethene (TCE)	ND	0.00689						0		30	
Toluene	ND	0.0293						0		30	
1,1,2-Trichloroethane	ND	0.00161						0		30	
Tetrachloroethylene (PCE)	ND	0.00565						0		30	
1,2-Dibromoethane (EDB)	ND	0.00161						0		30	
Ethylbenzene	ND	0.00943						0		30	
m,p-Xylene	ND	0.0108						0		30	
o-Xylene	ND	0.00331						0		30	
1,4-Dioxane	ND	4.42						0		30	
1,2-Dibromo-3-chloropropane	ND	0.0141						0		30	
Hexachloro-1,3-butadiene	ND	0.00723						0		30	
Surr: Dibromofluoromethane	0.559		0.5527		101	76.8	130		0		
Surr: Toluene-d8	0.550		0.5527		99.5	83.3	117		0		
Surr: 1-Bromo-4-fluorobenzene	0.550		0.5527		99.6	82.6	115		0		

Sample ID: **2009260-011BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/18/2020** RunNo: **61967**
Client ID: **Ex-7-2** Batch ID: **29719** Analysis Date: **9/19/2020** SeqNo: **1242823**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	0.200	0.00723	0.3030	0	66.0	35.9	160				
1,1-Dichloroethene (DCE)	0.199	0.00609	0.3030	0	65.7	47.4	153				

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D SIM

Sample ID: **2009260-011BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **9/18/2020** RunNo: **61967**
Client ID: **Ex-7-2** Batch ID: **29719** Analysis Date: **9/19/2020** SeqNo: **1242823**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	0.224	0.0517	0.3030	0	74.1	56.9	149				
trans-1,2-Dichloroethene	0.200	0.0121	0.3030	0	66.0	61.1	136				
Methyl tert-butyl ether (MTBE)	0.218	0.00865	0.3030	0	72.0	67.9	130				
1,1-Dichloroethane	0.210	0.00513	0.3030	0	69.3	64.5	126				
cis-1,2-Dichloroethene	0.208	0.00573	0.3030	0	68.5	69.5	123				S
1,1,1-Trichloroethane (TCA)	0.193	0.00423	0.3030	0	63.6	60.6	129				
1,2-Dichloroethane (EDC)	0.219	0.00175	0.3030	0	72.4	62.5	132				
Benzene	0.202	0.00663	0.3030	0	66.8	63.5	120				
Trichloroethene (TCE)	0.198	0.00755	0.3030	0	65.5	62	138				
Toluene	0.208	0.0322	0.3030	0	68.5	61.8	121				
1,1,2-Trichloroethane	0.222	0.00176	0.3030	0.001376	72.7	61	130				
Tetrachloroethylene (PCE)	0.200	0.00620	0.3030	0	66.2	60.9	126				
1,2-Dibromoethane (EDB)	0.225	0.00177	0.3030	0	74.1	60.4	133				
Ethylbenzene	0.205	0.0103	0.3030	0	67.8	70.9	113				S
m,p-Xylene	0.416	0.0118	0.6060	0	68.7	69.4	113				S
o-Xylene	0.210	0.00363	0.3030	0	69.2	68.8	115				
1,4-Dioxane	52.9	4.85	60.60	0	87.4	61.1	139				
1,2-Dibromo-3-chloropropane	0.226	0.0155	0.3030	0	74.4	64.3	137				
Hexachloro-1,3-butadiene	0.192	0.00793	0.3030	0	63.4	57.5	139				B
Surr: Dibromofluoromethane	0.611		0.6060		101	76.8	130				
Surr: Toluene-d8	0.620		0.6060		102	83.3	117				
Surr: 1-Bromo-4-fluorobenzene	0.640		0.6060		106	82.6	115				

NOTES:
S - Outlying spike recovery observed.

Sample ID: **2009260-011BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/18/2020** RunNo: **61967**
Client ID: **Ex-7-2** Batch ID: **29719** Analysis Date: **9/19/2020** SeqNo: **1242824**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	0.192	0.00723	0.3030	0	63.5	35.9	160	0.2001	3.92	30	
1,1-Dichloroethene (DCE)	0.191	0.00609	0.3030	0	62.9	47.4	153	0.1989	4.30	30	

Work Order: 2009260
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D SIM

Sample ID: **2009260-011BMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **9/18/2020** RunNo: **61967**
Client ID: **Ex-7-2** Batch ID: **29719** Analysis Date: **9/19/2020** SeqNo: **1242824**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	0.219	0.0517	0.3030	0	72.2	56.9	149	0.2245	2.55	30	
trans-1,2-Dichloroethene	0.195	0.0121	0.3030	0	64.3	61.1	136	0.2000	2.59	30	
Methyl tert-butyl ether (MTBE)	0.224	0.00865	0.3030	0	74.0	67.9	130	0.2180	2.82	30	
1,1-Dichloroethane	0.203	0.00513	0.3030	0	66.9	64.5	126	0.2099	3.52	30	
cis-1,2-Dichloroethene	0.203	0.00573	0.3030	0	67.0	69.5	123	0.2076	2.23	30	S
1,1,1-Trichloroethane (TCA)	0.188	0.00423	0.3030	0	62.2	60.6	129	0.1928	2.28	30	
1,2-Dichloroethane (EDC)	0.221	0.00175	0.3030	0	72.9	62.5	132	0.2194	0.702	30	
Benzene	0.201	0.00663	0.3030	0	66.4	63.5	120	0.2023	0.532	30	
Trichloroethene (TCE)	0.199	0.00755	0.3030	0	65.7	62	138	0.1983	0.397	30	
Toluene	0.206	0.0322	0.3030	0	67.9	61.8	121	0.2076	0.935	30	
1,1,2-Trichloroethane	0.229	0.00176	0.3030	0.001376	75.2	61	130	0.2216	3.45	30	
Tetrachloroethylene (PCE)	0.197	0.00620	0.3030	0	64.9	60.9	126	0.2005	1.88	30	
1,2-Dibromoethane (EDB)	0.231	0.00177	0.3030	0	76.3	60.4	133	0.2246	2.94	30	
Ethylbenzene	0.204	0.0103	0.3030	0	67.2	70.9	113	0.2054	0.893	30	S
m,p-Xylene	0.409	0.0118	0.6060	0	67.5	69.4	113	0.4164	1.75	30	S
o-Xylene	0.208	0.00363	0.3030	0	68.6	68.8	115	0.2098	0.912	30	S
1,4-Dioxane	57.0	4.85	60.60	0	94.1	61.1	139	52.94	7.39	30	
1,2-Dibromo-3-chloropropane	0.247	0.0155	0.3030	0	81.5	64.3	137	0.2255	9.11	30	
Hexachloro-1,3-butadiene	0.197	0.00793	0.3030	0	65.0	57.5	139	0.1922	2.41	30	B
Surr: Dibromofluoromethane	0.601		0.6060		99.1	76.8	130		0		
Surr: Toluene-d8	0.617		0.6060		102	83.3	117		0		
Surr: 1-Bromo-4-fluorobenzene	0.634		0.6060		105	82.6	115		0		

NOTES:
S - Outlying spike recovery observed.

Sample Log-In Check List

Client Name:	**PES**	Work Order Number:	**2009260**
Logged by:	**Clare Griggs**	Date Received:	**9/17/2020 1:33:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☑	No ☐	Not Present ☐
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes ☑	No ☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
10.	Are samples properly preserved?	Yes ☑	No ☐	
11.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
14.	Does paperwork match bottle labels?	Yes ☑	No ☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
16.	Is it clear what analyses were requested?	Yes ☑	No ☐	
17.	Were all holding times able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample	1.2

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 9-17-20 | Page: 1 of: 2 | Laboratory Project No (internal): 20092460

Special Remarks:

Project Name: MVSC

Client: PES Environmental, Inc.

Project No: 1358.001.02.012

Address: 1215 4th Ave Suite 1350

Collected by: C. DeBoer

City, State, Zip: Seattle, WA 98161

Location: Bunker, WA

Telephone: (206) 529-3980

Report To (PM): Matt Dahl

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax: (206) 529-3995

PM Email: mdahl@pesenv.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)		VOCs 8260 -SIM	Comments
1	Ex-1-1.5	9-17-20	0845	Soil	X															
2	Ex-1-4		0850		X															
3	Ex-2-1		0855		X															
4	Ex-2-4		0900		X															
5	Ex-3-3		0910		X															
6	Ex-3-4		0915		X															
7	Ex-4-2		0935		X															
8	Ex-4-4		0940		X															
9	Ex-5-2		0920		X															
10	Ex-6-3		0955																X	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☐ Standard
☐ 3 Day
☒ 2 Day
☐ Next Day
Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Chris DeBoer	9/17/20 1255	x	9/17/20 1333
Relinquished	Date/Time	Received	Date/Time
x		x	

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 9-17-20 | Page: 2 of: 2 | Laboratory Project No (internal): 20092460

Project Name: MVSC | Special Remarks:

Project No: 1358.001.02.012

Collected by: C. DeBoer

Location: Burien, WA

Report To (PM): Matt Dahl

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

PM Email: mdahl@fesenv.com

Client: FES Environmental, Inc

Address: 1215 4th Ave Suite 1350

City, State, Zip: Seattle, WA 98161

Telephone: (206) 529-3980

Fax: (206) 529-3985

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	(HOLD) VOCs 8260C - SIM	Comments
1	Ex-7-2	9/17/20	1005	Soil														X	
2	Ex-8-1.5		1015															X	
3	Ex-9-3 @		1025															X	
4	Ex-10-3		1030															X	
5	Ex-15-2		1050															X	
6	Ex-14-2		1055															X	
7	Ex-13-2		1105															X	
8	Ex-12-2		1110															X	
9	Ex-11-2		1115															X	
10	TRIP BLANK	9/15/20	0705	-														X	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☐ Standard
☐ 3 Day
☒ 2 Day
☐ Next Day
Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Chris DeBoer	9/17/20 1255	x	9/17/20 13:33
Relinquished	Date/Time	Received	Date/Time
x		x	

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 9-17-20 | Page: 1 of: 2 | Laboratory Project No (internal): 20092460

Special Remarks:

Project Name: MVSC

Client: PES Environmental, Inc.

Project No: 1358.001.02.012

Address: 1215 4th Ave Suite 1350

Collected by: C. DeBoer

City, State, Zip: Seattle, WA 98161

Location: Burien, WA

Telephone: (206) 529-3980

Report To (PM): Matt Dahl

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax: (206) 529-3995

PM Email: mdahl@pesenv.com

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)			VOCs 8260 -SIM	Comments
1 Ex-1-1.5	9-17-20	0845	Soil	X															
2 Ex-1-4		0850		X															
3 Ex-2-1		0855		X															
4 Ex-2-4		0900		X															
5 Ex-3-3		0910		X															
6 Ex-3-4		0915		X															
7 Ex-4-2		0935		X															
8 Ex-4-4		0940		X															
9 Ex-5-2		0920		X															
10 Ex-6-3		0955																X	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☐ Standard
☐ 3 Day
☒ 2 Day
☐ Next Day
Same Day _____ (specify)

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Relinquished	Date/Time	Received	Date/Time
x Chris DeBoer	9/17/20 1255	x	9/17/20 1333
Relinquished	Date/Time	Received	Date/Time
x		x	

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 9-17-20 | Page: 2 of: 2 | Laboratory Project No (internal): 20092460

Project Name: MVSC

Special Remarks: edit per MD 9/7/20 -cg

Client: PES Environmental, Inc

Project No: 1358.001.02.012

Address: 1215 4th Ave Suite 1350

Collected by: C. DeBoer

City, State, Zip: Seattle, WA 98161

Location: Burien, WA

Telephone: (206) 529-3980

Report To (PM): Matt Dahl

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax: (206) 529-3985

PM Email: mdahl@pesenv.com

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	(HOLD) VOCs 8260C - 5/14	Comments
1 Ex-7-2	9/17/20	1005	Soil														X	
2 Ex-8-1.5		1015															X	
3 Ex-9-3 @		1025															X	
4 Ex-10-3		1030															X	
5 Ex-15-2		1050															X	
6 Ex-14-2		1055															X	
7 Ex-13-2		1105															X	
8 Ex-12-2		1110															X	
9 Ex-11-2		1115															X	
10 TRIP BLANK	9/15/20	0705	-	X													X	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☐ Standard
☐ 3 Day
☒ 2 Day
☐ Next Day
Same Day _____ (specify)

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Relinquished	Date/Time		Received	Date/Time	
x Chris DeBoer	9/17/20	1255	x	9/17/20	13:33
Relinquished	Date/Time		Received	Date/Time	
x			x		

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 9-17-20 | Page: 1 of: 2 | Laboratory Project No (internal): 20092460

Special Remarks: *- Add MEK per M.D. 1/4/2021 -BB

Project Name: MVSC

Client: PES Environmental, Inc.
Project No: 1358.001.02.012
Address: 1215 4th Ave Suite 1350
Collected by: C. DeBoer
City, State, Zip: Seattle, WA 98161
Location: Burien, WA
Telephone: (206) 529-3980
Report To (PM): Matt Dahl
Fax: (206) 529-3995
PM Email: mdahl@pesenv.com

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624) *	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)			WOCs 8260 -SIM	Comments
1	Ex-1-1.5	9-17-20	0845	Soil	X															
2	Ex-1-4		0850		X															
3	Ex-2-1		0855		X															
4	Ex-2-4		0900		X															
5	Ex-3-3		0910		X															
6	Ex-3-4		0915		X															
7	Ex-4-2		0935		X															
8	Ex-4-4		0940		X															
9	Ex-5-2		0920		X															
10	Ex-6-3		0955																X	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☐ Standard
☐ 3 Day
☒ 2 Day
☐ Next Day
Same Day _____ (specify)

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Relinquished	Date/Time	Received	Date/Time
x Chris DeBoer	9/17/20 1255	x	9/17/20 1333
Relinquished	Date/Time	Received	Date/Time
x		x	

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 9-17-20 | Page: 2 of: 2 | Laboratory Project No (internal): 20092460

Special Remarks: edit per MD 9/7/20 -cg

Client: PES Environmental, Inc
Address: 1215 4th Ave Suite 1350
City, State, Zip: Seattle, WA 98161
Telephone: (206) 529-3980
Fax: (206) 529-3985

Project Name: MVSC
Project No: 1358.001.02.012
Collected by: C. DeBoer
Location: Burien, WA
Report To (PM): Matt Dahl
PM Email: mdahl@pesenv.com

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	(HOLD) VOCs 8260C - SIM	Comments
1 Ex-7-2	9/17/20	1005	Soil														X	
2 Ex-8-1.5		1015															X	
3 Ex-9-3 @		1025															X	
4 Ex-10-3		1030															X	
5 Ex-15-2		1050															X	
6 Ex-14-2		1055															X	
7 Ex-13-2		1105															X	
8 Ex-12-2		1110															X	
9 Ex-11-2		1115															X	
10 TRIP BLANK	9/15/20	0705	-	X													X	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☐ Standard
☐ 3 Day
☒ 2 Day
☐ Next Day
Same Day ____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time		Received	Date/Time	
x Chris DeBoer	9/17/20	1255	x	9/17/20	13:33
Relinquished	Date/Time		Received	Date/Time	
x			x		

MEMORANDUM

TO: Project File **DATE:** September 22, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: Manhattan Village Shopping Center

PROJECT #: 1358.001.02.012

TASK: EIM Data Validation Level EPA2A – September 17, 2020
Pre-Trench and Pre-Excavation Soil Samples

LAB: Fremont Work Order Number 2009260

Nineteen (19) soil samples and one trip blank sample were collected to profile soil to be excavated and trenched at the Manhattan Village Shopping Center site in Normandy Park, Washington on September 17, 2020. Laboratory analytical services were provided by Fremont Analytical (Fremont) of Seattle, Washington. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- VOCs (21 compounds) by USEPA Method 8260D Selected Ion Monitoring (SIM); and
- Total solids USEPA Method 8000D.

The quality assurance review of the laboratory data for Fremont Work Order 2009260 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested. No concerns, issues, or anomalies were identified in the laboratory report with the following discussions:

- Per PES's 9/**1**7/2020 request Trip Blank sample was removed from hold and submitted for VOC analysis.

Sample Collection and Preservation

The samples were stored on ice in coolers and delivered in good condition to the laboratory. Sample temperatures at the time of receipt were slightly below EPA's recommended temperature preservation range of less than 6.0 °Centigrade. No data qualifications are warranted.

Holding Times

USEPA Method 8260D/8260D-SIM:
All samples were analyzed for VOCs within the EPA recommended holding time of 14 days for preserved soil samples. All holding time criteria were met.

USEPA Method 8000D:
Samples were analyzed within the USEPA recommended holding time of seven days for total solids.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable and Fremont's case narrative and sample notes do not indicate any issues with calibration.

Method Blank Results

USEPA Method 8260D/8260D-SIM:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (VOCs) were not detected in the method blanks at a concentration at or above the reporting detection limits (RLs) with the following exception:

- Analytical batch 29719: Hexachloro-1,3-butadiene was detected above the RL in the method blank. No action is necessary since hexachloro-1,3-butadiene is not detected in the associated sample.

Trip Blank Results

One trip blank (Trip Blank) was collected and submitted for analysis. The target analytes (VOCs) were not detected in the trip blank at a concentration at or above the reporting detection limits (RLs).

Equipment Blank Results

An equipment blank was not collected.

Field Duplicate Analyses

Field duplicate samples were not collected. Refer to client or non-client laboratory duplicate results for precision data.

Laboratory Duplicate Analyses

USEPA Method 8260D/8260D-SIM:
Laboratory duplicate analysis were performed on client soil sample Ex-6-3 for EPA Method 8260-SIM and on two non-client soil samples for VOCs within the analytical batches. Laboratory duplicate relative percent differences (RPDs) are within laboratory control limit of 30% RPD ($\leq$2X RL for < 5X RL) for soils.

USEPA Method 8000D:
Laboratory duplicate sample analyses were not performed. No action is taken other than to note this.

Surrogate Recoveries

USEPA Method 8260D/8260D-SIM:
The surrogate percent recovery (%R) results for the samples, method blanks, and laboratory duplicate (client), matrix spike sample (client), and laboratory control samples are within the laboratory surrogate control limits. No data qualifications were warranted.

Laboratory Control Samples

USEPA Method 8260D/8260D-SIM:
The laboratory control sample and laboratory control sample duplicate (LCS/LCSD) percent recoveries and RPDs for analytical batch associated with soils are within the laboratory control limits with the following exceptions:

- Analytical batches 29706 and 29734: LCS recovery for bromomethane was recovered above QC criteria and laboratory qualified (S). No action is necessary since bromomethane was not detected in the associated samples.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D/8260D-SIM:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on a client sample E-7-2 for EPA Method 8260-SIM and on two non-client samples for VOCs within the analytical batches. Sample E-7-2 MS/MSD % recoveries and RPDs are within laboratory acceptance criteria with the following exceptions:

- Analytical batch 29719: Sample E-7-2 MS and or MSD % Rs are below laboratory QC criteria for cis-1,2-dichloroethene, ethylbenzene, m,p-xylene, and o-xylene. **Sample E-7-2 results for cis-1,2-dichloroethene, ethylbenzene, and m,p-xylene are estimated (UJ) due to low MS/MSD recoveries.** No action is taken for x-xylene since the MS recovery is within criteria. A low-level detection of hexachloro-1,3-butadiene was detected in the associated blank and laboratory qualified (B). Blank contribution to the MS/MSD is negligible and no action is taken on this basis.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory reports with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered where needed.

Quantitation Limits

Results of the USEPA 8260 VOC and VOC-SIM analyses were reported based on laboratory RLs. The RLs indicate the minimum quantity of a target analyte that can be confidently determined by the reference method. The RLs were acceptable for the project; therefore, no data qualifications were warranted.

Data Assessment

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Client: PES Environmental, Inc.
Collection Date: 9/17/2020 10:05:00 AM
Project: MVSC
Lab ID: 2009260-011
Matrix: Soil
Client Sample ID: **Ex-7-2**

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D SIM					Batch ID: 29719		Analyst: CR
Vinyl chloride	ND		0.00723		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,1-Dichloroethene (DCE)	ND		0.00609		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Methylene chloride	ND		0.0517		mg/Kg-dry	1	9/18/2020 7:32:59 PM
trans-1,2-Dichloroethene	ND		0.0121		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Methyl tert-butyl ether (MTBE)	ND		0.00865		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,1-Dichloroethane	ND		0.00513		mg/Kg-dry	1	9/18/2020 7:32:59 PM
cis-1,2-Dichloroethene	ND	UJ	0.00573		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,1,1-Trichloroethane (TCA)	ND		0.00423		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,2-Dichloroethane (EDC)	ND		0.00175		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Benzene	ND		0.00663		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Trichloroethene (TCE)	ND		0.00755		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Toluene	ND		0.0322		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,1,2-Trichloroethane	ND		0.00176		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Tetrachloroethylene (PCE)	ND		0.00620		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,2-Dibromoethane (EDB)	ND		0.00177		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Ethylbenzene	ND	UJ	0.0103		mg/Kg-dry	1	9/18/2020 7:32:59 PM
m,p-Xylene	ND	UJ	0.0118		mg/Kg-dry	1	9/18/2020 7:32:59 PM
o-Xylene	ND		0.00363		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,4-Dioxane	ND		4.85		mg/Kg-dry	1	9/18/2020 7:32:59 PM
1,2-Dibromo-3-chloropropane	ND		0.0155		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Hexachloro-1,3-butadiene	ND		0.00793		mg/Kg-dry	1	9/18/2020 7:32:59 PM
Surr: Dibromofluoromethane	101		76.8 - 130		%Rec	1	9/18/2020 7:32:59 PM
Surr: Toluene-d8	98.8		83.3 - 117		%Rec	1	9/18/2020 7:32:59 PM
Surr: 1-Bromo-4-fluorobenzene	99.6		82.6 - 115		%Rec	1	9/18/2020 7:32:59 PM
Sample Moisture (Percent Moisture)					Batch ID: R61930		Analyst: CJ
Percent Moisture	23.2		0.500		wt%	1	9/18/2020 10:36:51 AM

JC 9/22/2020

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

PES Environmental, Inc.
Matt Dahl
2101 Fourth Avenue, Suite 1310
Seattle, WA 98121

RE: MVSC - Harris
Work Order Number: 2101428

January 28, 2021

Attention Matt Dahl:

Fremont Analytical, Inc. received 12 sample(s) on 1/27/2021 for the analyses presented in the following report.

Sample Moisture (Percent Moisture)
Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,



Brianna Barnes
Project Manager

Date: *01/28/2021*

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris
Work Order: 2101428

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2101428-001	EX-16	01/27/2021 11:00 AM	01/27/2021 1:02 PM
2101428-002	EX-17	01/27/2021 11:05 AM	01/27/2021 1:02 PM
2101428-003	EX-18	01/27/2021 11:10 AM	01/27/2021 1:02 PM
2101428-004	EX-19	01/27/2021 11:35 AM	01/27/2021 1:02 PM
2101428-005	EX-20	01/27/2021 11:38 AM	01/27/2021 1:02 PM
2101428-006	EX-21	01/27/2021 11:43 AM	01/27/2021 1:02 PM
2101428-007	EX-22	01/27/2021 11:50 AM	01/27/2021 1:02 PM
2101428-008	EX-23	01/27/2021 11:53 AM	01/27/2021 1:02 PM
2101428-009	EX-24	01/27/2021 11:57 AM	01/27/2021 1:02 PM
2101428-010	EX-25	01/27/2021 12:00 PM	01/27/2021 1:02 PM
2101428-011	EX-26	01/27/2021 12:05 PM	01/27/2021 1:02 PM
2101428-012	EX-27	01/27/2021 12:08 PM	01/27/2021 1:02 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2101428**
Date: **1/28/2021**

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

1/28/2021: Revision 1 includes full list VOCs per client request.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-001 **Collection Date:** 1/27/2021 11:00:00 AM
Client Sample ID: **EX-16** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0214	Q	mg/Kg-dry	1	1/28/2021 12:01:30 AM
Chloromethane	ND	0.0536	Q	mg/Kg-dry	1	1/28/2021 12:01:30 AM
Vinyl chloride	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Bromomethane	ND	0.0536		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Trichlorofluoromethane (CFC-11)	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Chloroethane	ND	0.0536		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,1-Dichloroethene	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Methylene chloride	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
trans-1,2-Dichloroethene	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Methyl tert-butyl ether (MTBE)	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,1-Dichloroethane	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
cis-1,2-Dichloroethene	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Chloroform	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,1,1-Trichloroethane (TCA)	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,1-Dichloropropene	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Carbon tetrachloride	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2-Dichloroethane (EDC)	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Benzene	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Trichloroethene (TCE)	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2-Dichloropropane	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Bromodichloromethane	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Dibromomethane	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
cis-1,3-Dichloropropene	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Toluene	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
trans-1,3-Dichloropropylene	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,1,2-Trichloroethane	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,3-Dichloropropane	ND	0.0268		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Tetrachloroethene (PCE)	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Dibromochloromethane	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2-Dibromoethane (EDB)	ND	0.00536		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Chlorobenzene	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,1,1,2-Tetrachloroethane	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Ethylbenzene	ND	0.0268		mg/Kg-dry	1	1/28/2021 12:01:30 AM
m,p-Xylene	ND	0.0536		mg/Kg-dry	1	1/28/2021 12:01:30 AM
o-Xylene	ND	0.0268		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Styrene	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Isopropylbenzene	ND	0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Bromoform	ND	0.0536		mg/Kg-dry	1	1/28/2021 12:01:30 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
n-Propylbenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
Bromobenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,3,5-Trimethylbenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
2-Chlorotoluene	ND	0.0268	mg/Kg-dry	1	1/28/2021 12:01:30 AM
4-Chlorotoluene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
tert-Butylbenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2,3-Trichloropropane	ND	0.0268	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2,4-Trichlorobenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
sec-Butylbenzene	ND	0.0268	mg/Kg-dry	1	1/28/2021 12:01:30 AM
4-Isopropyltoluene	ND	0.0268	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,3-Dichlorobenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,4-Dichlorobenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
n-Butylbenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2-Dichlorobenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2-Dibromo-3-chloropropane	ND	0.536	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2,4-Trimethylbenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
Hexachloro-1,3-butadiene	ND	0.0268	mg/Kg-dry	1	1/28/2021 12:01:30 AM
Naphthalene	ND	0.0536	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2,3-Trichlorobenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
Surr: Dibromofluoromethane	92.5	82.3 - 112	%Rec	1	1/28/2021 12:01:30 AM
Surr: Toluene-d8	95.5	90.7 - 109	%Rec	1	1/28/2021 12:01:30 AM
Surr: 1-Bromo-4-fluorobenzene	98.5	88.4 - 109	%Rec	1	1/28/2021 12:01:30 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	18.7	0.500	wt%	1	1/28/2021 9:09:43 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-002 **Collection Date:** 1/27/2021 11:05:00 AM
Client Sample ID: **EX-17** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0234	Q	mg/Kg-dry	1	1/28/2021 12:31:47 AM
Chloromethane	ND	0.0585	Q	mg/Kg-dry	1	1/28/2021 12:31:47 AM
Vinyl chloride	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Bromomethane	ND	0.0585		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Trichlorofluoromethane (CFC-11)	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Chloroethane	ND	0.0585		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,1-Dichloroethene	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Methylene chloride	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
trans-1,2-Dichloroethene	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Methyl tert-butyl ether (MTBE)	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,1-Dichloroethane	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
cis-1,2-Dichloroethene	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Chloroform	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,1,1-Trichloroethane (TCA)	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,1-Dichloropropene	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Carbon tetrachloride	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2-Dichloroethane (EDC)	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Benzene	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Trichloroethene (TCE)	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2-Dichloropropane	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Bromodichloromethane	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Dibromomethane	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
cis-1,3-Dichloropropene	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Toluene	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
trans-1,3-Dichloropropylene	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,1,2-Trichloroethane	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,3-Dichloropropane	ND	0.0292		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Tetrachloroethene (PCE)	0.0876	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Dibromochloromethane	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2-Dibromoethane (EDB)	ND	0.00585		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Chlorobenzene	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,1,1,2-Tetrachloroethane	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Ethylbenzene	ND	0.0292		mg/Kg-dry	1	1/28/2021 12:31:47 AM
m,p-Xylene	ND	0.0585		mg/Kg-dry	1	1/28/2021 12:31:47 AM
o-Xylene	ND	0.0292		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Styrene	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Isopropylbenzene	ND	0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Bromoform	ND	0.0585		mg/Kg-dry	1	1/28/2021 12:31:47 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
n-Propylbenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
Bromobenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,3,5-Trimethylbenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
2-Chlorotoluene	ND	0.0292	mg/Kg-dry	1	1/28/2021 12:31:47 AM
4-Chlorotoluene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
tert-Butylbenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2,3-Trichloropropane	ND	0.0292	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2,4-Trichlorobenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
sec-Butylbenzene	ND	0.0292	mg/Kg-dry	1	1/28/2021 12:31:47 AM
4-Isopropyltoluene	ND	0.0292	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,3-Dichlorobenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,4-Dichlorobenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
n-Butylbenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2-Dichlorobenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2-Dibromo-3-chloropropane	ND	0.585	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2,4-Trimethylbenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
Hexachloro-1,3-butadiene	ND	0.0292	mg/Kg-dry	1	1/28/2021 12:31:47 AM
Naphthalene	ND	0.0585	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2,3-Trichlorobenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
Surr: Dibromofluoromethane	91.8	82.3 - 112	%Rec	1	1/28/2021 12:31:47 AM
Surr: Toluene-d8	93.1	90.7 - 109	%Rec	1	1/28/2021 12:31:47 AM
Surr: 1-Bromo-4-fluorobenzene	97.5	88.4 - 109	%Rec	1	1/28/2021 12:31:47 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	18.5	0.500	wt%	1	1/28/2021 9:09:43 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-003 **Collection Date:** 1/27/2021 11:10:00 AM
Client Sample ID: **EX-18** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0236	Q	mg/Kg-dry	1	1/28/2021 1:02:04 AM
Chloromethane	ND	0.0590	Q	mg/Kg-dry	1	1/28/2021 1:02:04 AM
Vinyl chloride	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Bromomethane	ND	0.0590		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Trichlorofluoromethane (CFC-11)	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Chloroethane	ND	0.0590		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,1-Dichloroethene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Methylene chloride	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
trans-1,2-Dichloroethene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Methyl tert-butyl ether (MTBE)	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,1-Dichloroethane	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
cis-1,2-Dichloroethene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Chloroform	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,1,1-Trichloroethane (TCA)	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,1-Dichloropropene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Carbon tetrachloride	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2-Dichloroethane (EDC)	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Benzene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Trichloroethene (TCE)	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2-Dichloropropane	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Bromodichloromethane	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Dibromomethane	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
cis-1,3-Dichloropropene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Toluene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
trans-1,3-Dichloropropylene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,1,2-Trichloroethane	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,3-Dichloropropane	ND	0.0295		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Tetrachloroethene (PCE)	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Dibromochloromethane	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2-Dibromoethane (EDB)	ND	0.00590		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Chlorobenzene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,1,1,2-Tetrachloroethane	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Ethylbenzene	ND	0.0295		mg/Kg-dry	1	1/28/2021 1:02:04 AM
m,p-Xylene	ND	0.0590		mg/Kg-dry	1	1/28/2021 1:02:04 AM
o-Xylene	ND	0.0295		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Styrene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Isopropylbenzene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Bromoform	ND	0.0590		mg/Kg-dry	1	1/28/2021 1:02:04 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
n-Propylbenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
Bromobenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,3,5-Trimethylbenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
2-Chlorotoluene	ND	0.0295	mg/Kg-dry	1	1/28/2021 1:02:04 AM
4-Chlorotoluene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
tert-Butylbenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2,3-Trichloropropane	ND	0.0295	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2,4-Trichlorobenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
sec-Butylbenzene	ND	0.0295	mg/Kg-dry	1	1/28/2021 1:02:04 AM
4-Isopropyltoluene	ND	0.0295	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,3-Dichlorobenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,4-Dichlorobenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
n-Butylbenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2-Dichlorobenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2-Dibromo-3-chloropropane	ND	0.590	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2,4-Trimethylbenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
Hexachloro-1,3-butadiene	ND	0.0295	mg/Kg-dry	1	1/28/2021 1:02:04 AM
Naphthalene	ND	0.0590	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2,3-Trichlorobenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
Surr: Dibromofluoromethane	91.7	82.3 - 112	%Rec	1	1/28/2021 1:02:04 AM
Surr: Toluene-d8	96.1	90.7 - 109	%Rec	1	1/28/2021 1:02:04 AM
Surr: 1-Bromo-4-fluorobenzene	98.0	88.4 - 109	%Rec	1	1/28/2021 1:02:04 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	15.9	0.500	wt%	1	1/28/2021 9:09:43 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-004 **Collection Date:** 1/27/2021 11:35:00 AM
Client Sample ID: **EX-19** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0265	Q	mg/Kg-dry	1	1/28/2021 1:32:20 AM
Chloromethane	ND	0.0662	Q	mg/Kg-dry	1	1/28/2021 1:32:20 AM
Vinyl chloride	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Bromomethane	ND	0.0662		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Trichlorofluoromethane (CFC-11)	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Chloroethane	ND	0.0662		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,1-Dichloroethene	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Methylene chloride	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
trans-1,2-Dichloroethene	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Methyl tert-butyl ether (MTBE)	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,1-Dichloroethane	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
cis-1,2-Dichloroethene	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Chloroform	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,1,1-Trichloroethane (TCA)	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,1-Dichloropropene	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Carbon tetrachloride	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2-Dichloroethane (EDC)	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Benzene	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Trichloroethene (TCE)	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2-Dichloropropane	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Bromodichloromethane	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Dibromomethane	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
cis-1,3-Dichloropropene	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Toluene	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
trans-1,3-Dichloropropylene	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,1,2-Trichloroethane	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,3-Dichloropropane	ND	0.0331		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Tetrachloroethene (PCE)	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Dibromochloromethane	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2-Dibromoethane (EDB)	ND	0.00662		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Chlorobenzene	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,1,1,2-Tetrachloroethane	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Ethylbenzene	ND	0.0331		mg/Kg-dry	1	1/28/2021 1:32:20 AM
m,p-Xylene	ND	0.0662		mg/Kg-dry	1	1/28/2021 1:32:20 AM
o-Xylene	ND	0.0331		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Styrene	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Isopropylbenzene	ND	0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Bromoform	ND	0.0662		mg/Kg-dry	1	1/28/2021 1:32:20 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
n-Propylbenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
Bromobenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,3,5-Trimethylbenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
2-Chlorotoluene	ND	0.0331	mg/Kg-dry	1	1/28/2021 1:32:20 AM
4-Chlorotoluene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
tert-Butylbenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2,3-Trichloropropane	ND	0.0331	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2,4-Trichlorobenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
sec-Butylbenzene	ND	0.0331	mg/Kg-dry	1	1/28/2021 1:32:20 AM
4-Isopropyltoluene	ND	0.0331	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,3-Dichlorobenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,4-Dichlorobenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
n-Butylbenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2-Dichlorobenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2-Dibromo-3-chloropropane	ND	0.662	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2,4-Trimethylbenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
Hexachloro-1,3-butadiene	ND	0.0331	mg/Kg-dry	1	1/28/2021 1:32:20 AM
Naphthalene	ND	0.0662	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2,3-Trichlorobenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
Surr: Dibromofluoromethane	91.6	82.3 - 112	%Rec	1	1/28/2021 1:32:20 AM
Surr: Toluene-d8	96.1	90.7 - 109	%Rec	1	1/28/2021 1:32:20 AM
Surr: 1-Bromo-4-fluorobenzene	97.3	88.4 - 109	%Rec	1	1/28/2021 1:32:20 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	18.9	0.500	wt%	1	1/28/2021 9:09:43 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-005 **Collection Date:** 1/27/2021 11:38:00 AM
Client Sample ID: **EX-20** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0231	Q	mg/Kg-dry	1	1/28/2021 2:02:32 AM
Chloromethane	ND	0.0578	Q	mg/Kg-dry	1	1/28/2021 2:02:32 AM
Vinyl chloride	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Bromomethane	ND	0.0578		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Trichlorofluoromethane (CFC-11)	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Chloroethane	ND	0.0578		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,1-Dichloroethene	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Methylene chloride	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
trans-1,2-Dichloroethene	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Methyl tert-butyl ether (MTBE)	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,1-Dichloroethane	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
cis-1,2-Dichloroethene	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Chloroform	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,1,1-Trichloroethane (TCA)	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,1-Dichloropropene	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Carbon tetrachloride	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2-Dichloroethane (EDC)	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Benzene	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Trichloroethene (TCE)	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2-Dichloropropane	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Bromodichloromethane	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Dibromomethane	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
cis-1,3-Dichloropropene	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Toluene	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
trans-1,3-Dichloropropylene	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,1,2-Trichloroethane	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,3-Dichloropropane	ND	0.0289		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Tetrachloroethene (PCE)	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Dibromochloromethane	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2-Dibromoethane (EDB)	ND	0.00578		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Chlorobenzene	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,1,1,2-Tetrachloroethane	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Ethylbenzene	ND	0.0289		mg/Kg-dry	1	1/28/2021 2:02:32 AM
m,p-Xylene	ND	0.0578		mg/Kg-dry	1	1/28/2021 2:02:32 AM
o-Xylene	ND	0.0289		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Styrene	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Isopropylbenzene	ND	0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Bromoform	ND	0.0578		mg/Kg-dry	1	1/28/2021 2:02:32 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
n-Propylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
Bromobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,3,5-Trimethylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
2-Chlorotoluene	ND	0.0289	mg/Kg-dry	1	1/28/2021 2:02:32 AM
4-Chlorotoluene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
tert-Butylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2,3-Trichloropropane	ND	0.0289	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2,4-Trichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
sec-Butylbenzene	ND	0.0289	mg/Kg-dry	1	1/28/2021 2:02:32 AM
4-Isopropyltoluene	ND	0.0289	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,3-Dichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,4-Dichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
n-Butylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2-Dichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2-Dibromo-3-chloropropane	ND	0.578	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2,4-Trimethylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
Hexachloro-1,3-butadiene	ND	0.0289	mg/Kg-dry	1	1/28/2021 2:02:32 AM
Naphthalene	ND	0.0578	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2,3-Trichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
Surr: Dibromofluoromethane	92.2	82.3 - 112	%Rec	1	1/28/2021 2:02:32 AM
Surr: Toluene-d8	97.0	90.7 - 109	%Rec	1	1/28/2021 2:02:32 AM
Surr: 1-Bromo-4-fluorobenzene	97.9	88.4 - 109	%Rec	1	1/28/2021 2:02:32 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	17.3	0.500	wt%	1	1/28/2021 9:09:43 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-006 **Collection Date:** 1/27/2021 11:43:00 AM
Client Sample ID: **EX-21** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0229	Q	mg/Kg-dry	1	1/28/2021 2:32:44 AM
Chloromethane	ND	0.0573	Q	mg/Kg-dry	1	1/28/2021 2:32:44 AM
Vinyl chloride	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Bromomethane	ND	0.0573		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Trichlorofluoromethane (CFC-11)	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Chloroethane	ND	0.0573		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,1-Dichloroethene	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Methylene chloride	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
trans-1,2-Dichloroethene	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Methyl tert-butyl ether (MTBE)	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,1-Dichloroethane	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
cis-1,2-Dichloroethene	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Chloroform	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,1,1-Trichloroethane (TCA)	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,1-Dichloropropene	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Carbon tetrachloride	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2-Dichloroethane (EDC)	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Benzene	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Trichloroethene (TCE)	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2-Dichloropropane	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Bromodichloromethane	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Dibromomethane	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
cis-1,3-Dichloropropene	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Toluene	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
trans-1,3-Dichloropropylene	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,1,2-Trichloroethane	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,3-Dichloropropane	ND	0.0286		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Tetrachloroethene (PCE)	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Dibromochloromethane	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2-Dibromoethane (EDB)	ND	0.00573		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Chlorobenzene	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,1,1,2-Tetrachloroethane	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Ethylbenzene	ND	0.0286		mg/Kg-dry	1	1/28/2021 2:32:44 AM
m,p-Xylene	ND	0.0573		mg/Kg-dry	1	1/28/2021 2:32:44 AM
o-Xylene	ND	0.0286		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Styrene	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Isopropylbenzene	ND	0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Bromoform	ND	0.0573		mg/Kg-dry	1	1/28/2021 2:32:44 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
n-Propylbenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
Bromobenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,3,5-Trimethylbenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
2-Chlorotoluene	ND	0.0286	mg/Kg-dry	1	1/28/2021 2:32:44 AM
4-Chlorotoluene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
tert-Butylbenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2,3-Trichloropropane	ND	0.0286	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2,4-Trichlorobenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
sec-Butylbenzene	ND	0.0286	mg/Kg-dry	1	1/28/2021 2:32:44 AM
4-Isopropyltoluene	ND	0.0286	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,3-Dichlorobenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,4-Dichlorobenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
n-Butylbenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2-Dichlorobenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2-Dibromo-3-chloropropane	ND	0.573	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2,4-Trimethylbenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
Hexachloro-1,3-butadiene	ND	0.0286	mg/Kg-dry	1	1/28/2021 2:32:44 AM
Naphthalene	ND	0.0573	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2,3-Trichlorobenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
Surr: Dibromofluoromethane	92.2	82.3 - 112	%Rec	1	1/28/2021 2:32:44 AM
Surr: Toluene-d8	97.2	90.7 - 109	%Rec	1	1/28/2021 2:32:44 AM
Surr: 1-Bromo-4-fluorobenzene	97.8	88.4 - 109	%Rec	1	1/28/2021 2:32:44 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	12.7	0.500	wt%	1	1/28/2021 9:09:43 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-007 **Collection Date:** 1/27/2021 11:50:00 AM
Client Sample ID: **EX-22** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0237	Q	mg/Kg-dry	1	1/28/2021 3:02:59 AM
Chloromethane	ND	0.0593	Q	mg/Kg-dry	1	1/28/2021 3:02:59 AM
Vinyl chloride	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Bromomethane	ND	0.0593		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Trichlorofluoromethane (CFC-11)	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Chloroethane	ND	0.0593		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,1-Dichloroethene	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Methylene chloride	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
trans-1,2-Dichloroethene	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Methyl tert-butyl ether (MTBE)	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,1-Dichloroethane	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
cis-1,2-Dichloroethene	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Chloroform	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,1,1-Trichloroethane (TCA)	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,1-Dichloropropene	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Carbon tetrachloride	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2-Dichloroethane (EDC)	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Benzene	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Trichloroethene (TCE)	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2-Dichloropropane	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Bromodichloromethane	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Dibromomethane	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
cis-1,3-Dichloropropene	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Toluene	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
trans-1,3-Dichloropropylene	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,1,2-Trichloroethane	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,3-Dichloropropane	ND	0.0297		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Tetrachloroethene (PCE)	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Dibromochloromethane	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2-Dibromoethane (EDB)	ND	0.00593		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Chlorobenzene	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,1,1,2-Tetrachloroethane	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Ethylbenzene	ND	0.0297		mg/Kg-dry	1	1/28/2021 3:02:59 AM
m,p-Xylene	ND	0.0593		mg/Kg-dry	1	1/28/2021 3:02:59 AM
o-Xylene	ND	0.0297		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Styrene	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Isopropylbenzene	ND	0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Bromoform	ND	0.0593		mg/Kg-dry	1	1/28/2021 3:02:59 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
n-Propylbenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
Bromobenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,3,5-Trimethylbenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
2-Chlorotoluene	ND	0.0297	mg/Kg-dry	1	1/28/2021 3:02:59 AM
4-Chlorotoluene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
tert-Butylbenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2,3-Trichloropropane	ND	0.0297	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2,4-Trichlorobenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
sec-Butylbenzene	ND	0.0297	mg/Kg-dry	1	1/28/2021 3:02:59 AM
4-Isopropyltoluene	ND	0.0297	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,3-Dichlorobenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,4-Dichlorobenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
n-Butylbenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2-Dichlorobenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2-Dibromo-3-chloropropane	ND	0.593	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2,4-Trimethylbenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
Hexachloro-1,3-butadiene	ND	0.0297	mg/Kg-dry	1	1/28/2021 3:02:59 AM
Naphthalene	ND	0.0593	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2,3-Trichlorobenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
Surr: Dibromofluoromethane	91.9	82.3 - 112	%Rec	1	1/28/2021 3:02:59 AM
Surr: Toluene-d8	97.1	90.7 - 109	%Rec	1	1/28/2021 3:02:59 AM
Surr: 1-Bromo-4-fluorobenzene	98.1	88.4 - 109	%Rec	1	1/28/2021 3:02:59 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	17.2	0.500	wt%	1	1/28/2021 9:09:43 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-008 **Collection Date:** 1/27/2021 11:53:00 AM
Client Sample ID: **EX-23** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0273	Q	mg/Kg-dry	1	1/28/2021 3:33:10 AM
Chloromethane	ND	0.0684	Q	mg/Kg-dry	1	1/28/2021 3:33:10 AM
Vinyl chloride	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Bromomethane	ND	0.0684		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Trichlorofluoromethane (CFC-11)	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Chloroethane	ND	0.0684		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,1-Dichloroethene	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Methylene chloride	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
trans-1,2-Dichloroethene	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Methyl tert-butyl ether (MTBE)	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,1-Dichloroethane	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
cis-1,2-Dichloroethene	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Chloroform	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,1,1-Trichloroethane (TCA)	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,1-Dichloropropene	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Carbon tetrachloride	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2-Dichloroethane (EDC)	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Benzene	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Trichloroethene (TCE)	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2-Dichloropropane	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Bromodichloromethane	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Dibromomethane	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
cis-1,3-Dichloropropene	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Toluene	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
trans-1,3-Dichloropropylene	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,1,2-Trichloroethane	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,3-Dichloropropane	ND	0.0342		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Tetrachloroethene (PCE)	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Dibromochloromethane	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2-Dibromoethane (EDB)	ND	0.00684		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Chlorobenzene	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,1,1,2-Tetrachloroethane	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Ethylbenzene	ND	0.0342		mg/Kg-dry	1	1/28/2021 3:33:10 AM
m,p-Xylene	ND	0.0684		mg/Kg-dry	1	1/28/2021 3:33:10 AM
o-Xylene	ND	0.0342		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Styrene	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Isopropylbenzene	ND	0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Bromoform	ND	0.0684		mg/Kg-dry	1	1/28/2021 3:33:10 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
n-Propylbenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
Bromobenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,3,5-Trimethylbenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
2-Chlorotoluene	ND	0.0342	mg/Kg-dry	1	1/28/2021 3:33:10 AM
4-Chlorotoluene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
tert-Butylbenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2,3-Trichloropropane	ND	0.0342	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2,4-Trichlorobenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
sec-Butylbenzene	ND	0.0342	mg/Kg-dry	1	1/28/2021 3:33:10 AM
4-Isopropyltoluene	ND	0.0342	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,3-Dichlorobenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,4-Dichlorobenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
n-Butylbenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2-Dichlorobenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2-Dibromo-3-chloropropane	ND	0.684	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2,4-Trimethylbenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
Hexachloro-1,3-butadiene	ND	0.0342	mg/Kg-dry	1	1/28/2021 3:33:10 AM
Naphthalene	ND	0.0684	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2,3-Trichlorobenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
Surr: Dibromofluoromethane	91.9	82.3 - 112	%Rec	1	1/28/2021 3:33:10 AM
Surr: Toluene-d8	98.3	90.7 - 109	%Rec	1	1/28/2021 3:33:10 AM
Surr: 1-Bromo-4-fluorobenzene	98.8	88.4 - 109	%Rec	1	1/28/2021 3:33:10 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	19.7	0.500	wt%	1	1/28/2021 9:09:43 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-009 **Collection Date:** 1/27/2021 11:57:00 AM
Client Sample ID: **EX-24** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0242	Q	mg/Kg-dry	1	1/28/2021 4:03:29 AM
Chloromethane	ND	0.0605	Q	mg/Kg-dry	1	1/28/2021 4:03:29 AM
Vinyl chloride	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Bromomethane	ND	0.0605		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Trichlorofluoromethane (CFC-11)	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Chloroethane	ND	0.0605		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,1-Dichloroethene	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Methylene chloride	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
trans-1,2-Dichloroethene	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Methyl tert-butyl ether (MTBE)	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,1-Dichloroethane	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
cis-1,2-Dichloroethene	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Chloroform	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,1,1-Trichloroethane (TCA)	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,1-Dichloropropene	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Carbon tetrachloride	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2-Dichloroethane (EDC)	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Benzene	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Trichloroethene (TCE)	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2-Dichloropropane	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Bromodichloromethane	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Dibromomethane	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
cis-1,3-Dichloropropene	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Toluene	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
trans-1,3-Dichloropropylene	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,1,2-Trichloroethane	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,3-Dichloropropane	ND	0.0302		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Tetrachloroethene (PCE)	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Dibromochloromethane	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2-Dibromoethane (EDB)	ND	0.00605		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Chlorobenzene	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,1,1,2-Tetrachloroethane	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Ethylbenzene	ND	0.0302		mg/Kg-dry	1	1/28/2021 4:03:29 AM
m,p-Xylene	ND	0.0605		mg/Kg-dry	1	1/28/2021 4:03:29 AM
o-Xylene	ND	0.0302		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Styrene	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Isopropylbenzene	ND	0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Bromoform	ND	0.0605		mg/Kg-dry	1	1/28/2021 4:03:29 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
n-Propylbenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
Bromobenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,3,5-Trimethylbenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
2-Chlorotoluene	ND	0.0302	mg/Kg-dry	1	1/28/2021 4:03:29 AM
4-Chlorotoluene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
tert-Butylbenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2,3-Trichloropropane	ND	0.0302	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2,4-Trichlorobenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
sec-Butylbenzene	ND	0.0302	mg/Kg-dry	1	1/28/2021 4:03:29 AM
4-Isopropyltoluene	ND	0.0302	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,3-Dichlorobenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,4-Dichlorobenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
n-Butylbenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2-Dichlorobenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2-Dibromo-3-chloropropane	ND	0.605	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2,4-Trimethylbenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
Hexachloro-1,3-butadiene	ND	0.0302	mg/Kg-dry	1	1/28/2021 4:03:29 AM
Naphthalene	ND	0.0605	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2,3-Trichlorobenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
Surr: Dibromofluoromethane	92.1	82.3 - 112	%Rec	1	1/28/2021 4:03:29 AM
Surr: Toluene-d8	99.4	90.7 - 109	%Rec	1	1/28/2021 4:03:29 AM
Surr: 1-Bromo-4-fluorobenzene	98.0	88.4 - 109	%Rec	1	1/28/2021 4:03:29 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	19.8	0.500	wt%	1	1/28/2021 9:09:43 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-010 **Collection Date:** 1/27/2021 12:00:00 PM
Client Sample ID: **EX-25** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0264	Q	mg/Kg-dry	1	1/28/2021 4:33:40 AM
Chloromethane	ND	0.0660	Q	mg/Kg-dry	1	1/28/2021 4:33:40 AM
Vinyl chloride	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Bromomethane	ND	0.0660		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Trichlorofluoromethane (CFC-11)	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Chloroethane	ND	0.0660		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,1-Dichloroethene	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Methylene chloride	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
trans-1,2-Dichloroethene	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Methyl tert-butyl ether (MTBE)	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,1-Dichloroethane	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
cis-1,2-Dichloroethene	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Chloroform	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,1,1-Trichloroethane (TCA)	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,1-Dichloropropene	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Carbon tetrachloride	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2-Dichloroethane (EDC)	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Benzene	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Trichloroethene (TCE)	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2-Dichloropropane	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Bromodichloromethane	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Dibromomethane	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
cis-1,3-Dichloropropene	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Toluene	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
trans-1,3-Dichloropropylene	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,1,2-Trichloroethane	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,3-Dichloropropane	ND	0.0330		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Tetrachloroethene (PCE)	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Dibromochloromethane	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2-Dibromoethane (EDB)	ND	0.00660		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Chlorobenzene	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,1,1,2-Tetrachloroethane	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Ethylbenzene	ND	0.0330		mg/Kg-dry	1	1/28/2021 4:33:40 AM
m,p-Xylene	ND	0.0660		mg/Kg-dry	1	1/28/2021 4:33:40 AM
o-Xylene	ND	0.0330		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Styrene	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Isopropylbenzene	ND	0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Bromoform	ND	0.0660		mg/Kg-dry	1	1/28/2021 4:33:40 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
n-Propylbenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
Bromobenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,3,5-Trimethylbenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
2-Chlorotoluene	ND	0.0330	mg/Kg-dry	1	1/28/2021 4:33:40 AM
4-Chlorotoluene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
tert-Butylbenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2,3-Trichloropropane	ND	0.0330	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2,4-Trichlorobenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
sec-Butylbenzene	ND	0.0330	mg/Kg-dry	1	1/28/2021 4:33:40 AM
4-Isopropyltoluene	ND	0.0330	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,3-Dichlorobenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,4-Dichlorobenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
n-Butylbenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2-Dichlorobenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2-Dibromo-3-chloropropane	ND	0.660	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2,4-Trimethylbenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
Hexachloro-1,3-butadiene	ND	0.0330	mg/Kg-dry	1	1/28/2021 4:33:40 AM
Naphthalene	ND	0.0660	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2,3-Trichlorobenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
Surr: Dibromofluoromethane	92.4	82.3 - 112	%Rec	1	1/28/2021 4:33:40 AM
Surr: Toluene-d8	99.5	90.7 - 109	%Rec	1	1/28/2021 4:33:40 AM
Surr: 1-Bromo-4-fluorobenzene	98.2	88.4 - 109	%Rec	1	1/28/2021 4:33:40 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	10.6	0.500	wt%	1	1/28/2021 9:09:43 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-011 **Collection Date:** 1/27/2021 12:05:00 PM
Client Sample ID: **EX-26** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0231	Q	mg/Kg-dry	1	1/28/2021 5:03:52 AM
Chloromethane	ND	0.0577	Q	mg/Kg-dry	1	1/28/2021 5:03:52 AM
Vinyl chloride	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Bromomethane	ND	0.0577		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Trichlorofluoromethane (CFC-11)	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Chloroethane	ND	0.0577		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,1-Dichloroethene	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Methylene chloride	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
trans-1,2-Dichloroethene	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Methyl tert-butyl ether (MTBE)	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,1-Dichloroethane	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
cis-1,2-Dichloroethene	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Chloroform	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,1,1-Trichloroethane (TCA)	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,1-Dichloropropene	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Carbon tetrachloride	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2-Dichloroethane (EDC)	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Benzene	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Trichloroethene (TCE)	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2-Dichloropropane	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Bromodichloromethane	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Dibromomethane	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
cis-1,3-Dichloropropene	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Toluene	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
trans-1,3-Dichloropropylene	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,1,2-Trichloroethane	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,3-Dichloropropane	ND	0.0289		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Tetrachloroethene (PCE)	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Dibromochloromethane	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2-Dibromoethane (EDB)	ND	0.00577		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Chlorobenzene	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,1,1,2-Tetrachloroethane	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Ethylbenzene	ND	0.0289		mg/Kg-dry	1	1/28/2021 5:03:52 AM
m,p-Xylene	ND	0.0577		mg/Kg-dry	1	1/28/2021 5:03:52 AM
o-Xylene	ND	0.0289		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Styrene	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Isopropylbenzene	ND	0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Bromoform	ND	0.0577		mg/Kg-dry	1	1/28/2021 5:03:52 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
n-Propylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
Bromobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,3,5-Trimethylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
2-Chlorotoluene	ND	0.0289	mg/Kg-dry	1	1/28/2021 5:03:52 AM
4-Chlorotoluene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
tert-Butylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2,3-Trichloropropane	ND	0.0289	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2,4-Trichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
sec-Butylbenzene	ND	0.0289	mg/Kg-dry	1	1/28/2021 5:03:52 AM
4-Isopropyltoluene	ND	0.0289	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,3-Dichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,4-Dichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
n-Butylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2-Dichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2-Dibromo-3-chloropropane	ND	0.577	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2,4-Trimethylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
Hexachloro-1,3-butadiene	ND	0.0289	mg/Kg-dry	1	1/28/2021 5:03:52 AM
Naphthalene	ND	0.0577	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2,3-Trichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
Surr: Dibromofluoromethane	93.0	82.3 - 112	%Rec	1	1/28/2021 5:03:52 AM
Surr: Toluene-d8	98.9	90.7 - 109	%Rec	1	1/28/2021 5:03:52 AM
Surr: 1-Bromo-4-fluorobenzene	97.7	88.4 - 109	%Rec	1	1/28/2021 5:03:52 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	19.2	0.500	wt%	1	1/28/2021 9:09:43 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-012 **Collection Date:** 1/27/2021 12:08:00 PM
Client Sample ID: **EX-27** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0193	Q	mg/Kg-dry	1	1/28/2021 5:34:03 AM
Chloromethane	ND	0.0484	Q	mg/Kg-dry	1	1/28/2021 5:34:03 AM
Vinyl chloride	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Bromomethane	ND	0.0484		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Trichlorofluoromethane (CFC-11)	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Chloroethane	ND	0.0484		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,1-Dichloroethene	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Methylene chloride	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
trans-1,2-Dichloroethene	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Methyl tert-butyl ether (MTBE)	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,1-Dichloroethane	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
cis-1,2-Dichloroethene	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Chloroform	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,1,1-Trichloroethane (TCA)	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,1-Dichloropropene	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Carbon tetrachloride	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2-Dichloroethane (EDC)	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Benzene	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Trichloroethene (TCE)	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2-Dichloropropane	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Bromodichloromethane	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Dibromomethane	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
cis-1,3-Dichloropropene	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Toluene	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
trans-1,3-Dichloropropylene	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,1,2-Trichloroethane	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,3-Dichloropropane	ND	0.0242		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Tetrachloroethene (PCE)	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Dibromochloromethane	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2-Dibromoethane (EDB)	ND	0.00484		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Chlorobenzene	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,1,1,2-Tetrachloroethane	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Ethylbenzene	ND	0.0242		mg/Kg-dry	1	1/28/2021 5:34:03 AM
m,p-Xylene	ND	0.0484		mg/Kg-dry	1	1/28/2021 5:34:03 AM
o-Xylene	ND	0.0242		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Styrene	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Isopropylbenzene	ND	0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Bromoform	ND	0.0484		mg/Kg-dry	1	1/28/2021 5:34:03 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
n-Propylbenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
Bromobenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,3,5-Trimethylbenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
2-Chlorotoluene	ND	0.0242	mg/Kg-dry	1	1/28/2021 5:34:03 AM
4-Chlorotoluene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
tert-Butylbenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2,3-Trichloropropane	ND	0.0242	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2,4-Trichlorobenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
sec-Butylbenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 5:34:03 AM
4-Isopropyltoluene	ND	0.0242	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,3-Dichlorobenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,4-Dichlorobenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
n-Butylbenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2-Dichlorobenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2-Dibromo-3-chloropropane	ND	0.484	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2,4-Trimethylbenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
Hexachloro-1,3-butadiene	ND	0.0242	mg/Kg-dry	1	1/28/2021 5:34:03 AM
Naphthalene	ND	0.0484	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2,3-Trichlorobenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
Surr: Dibromofluoromethane	93.6	82.3 - 112	%Rec	1	1/28/2021 5:34:03 AM
Surr: Toluene-d8	99.1	90.7 - 109	%Rec	1	1/28/2021 5:34:03 AM
Surr: 1-Bromo-4-fluorobenzene	97.8	88.4 - 109	%Rec	1	1/28/2021 5:34:03 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	8.50	0.500	wt%	1	1/28/2021 9:09:43 AM

Work Order: 2101428
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-31185** SampType: **LCS** Units: **µg/L** Prep Date: **1/27/2021** RunNo: **64951**
Client ID: **LCSS** Batch ID: **31185** Analysis Date: **1/27/2021** SeqNo: **1306599**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.649	0.0200	1.000	0	64.9	30.4	178				
Chloromethane	0.692	0.0500	1.000	0	69.2	52.7	141				
Vinyl chloride	0.802	0.0200	1.000	0	80.2	64	132				
Bromomethane	1.07	0.0500	1.000	0	107	57.9	162				
Trichlorofluoromethane (CFC-11)	0.866	0.0200	1.000	0	86.6	69.8	127				
Chloroethane	0.845	0.0500	1.000	0	84.5	58.8	146				
1,1-Dichloroethene	0.874	0.0200	1.000	0	87.4	72.3	124				
Methylene chloride	0.897	0.0200	1.000	0	89.7	73.2	121				
trans-1,2-Dichloroethene	0.885	0.0200	1.000	0	88.5	73.9	121				
Methyl tert-butyl ether (MTBE)	0.904	0.0200	1.000	0	90.4	69.2	127				
1,1-Dichloroethane	0.852	0.0200	1.000	0	85.2	72.5	121				
cis-1,2-Dichloroethene	0.894	0.0200	1.000	0	89.4	76.6	118				
Chloroform	0.889	0.0200	1.000	0	88.9	76.6	118				
1,1,1-Trichloroethane (TCA)	0.875	0.0200	1.000	0	87.5	77.6	121				
1,1-Dichloropropene	0.863	0.0200	1.000	0	86.3	75.6	123				
Carbon tetrachloride	0.861	0.0200	1.000	0	86.1	76.1	123				
1,2-Dichloroethane (EDC)	0.902	0.0200	1.000	0	90.2	74.1	121				
Benzene	0.869	0.0200	1.000	0	86.9	76.6	121				
Trichloroethene (TCE)	0.903	0.0200	1.000	0	90.3	75.2	124				
1,2-Dichloropropane	0.876	0.0200	1.000	0	87.6	75.2	121				
Bromodichloromethane	0.883	0.0200	1.000	0	88.3	79.4	118				
Dibromomethane	0.914	0.0200	1.000	0	91.4	75.5	120				
cis-1,3-Dichloropropene	0.925	0.0200	1.000	0	92.5	78.4	121				
Toluene	0.894	0.0200	1.000	0	89.4	77.1	123				
trans-1,3-Dichloropropylene	0.935	0.0200	1.000	0	93.5	77.5	122				
1,1,2-Trichloroethane	0.932	0.0200	1.000	0	93.2	75	122				
1,3-Dichloropropane	0.927	0.0250	1.000	0	92.7	74.8	122				
Tetrachloroethene (PCE)	0.904	0.0200	1.000	0	90.4	78	122				
Dibromochloromethane	0.909	0.0200	1.000	0	90.9	74.1	124				
1,2-Dibromoethane (EDB)	0.947	0.00500	1.000	0	94.7	74.2	123				

Work Order: 2101428
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-31185** SampType: **LCS** Units: **µg/L** Prep Date: **1/27/2021** RunNo: **64951**
Client ID: **LCSS** Batch ID: **31185** Analysis Date: **1/27/2021** SeqNo: **1306599**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	0.932	0.0200	1.000	0	93.2	77.9	120				
1,1,1,2-Tetrachloroethane	0.937	0.0200	1.000	0	93.7	78.4	119				
Ethylbenzene	0.921	0.0250	1.000	0	92.1	78	124				
m,p-Xylene	1.89	0.0500	2.000	0	94.3	78	124				
o-Xylene	0.910	0.0250	1.000	0	91.0	77.5	123				
Styrene	0.946	0.0200	1.000	0	94.6	77.9	122				
Isopropylbenzene	0.920	0.0200	1.000	0	92.0	77.1	125				
Bromoform	1.00	0.0500	1.000	0	100	65.2	129				
1,1,2,2-Tetrachloroethane	0.949	0.0200	1.000	0	94.9	60.3	129				
n-Propylbenzene	0.922	0.0200	1.000	0	92.2	76	127				
Bromobenzene	0.957	0.0200	1.000	0	95.7	78.3	120				
1,3,5-Trimethylbenzene	0.933	0.0200	1.000	0	93.3	78.3	123				
2-Chlorotoluene	0.926	0.0250	1.000	0	92.6	77.3	123				
4-Chlorotoluene	0.922	0.0200	1.000	0	92.2	78.4	122				
tert-Butylbenzene	0.938	0.0200	1.000	0	93.8	77	123				
1,2,3-Trichloropropane	0.996	0.0250	1.000	0	99.6	65.9	128				
1,2,4-Trichlorobenzene	1.08	0.0200	1.000	0	108	70.9	129				
sec-Butylbenzene	0.925	0.0250	1.000	0	92.5	76.7	125				
4-Isopropyltoluene	0.938	0.0250	1.000	0	93.8	78	123				
1,3-Dichlorobenzene	0.969	0.0200	1.000	0	96.9	80.5	123				
1,4-Dichlorobenzene	0.966	0.0200	1.000	0	96.6	80.7	121				
n-Butylbenzene	0.962	0.0200	1.000	0	96.2	79.2	126				
1,2-Dichlorobenzene	0.980	0.0200	1.000	0	98.0	80.5	121				
1,2-Dibromo-3-chloropropane	1.04	0.500	1.000	0	104	59.1	138				
1,2,4-Trimethylbenzene	0.934	0.0200	1.000	0	93.4	78.9	123				
Hexachloro-1,3-butadiene	0.987	0.0250	1.000	0	98.7	73.4	128				
Naphthalene	1.26	0.0500	1.000	0	126	57.7	142				
1,2,3-Trichlorobenzene	1.07	0.0200	1.000	0	107	60.5	138				
Surr: Dibromofluoromethane	1.21		1.250		96.6	82.3	112				
Surr: Toluene-d8	1.21		1.250		96.4	90.7	109				

Work Order: 2101428
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-31185**	SampType: **LCS**			Units: **µg/L**		Prep Date: **1/27/2021**		RunNo: **64951**	
Client ID: **LCSS**	Batch ID: **31185**					Analysis Date: **1/27/2021**		SeqNo: **1306599**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	1.30		1.250		104	88.4	109				

Sample ID: **MB-31185**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **1/27/2021**		RunNo: **64951**	
Client ID: **MBLKS**	Batch ID: **31185**					Analysis Date: **1/27/2021**		SeqNo: **1306598**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0200									Q
Chloromethane	ND	0.0500									Q
Vinyl chloride	ND	0.0200									
Bromomethane	ND	0.0500									
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0500									
1,1-Dichloroethene	ND	0.0200									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0200									
1,1-Dichloroethane	ND	0.0200									
cis-1,2-Dichloroethene	ND	0.0200									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0200									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0200									
1,2-Dichloroethane (EDC)	ND	0.0200									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0200									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0200									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									

Work Order: 2101428
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-31185** SampType: **MBLK** Units: **mg/Kg** Prep Date: **1/27/2021** RunNo: **64951**
Client ID: **MBLKS** Batch ID: **31185** Analysis Date: **1/27/2021** SeqNo: **1306598**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	0.0200									
1,1,2-Trichloroethane	ND	0.0200									
1,3-Dichloropropane	ND	0.0250									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0200									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0200									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0200									
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0200									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0250									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0250									
1,2,4-Trichlorobenzene	ND	0.0200									
sec-Butylbenzene	ND	0.0250									
4-Isopropyltoluene	ND	0.0250									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.500									

Work Order: 2101428
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-31185** SampType: **MBLK** Units: **mg/Kg** Prep Date: **1/27/2021** RunNo: **64951**
Client ID: **MBLKS** Batch ID: **31185** Analysis Date: **1/27/2021** SeqNo: **1306598**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachloro-1,3-butadiene	ND	0.0250									
Naphthalene	ND	0.0500									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: Dibromofluoromethane	1.16		1.250		93.2	82.3	112				
Surr: Toluene-d8	1.16		1.250		93.1	90.7	109				
Surr: 1-Bromo-4-fluorobenzene	1.27		1.250		101	88.4	109				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2101368-015BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **1/27/2021** RunNo: **64951**
Client ID: **BATCH** Batch ID: **31185** Analysis Date: **1/27/2021** SeqNo: **1306581**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0213						0		30	Q
Chloromethane	ND	0.0531						0		30	Q
Vinyl chloride	ND	0.0213						0		30	
Bromomethane	ND	0.0531						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0213						0		30	
Chloroethane	ND	0.0531						0		30	
1,1-Dichloroethene	ND	0.0213						0		30	
Methylene chloride	ND	0.0213						0		30	
trans-1,2-Dichloroethene	ND	0.0213						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0213						0		30	
1,1-Dichloroethane	ND	0.0213						0		30	
cis-1,2-Dichloroethene	ND	0.0213						0		30	
Chloroform	ND	0.0213						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0213						0		30	
1,1-Dichloropropene	ND	0.0213						0		30	
Carbon tetrachloride	ND	0.0213						0		30	
1,2-Dichloroethane (EDC)	ND	0.0213						0		30	

Work Order: 2101428
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2101368-015BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **1/27/2021** RunNo: **64951**
Client ID: **BATCH** Batch ID: **31185** Analysis Date: **1/27/2021** SeqNo: **1306581**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0213						0		30	
Trichloroethene (TCE)	ND	0.0213						0		30	
1,2-Dichloropropane	ND	0.0213						0		30	
Bromodichloromethane	ND	0.0213						0		30	
Dibromomethane	ND	0.0213						0		30	
cis-1,3-Dichloropropene	ND	0.0213						0		30	
Toluene	ND	0.0213						0		30	
trans-1,3-Dichloropropylene	ND	0.0213						0		30	
1,1,2-Trichloroethane	ND	0.0213						0		30	
1,3-Dichloropropane	ND	0.0266						0		30	
Tetrachloroethene (PCE)	ND	0.0213						0		30	
Dibromochloromethane	ND	0.0213						0		30	
1,2-Dibromoethane (EDB)	ND	0.00531						0		30	
Chlorobenzene	ND	0.0213						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0213						0		30	
Ethylbenzene	ND	0.0266						0		30	
m,p-Xylene	ND	0.0531						0		30	
o-Xylene	ND	0.0266						0		30	
Styrene	ND	0.0213						0		30	
Isopropylbenzene	ND	0.0213						0		30	
Bromoform	ND	0.0531						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0213						0		30	
n-Propylbenzene	ND	0.0213						0		30	
Bromobenzene	ND	0.0213						0		30	
1,3,5-Trimethylbenzene	ND	0.0213						0		30	
2-Chlorotoluene	ND	0.0266						0		30	
4-Chlorotoluene	ND	0.0213						0		30	
tert-Butylbenzene	ND	0.0213						0		30	
1,2,3-Trichloropropane	ND	0.0266						0		30	
1,2,4-Trichlorobenzene	ND	0.0213						0		30	

Work Order: 2101428
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2101368-015BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **1/27/2021** RunNo: **64951**
Client ID: **BATCH** Batch ID: **31185** Analysis Date: **1/27/2021** SeqNo: **1306581**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	ND	0.0266						0		30	
4-Isopropyltoluene	ND	0.0266						0		30	
1,3-Dichlorobenzene	ND	0.0213						0		30	
1,4-Dichlorobenzene	ND	0.0213						0		30	
n-Butylbenzene	ND	0.0213						0		30	
1,2-Dichlorobenzene	ND	0.0213						0		30	
1,2-Dibromo-3-chloropropane	ND	0.531						0		30	
1,2,4-Trimethylbenzene	ND	0.0213						0		30	
Hexachloro-1,3-butadiene	ND	0.0266						0		30	
Naphthalene	ND	0.0531						0		30	
1,2,3-Trichlorobenzene	ND	0.0213						0		30	
Surr: Dibromofluoromethane	1.23		1.329		92.9	82.3	112		0		
Surr: Toluene-d8	1.28		1.329		96.1	90.7	109		0		
Surr: 1-Bromo-4-fluorobenzene	1.42		1.329		107	88.4	109		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2101368-013BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **1/27/2021** RunNo: **64951**
Client ID: **BATCH** Batch ID: **31185** Analysis Date: **1/27/2021** SeqNo: **1306577**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.181						0		30	DQ
Chloromethane	ND	0.453						0		30	DQ
Vinyl chloride	ND	0.181						0		30	D
Bromomethane	ND	0.453						0		30	D
Trichlorofluoromethane (CFC-11)	ND	0.181						0		30	D
Chloroethane	ND	0.453						0		30	D
1,1-Dichloroethene	ND	0.181						0		30	D
Methylene chloride	ND	0.181						0		30	D
trans-1,2-Dichloroethene	ND	0.181						0		30	D
Methyl tert-butyl ether (MTBE)	ND	0.181						0		30	D

Work Order: 2101428
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2101368-013BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **1/27/2021** RunNo: **64951**
Client ID: **BATCH** Batch ID: **31185** Analysis Date: **1/27/2021** SeqNo: **1306577**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	ND	0.181						0		30	D
cis-1,2-Dichloroethene	ND	0.181						0		30	D
Chloroform	ND	0.181						0		30	D
1,1,1-Trichloroethane (TCA)	ND	0.181						0		30	D
1,1-Dichloropropene	ND	0.181						0		30	D
Carbon tetrachloride	ND	0.181						0		30	D
1,2-Dichloroethane (EDC)	ND	0.181						0		30	D
Benzene	ND	0.181						0		30	D
Trichloroethene (TCE)	ND	0.181						0		30	D
1,2-Dichloropropane	ND	0.181						0		30	D
Bromodichloromethane	ND	0.181						0		30	D
Dibromomethane	ND	0.181						0		30	D
cis-1,3-Dichloropropene	ND	0.181						0		30	D
Toluene	ND	0.181						0		30	D
trans-1,3-Dichloropropylene	ND	0.181						0		30	D
1,1,2-Trichloroethane	ND	0.181						0		30	D
1,3-Dichloropropane	ND	0.227						0		30	D
Tetrachloroethene (PCE)	ND	0.181						0		30	D
Dibromochloromethane	ND	0.181						0		30	D
1,2-Dibromoethane (EDB)	ND	0.0453						0		30	D
Chlorobenzene	ND	0.181						0		30	D
1,1,1,2-Tetrachloroethane	ND	0.181						0		30	D
Ethylbenzene	ND	0.227						0		30	D
m,p-Xylene	ND	0.453						0		30	D
o-Xylene	ND	0.227						0		30	D
Styrene	ND	0.181						0		30	D
Isopropylbenzene	ND	0.181						0		30	D
Bromoform	ND	0.453						0		30	D
1,1,2,2-Tetrachloroethane	ND	0.181						0		30	D
n-Propylbenzene	ND	0.181						0		30	D

Work Order: 2101428
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2101368-013BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **1/27/2021** RunNo: **64951**
Client ID: **BATCH** Batch ID: **31185** Analysis Date: **1/27/2021** SeqNo: **1306577**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	ND	0.181						0		30	D
1,3,5-Trimethylbenzene	ND	0.181						0		30	D
2-Chlorotoluene	ND	0.227						0		30	D
4-Chlorotoluene	ND	0.181						0		30	D
tert-Butylbenzene	ND	0.181						0		30	D
1,2,3-Trichloropropane	ND	0.227						0		30	D
1,2,4-Trichlorobenzene	ND	0.181						0		30	D
sec-Butylbenzene	ND	0.227						0		30	D
4-Isopropyltoluene	ND	0.227						0		30	D
1,3-Dichlorobenzene	ND	0.181						0		30	D
1,4-Dichlorobenzene	ND	0.181						0		30	D
n-Butylbenzene	ND	0.181						0		30	D
1,2-Dichlorobenzene	ND	0.181						0		30	D
1,2-Dibromo-3-chloropropane	ND	4.53						0		30	D
1,2,4-Trimethylbenzene	ND	0.181						0		30	D
Hexachloro-1,3-butadiene	ND	0.227						0		30	D
Naphthalene	ND	0.453						0		30	D
1,2,3-Trichlorobenzene	ND	0.181						0		30	D
Surr: Dibromofluoromethane	10.6		11.34		93.8	82.3	112		0		D
Surr: Toluene-d8	10.7		11.34		94.8	90.7	109		0		D
Surr: 1-Bromo-4-fluorobenzene	11.5		11.34		102	88.4	109		0		D

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria
Diluted due to high levels of non-target analytes.

Sample ID: **2101368-014BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **1/27/2021** RunNo: **64951**
Client ID: **BATCH** Batch ID: **31185** Analysis Date: **1/27/2021** SeqNo: **1306579**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.566	0.0169	0.8428	0	67.1	9.4	173				
Chloromethane	0.531	0.0421	0.8428	0	63.0	41.8	143				

Work Order: 2101428
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2101368-014BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **1/27/2021** RunNo: **64951**
Client ID: **BATCH** Batch ID: **31185** Analysis Date: **1/27/2021** SeqNo: **1306579**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	0.892	0.0169	0.8428	0	106	52.5	142				
Bromomethane	0.891	0.0421	0.8428	0	106	56.2	160				
Trichlorofluoromethane (CFC-11)	0.769	0.0169	0.8428	0	91.3	44.9	148				
Chloroethane	0.711	0.0421	0.8428	0	84.3	35.5	171				
1,1-Dichloroethene	0.740	0.0169	0.8428	0	87.8	55.2	140				
Methylene chloride	0.731	0.0169	0.8428	0	86.7	67.6	128				
trans-1,2-Dichloroethene	0.724	0.0169	0.8428	0	85.9	65.6	132				
Methyl tert-butyl ether (MTBE)	0.817	0.0169	0.8428	0	97.0	65.1	131				
1,1-Dichloroethane	0.771	0.0169	0.8428	0	91.5	69	128				
cis-1,2-Dichloroethene	0.791	0.0169	0.8428	0	93.9	70.8	129				
Chloroform	0.784	0.0169	0.8428	0	93.1	71.4	129				
1,1,1-Trichloroethane (TCA)	0.798	0.0169	0.8428	0	94.6	67.2	134				
1,1-Dichloropropene	0.782	0.0169	0.8428	0	92.8	64.2	136				
Carbon tetrachloride	0.792	0.0169	0.8428	0	94.0	62.7	137				
1,2-Dichloroethane (EDC)	0.797	0.0169	0.8428	0	94.5	70.5	129				
Benzene	0.781	0.0169	0.8428	0	92.6	72.3	128				
Trichloroethene (TCE)	0.834	0.0169	0.8428	0	98.9	68.2	137				
1,2-Dichloropropane	0.775	0.0169	0.8428	0	91.9	72.1	129				
Bromodichloromethane	0.758	0.0169	0.8428	0	90.0	71.7	128				
Dibromomethane	0.808	0.0169	0.8428	0	95.8	71	129				
cis-1,3-Dichloropropene	0.768	0.0169	0.8428	0	91.1	69.6	126				
Toluene	0.802	0.0169	0.8428	0	95.2	71	132				
trans-1,3-Dichloropropylene	0.793	0.0169	0.8428	0	94.1	66.3	130				
1,1,2-Trichloroethane	0.826	0.0169	0.8428	0	98.0	69.4	131				
1,3-Dichloropropane	0.824	0.0211	0.8428	0	97.8	70.4	129				
Tetrachloroethene (PCE)	0.855	0.0169	0.8428	0	101	67.4	133				
Dibromochloromethane	0.841	0.0169	0.8428	0	99.8	70.2	128				
1,2-Dibromoethane (EDB)	0.874	0.00421	0.8428	0	104	71.1	127				
Chlorobenzene	0.836	0.0169	0.8428	0	99.2	75.3	126				
1,1,1,2-Tetrachloroethane	0.849	0.0169	0.8428	0	101	73	128				

Work Order: 2101428
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2101368-014BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **1/27/2021** RunNo: **64951**
Client ID: **BATCH** Batch ID: **31185** Analysis Date: **1/27/2021** SeqNo: **1306579**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	0.833	0.0211	0.8428	0	98.8	73.8	130				
m,p-Xylene	1.69	0.0421	1.686	0	100	74.1	130				
o-Xylene	0.841	0.0211	0.8428	0	99.8	74.2	129				
Styrene	0.829	0.0169	0.8428	0	98.4	74.6	129				
Isopropylbenzene	0.853	0.0169	0.8428	0	101	72	133				
Bromoform	0.940	0.0421	0.8428	0	112	59.4	135				
1,1,2,2-Tetrachloroethane	0.825	0.0169	0.8428	0	97.8	53.6	139				
n-Propylbenzene	0.835	0.0169	0.8428	0	99.0	68.8	137				
Bromobenzene	0.849	0.0169	0.8428	0	101	75.4	127				
1,3,5-Trimethylbenzene	0.843	0.0169	0.8428	0	100	70.9	134				
2-Chlorotoluene	0.821	0.0211	0.8428	0	97.4	71.8	133				
4-Chlorotoluene	0.811	0.0169	0.8428	0	96.3	73.6	131				
tert-Butylbenzene	0.850	0.0169	0.8428	0	101	69.7	134				
1,2,3-Trichloropropane	0.875	0.0211	0.8428	0	104	61.6	135				
1,2,4-Trichlorobenzene	0.930	0.0169	0.8428	0	110	67.4	132				
sec-Butylbenzene	0.838	0.0211	0.8428	0	99.5	68.4	137				
4-Isopropyltoluene	0.830	0.0211	0.8428	0	98.4	69.5	136				
1,3-Dichlorobenzene	0.866	0.0169	0.8428	0	103	76.4	129				
1,4-Dichlorobenzene	0.860	0.0169	0.8428	0	102	78.3	128				
n-Butylbenzene	0.851	0.0169	0.8428	0	101	66.6	139				
1,2-Dichlorobenzene	0.876	0.0169	0.8428	0	104	77.2	127				
1,2-Dibromo-3-chloropropane	0.953	0.421	0.8428	0	113	49.8	144				
1,2,4-Trimethylbenzene	0.838	0.0169	0.8428	0	99.4	71.8	135				
Hexachloro-1,3-butadiene	0.876	0.0211	0.8428	0	104	61.7	141				
Naphthalene	1.11	0.0421	0.8428	0	131	52.2	149				
1,2,3-Trichlorobenzene	0.950	0.0169	0.8428	0	113	59.7	140				
Surr: Dibromofluoromethane	1.00		1.053		95.0	82.3	112				
Surr: Toluene-d8	1.00		1.053		95.0	90.7	109				
Surr: 1-Bromo-4-fluorobenzene	1.09		1.053		103	88.4	109				

Sample Log-In Check List

Client Name:	**PES**	Work Order Number:	**2101428**
Logged by:	**Carissa True**	Date Received:	**1/27/2021 1:02:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present ☐
2.	How was the sample delivered?	Courier				

Log In

3.	Coolers are present?	Yes	☑	No	☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes	☑	No	☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	☑	No	☐	Not Present ☐
6.	Was an attempt made to cool the samples?	Yes	☑	No	☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes	☑	No	☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes	☑	No	☐	
9.	Sufficient sample volume for indicated test(s)?	Yes	☑	No	☐	
10.	Are samples properly preserved?	Yes	☑	No	☐	
11.	Was preservative added to bottles?	Yes	☐	No	☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes	☐	No	☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes	☑	No	☐	
14.	Does paperwork match bottle labels?	Yes	☑	No	☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐	
16.	Is it clear what analyses were requested?	Yes	☑	No	☐	
17.	Were all holding times able to be met?	Yes	☑	No	☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes	☐	No	☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample 1	0.3

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 1-27-2021 Page: 1 of: 2

Laboratory Project No (internal): 2401428

Project Name: MVSC - Harris

Special Remarks: PCE, TCE, VC by 2:00pm on 1/28/21

Client: PES Environmental

Project No: 1358.001.02.014

Address: 2101 4th Ave Ste 1310

Collected by: Sean K

City, State, Zip: Seattle, WA 98121

Location: Normandy Park, WA

Telephone: 206 529 3980

Report To (PM): Matt Dahl

Sample Disposal: ☐ Return to client ☑ Disposal by lab (after 30 days)

Fax: 206 529 3985

PM Email: MDAHL@PESENV.COM

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	Ex-16	1/27/21	1100	S	3	X												
2	Ex-17		1105		3	X												
3	Ex-18		1110		3	X												
4	Ex-19		1135		3	X												
5	Ex-20		1138		3	X												
6	Ex-21		1142		3	X												
7	Ex-22		1150		3	X												
8	Ex-23		1153		3	X												
9	Ex-24		1157		3	X												
10	Ex-25		1200		3	X												

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☐ Standard ☒ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day ____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x	Sean Kouvousky	1/27/21 @ 1220	x	Alex	01/27/21
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x	Carter Johnson	1/27/21 @ 1302

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 1/27/21 Page: 2 of: 2

Laboratory Project No (internal): 2101428

Project Name: MWSC

Special Remarks: PCE, TCE, VC by 2:00pm on 1/28/21

Client: PES Environmental

Project No: 1358.001.02.014

Address: \

Collected by: \

City, State, Zip: See pg. 1

Location: See pg. 1

Telephone: \

Report To (PM): \

Fax: \

PM Email: \

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	EX-26	1/27/21	1205	S	3	X												
2	EX-27	1/27/21	1208	S	3	X												
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☐ Standard ☒ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day ☐ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x	Sean Kennovsky	1/27/21 @1220	x	Alex	01/27/21
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x	Carter Johnson	1/27/21 @1302

MEMORANDUM

TO: Project File **DATE:** April 9, 2021

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: Manhattan Village Shopping Center

PROJECT #: 1358.001.02.014

TASK: EIM Data Validation Level EPA2A – January 2021 Soil Samples

LAB: Fremont Work Order Number 2101428

Twelve (12) confirmatory soil samples were collected from sidewalls and bottom of an excavation at the Manhattan Village Shopping Centre site in Normandy Park, Washington on January 27,2021. Laboratory analytical services were provided by Fremont Analytical (Fremont) of Seattle, Washington. Samples were analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D. Total solids were assessed using EPA Method 8000D.

The quality assurance review of the laboratory data for Fremont Work Order 2101428 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017).

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested. No concerns, issues, or anomalies were identified in the laboratory report.

Sample Collection and Preservation

The samples were stored on ice in coolers and delivered in good condition to the laboratory. Sample temperatures at the time of receipt were below EPA's recommended temperature preservation range of less than 6.0 °Centigrade. No data qualifications are warranted.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of 14 days for soil samples. All holding time criteria were met.

USEPA Method 8000D:
Samples were analyzed within the USEPA recommended holding time of seven days for total solids.

Initial and Continuing Calibration

Calibration data for this project are not required for this deliverable however Fremont's notes indicate the following:

- *USEPA Method 8260D:* Continuing calibration verification (CCV) issues are noted by Fremont for various compounds associated with the analytical batches. These results are qualified by the laboratory "Q" to indicate that percent difference CCVs are outside of laboratory acceptance criteria**. All associated compound results with laboratory qualified (Q) results (all non-detect) are estimated and qualified (UJ).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blank was included with the analytical batch per method requirement. The target analytes (VOCs) were not detected in the method blank at a concentration at or above the reporting detection limits (RLs).

Trip Blank Results

USEPA Method 8260D:
Trip blanks were not collected. No action is taken other than to note this.

Equipment Blank Results

An equipment blank was not collected.

Field Duplicate Analyses

Field duplicate samples were not collected. Refer to client or non-client laboratory duplicate results for precision data.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate analysis were performed on non-client soil samples within the analytical batch. Laboratory duplicate relative percent differences (RPDs) are within laboratory control limits.

USEPA Method 8000D:
Laboratory duplicate sample analyses were not performed. No action is taken other than to note this.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate percent recovery (%R) results for the samples, method blanks, and laboratory duplicates, matrix spike sample, and laboratory control sample are within the laboratory surrogate control limits. No data qualifications were warranted.

Laboratory Control Samples

USEPA Method 8260D:
The laboratory control sample (LCS) percent recoveries for analytical batch associated with soils are within the laboratory control limits. Refer to matrix spike results for additional accuracy data.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike (MS) analyses was performed on a non-client sample within the analytical batch. MS % recoveries are within laboratory acceptance criteria.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory reports with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered where needed.

Quantitation Limits

Results of the USEPA 8260D VOC analyses were reported based on laboratory RLs. The RLs indicate the minimum quantity of a target analyte that can be confidently determined by the reference method. The RLs were acceptable for the project; therefore, no data qualifications were warranted.

Data Assessment

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Analytical Report

Work Order: **2101428**
Date Reported: **1/28/2021**

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-001 **Collection Date:** 1/27/2021 11:00:00 AM
Client Sample ID: **EX-16** **Matrix:** Soil

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D					Batch ID: 31185		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	UJ	0.0214	Q	mg/Kg-dry	1	1/28/2021 12:01:30 AM
Chloromethane	ND	UJ	0.0536	Q	mg/Kg-dry	1	1/28/2021 12:01:30 AM
Vinyl chloride	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Bromomethane	ND		0.0536		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Trichlorofluoromethane (CFC-11)	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Chloroethane	ND		0.0536		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,1-Dichloroethene	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Methylene chloride	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
trans-1,2-Dichloroethene	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Methyl tert-butyl ether (MTBE)	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,1-Dichloroethane	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
cis-1,2-Dichloroethene	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Chloroform	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,1,1-Trichloroethane (TCA)	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,1-Dichloropropene	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Carbon tetrachloride	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2-Dichloroethane (EDC)	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Benzene	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Trichloroethene (TCE)	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2-Dichloropropane	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Bromodichloromethane	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Dibromomethane	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
cis-1,3-Dichloropropene	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Toluene	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
trans-1,3-Dichloropropylene	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,1,2-Trichloroethane	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,3-Dichloropropane	ND		0.0268		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Tetrachloroethene (PCE)	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Dibromochloromethane	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2-Dibromoethane (EDB)	ND		0.00536		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Chlorobenzene	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,1,1,2-Tetrachloroethane	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Ethylbenzene	ND		0.0268		mg/Kg-dry	1	1/28/2021 12:01:30 AM
m,p-Xylene	ND		0.0536		mg/Kg-dry	1	1/28/2021 12:01:30 AM
o-Xylene	ND		0.0268		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Styrene	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Isopropylbenzene	ND		0.0214		mg/Kg-dry	1	1/28/2021 12:01:30 AM
Bromoform	ND		0.0536		mg/Kg-dry	1	1/28/2021 12:01:30 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
n-Propylbenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
Bromobenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,3,5-Trimethylbenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
2-Chlorotoluene	ND	0.0268	mg/Kg-dry	1	1/28/2021 12:01:30 AM
4-Chlorotoluene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
tert-Butylbenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2,3-Trichloropropane	ND	0.0268	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2,4-Trichlorobenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
sec-Butylbenzene	ND	0.0268	mg/Kg-dry	1	1/28/2021 12:01:30 AM
4-Isopropyltoluene	ND	0.0268	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,3-Dichlorobenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,4-Dichlorobenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
n-Butylbenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2-Dichlorobenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2-Dibromo-3-chloropropane	ND	0.536	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2,4-Trimethylbenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
Hexachloro-1,3-butadiene	ND	0.0268	mg/Kg-dry	1	1/28/2021 12:01:30 AM
Naphthalene	ND	0.0536	mg/Kg-dry	1	1/28/2021 12:01:30 AM
1,2,3-Trichlorobenzene	ND	0.0214	mg/Kg-dry	1	1/28/2021 12:01:30 AM
Surr: Dibromofluoromethane	92.5	82.3 - 112	%Rec	1	1/28/2021 12:01:30 AM
Surr: Toluene-d8	95.5	90.7 - 109	%Rec	1	1/28/2021 12:01:30 AM
Surr: 1-Bromo-4-fluorobenzene	98.5	88.4 - 109	%Rec	1	1/28/2021 12:01:30 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	18.7	0.500	wt%	1	1/28/2021 9:09:43 AM

JC 4/8/21

Analytical Report

Work Order: **2101428**
Date Reported: **1/28/2021**

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-002 **Collection Date:** 1/27/2021 11:05:00 AM
Client Sample ID: **EX-17** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	0.0234	Q	mg/Kg-dry	1	1/28/2021 12:31:47 AM
Chloromethane	ND	UJ	0.0585	Q	mg/Kg-dry	1	1/28/2021 12:31:47 AM
Vinyl chloride	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Bromomethane	ND		0.0585		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Trichlorofluoromethane (CFC-11)	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Chloroethane	ND		0.0585		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,1-Dichloroethene	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Methylene chloride	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
trans-1,2-Dichloroethene	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Methyl tert-butyl ether (MTBE)	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,1-Dichloroethane	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
cis-1,2-Dichloroethene	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Chloroform	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,1,1-Trichloroethane (TCA)	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,1-Dichloropropene	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Carbon tetrachloride	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2-Dichloroethane (EDC)	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Benzene	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Trichloroethene (TCE)	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2-Dichloropropane	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Bromodichloromethane	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Dibromomethane	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
cis-1,3-Dichloropropene	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Toluene	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
trans-1,3-Dichloropropylene	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,1,2-Trichloroethane	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,3-Dichloropropane	ND		0.0292		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Tetrachloroethene (PCE)	0.0876		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Dibromochloromethane	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2-Dibromoethane (EDB)	ND		0.00585		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Chlorobenzene	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,1,1,2-Tetrachloroethane	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Ethylbenzene	ND		0.0292		mg/Kg-dry	1	1/28/2021 12:31:47 AM
m,p-Xylene	ND		0.0585		mg/Kg-dry	1	1/28/2021 12:31:47 AM
o-Xylene	ND		0.0292		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Styrene	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Isopropylbenzene	ND		0.0234		mg/Kg-dry	1	1/28/2021 12:31:47 AM
Bromoform	ND		0.0585		mg/Kg-dry	1	1/28/2021 12:31:47 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
n-Propylbenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
Bromobenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,3,5-Trimethylbenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
2-Chlorotoluene	ND	0.0292	mg/Kg-dry	1	1/28/2021 12:31:47 AM
4-Chlorotoluene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
tert-Butylbenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2,3-Trichloropropane	ND	0.0292	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2,4-Trichlorobenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
sec-Butylbenzene	ND	0.0292	mg/Kg-dry	1	1/28/2021 12:31:47 AM
4-Isopropyltoluene	ND	0.0292	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,3-Dichlorobenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,4-Dichlorobenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
n-Butylbenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2-Dichlorobenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2-Dibromo-3-chloropropane	ND	0.585	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2,4-Trimethylbenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
Hexachloro-1,3-butadiene	ND	0.0292	mg/Kg-dry	1	1/28/2021 12:31:47 AM
Naphthalene	ND	0.0585	mg/Kg-dry	1	1/28/2021 12:31:47 AM
1,2,3-Trichlorobenzene	ND	0.0234	mg/Kg-dry	1	1/28/2021 12:31:47 AM
Surr: Dibromofluoromethane	91.8	82.3 - 112	%Rec	1	1/28/2021 12:31:47 AM
Surr: Toluene-d8	93.1	90.7 - 109	%Rec	1	1/28/2021 12:31:47 AM
Surr: 1-Bromo-4-fluorobenzene	97.5	88.4 - 109	%Rec	1	1/28/2021 12:31:47 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	18.5	0.500	wt%	1	1/28/2021 9:09:43 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-003 **Collection Date:** 1/27/2021 11:10:00 AM
Client Sample ID: **EX-18** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND UJ	0.0236	Q	mg/Kg-dry	1	1/28/2021 1:02:04 AM
Chloromethane	ND UJ	0.0590	Q	mg/Kg-dry	1	1/28/2021 1:02:04 AM
Vinyl chloride	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Bromomethane	ND	0.0590		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Trichlorofluoromethane (CFC-11)	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Chloroethane	ND	0.0590		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,1-Dichloroethene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Methylene chloride	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
trans-1,2-Dichloroethene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Methyl tert-butyl ether (MTBE)	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,1-Dichloroethane	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
cis-1,2-Dichloroethene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Chloroform	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,1,1-Trichloroethane (TCA)	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,1-Dichloropropene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Carbon tetrachloride	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2-Dichloroethane (EDC)	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Benzene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Trichloroethene (TCE)	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2-Dichloropropane	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Bromodichloromethane	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Dibromomethane	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
cis-1,3-Dichloropropene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Toluene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
trans-1,3-Dichloropropylene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,1,2-Trichloroethane	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,3-Dichloropropane	ND	0.0295		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Tetrachloroethene (PCE)	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Dibromochloromethane	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2-Dibromoethane (EDB)	ND	0.00590		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Chlorobenzene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,1,1,2-Tetrachloroethane	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Ethylbenzene	ND	0.0295		mg/Kg-dry	1	1/28/2021 1:02:04 AM
m,p-Xylene	ND	0.0590		mg/Kg-dry	1	1/28/2021 1:02:04 AM
o-Xylene	ND	0.0295		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Styrene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Isopropylbenzene	ND	0.0236		mg/Kg-dry	1	1/28/2021 1:02:04 AM
Bromoform	ND	0.0590		mg/Kg-dry	1	1/28/2021 1:02:04 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
n-Propylbenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
Bromobenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,3,5-Trimethylbenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
2-Chlorotoluene	ND	0.0295	mg/Kg-dry	1	1/28/2021 1:02:04 AM
4-Chlorotoluene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
tert-Butylbenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2,3-Trichloropropane	ND	0.0295	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2,4-Trichlorobenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
sec-Butylbenzene	ND	0.0295	mg/Kg-dry	1	1/28/2021 1:02:04 AM
4-Isopropyltoluene	ND	0.0295	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,3-Dichlorobenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,4-Dichlorobenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
n-Butylbenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2-Dichlorobenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2-Dibromo-3-chloropropane	ND	0.590	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2,4-Trimethylbenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
Hexachloro-1,3-butadiene	ND	0.0295	mg/Kg-dry	1	1/28/2021 1:02:04 AM
Naphthalene	ND	0.0590	mg/Kg-dry	1	1/28/2021 1:02:04 AM
1,2,3-Trichlorobenzene	ND	0.0236	mg/Kg-dry	1	1/28/2021 1:02:04 AM
Surr: Dibromofluoromethane	91.7	82.3 - 112	%Rec	1	1/28/2021 1:02:04 AM
Surr: Toluene-d8	96.1	90.7 - 109	%Rec	1	1/28/2021 1:02:04 AM
Surr: 1-Bromo-4-fluorobenzene	98.0	88.4 - 109	%Rec	1	1/28/2021 1:02:04 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	15.9	0.500	wt%	1	1/28/2021 9:09:43 AM

JC 4/8/21

Analytical Report

Work Order: **2101428**
Date Reported: **1/28/2021**

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-004 **Collection Date:** 1/27/2021 11:35:00 AM
Client Sample ID: **EX-19** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	0.0265	Q	mg/Kg-dry	1	1/28/2021 1:32:20 AM
Chloromethane	ND	UJ	0.0662	Q	mg/Kg-dry	1	1/28/2021 1:32:20 AM
Vinyl chloride	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Bromomethane	ND		0.0662		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Trichlorofluoromethane (CFC-11)	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Chloroethane	ND		0.0662		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,1-Dichloroethene	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Methylene chloride	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
trans-1,2-Dichloroethene	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Methyl tert-butyl ether (MTBE)	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,1-Dichloroethane	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
cis-1,2-Dichloroethene	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Chloroform	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,1,1-Trichloroethane (TCA)	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,1-Dichloropropene	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Carbon tetrachloride	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2-Dichloroethane (EDC)	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Benzene	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Trichloroethene (TCE)	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2-Dichloropropane	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Bromodichloromethane	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Dibromomethane	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
cis-1,3-Dichloropropene	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Toluene	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
trans-1,3-Dichloropropylene	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,1,2-Trichloroethane	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,3-Dichloropropane	ND		0.0331		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Tetrachloroethene (PCE)	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Dibromochloromethane	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2-Dibromoethane (EDB)	ND		0.00662		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Chlorobenzene	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,1,1,2-Tetrachloroethane	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Ethylbenzene	ND		0.0331		mg/Kg-dry	1	1/28/2021 1:32:20 AM
m,p-Xylene	ND		0.0662		mg/Kg-dry	1	1/28/2021 1:32:20 AM
o-Xylene	ND		0.0331		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Styrene	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Isopropylbenzene	ND		0.0265		mg/Kg-dry	1	1/28/2021 1:32:20 AM
Bromoform	ND		0.0662		mg/Kg-dry	1	1/28/2021 1:32:20 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
n-Propylbenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
Bromobenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,3,5-Trimethylbenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
2-Chlorotoluene	ND	0.0331	mg/Kg-dry	1	1/28/2021 1:32:20 AM
4-Chlorotoluene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
tert-Butylbenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2,3-Trichloropropane	ND	0.0331	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2,4-Trichlorobenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
sec-Butylbenzene	ND	0.0331	mg/Kg-dry	1	1/28/2021 1:32:20 AM
4-Isopropyltoluene	ND	0.0331	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,3-Dichlorobenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,4-Dichlorobenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
n-Butylbenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2-Dichlorobenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2-Dibromo-3-chloropropane	ND	0.662	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2,4-Trimethylbenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
Hexachloro-1,3-butadiene	ND	0.0331	mg/Kg-dry	1	1/28/2021 1:32:20 AM
Naphthalene	ND	0.0662	mg/Kg-dry	1	1/28/2021 1:32:20 AM
1,2,3-Trichlorobenzene	ND	0.0265	mg/Kg-dry	1	1/28/2021 1:32:20 AM
Surr: Dibromofluoromethane	91.6	82.3 - 112	%Rec	1	1/28/2021 1:32:20 AM
Surr: Toluene-d8	96.1	90.7 - 109	%Rec	1	1/28/2021 1:32:20 AM
Surr: 1-Bromo-4-fluorobenzene	97.3	88.4 - 109	%Rec	1	1/28/2021 1:32:20 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	18.9	0.500	wt%	1	1/28/2021 9:09:43 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-005 **Collection Date:** 1/27/2021 11:38:00 AM
Client Sample ID: **EX-20** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	0.0231	Q	mg/Kg-dry	1	1/28/2021 2:02:32 AM
Chloromethane	ND	UJ	0.0578	Q	mg/Kg-dry	1	1/28/2021 2:02:32 AM
Vinyl chloride	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Bromomethane	ND		0.0578		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Trichlorofluoromethane (CFC-11)	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Chloroethane	ND		0.0578		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,1-Dichloroethene	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Methylene chloride	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
trans-1,2-Dichloroethene	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Methyl tert-butyl ether (MTBE)	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,1-Dichloroethane	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
cis-1,2-Dichloroethene	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Chloroform	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,1,1-Trichloroethane (TCA)	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,1-Dichloropropene	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Carbon tetrachloride	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2-Dichloroethane (EDC)	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Benzene	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Trichloroethene (TCE)	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2-Dichloropropane	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Bromodichloromethane	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Dibromomethane	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
cis-1,3-Dichloropropene	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Toluene	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
trans-1,3-Dichloropropylene	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,1,2-Trichloroethane	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,3-Dichloropropane	ND		0.0289		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Tetrachloroethene (PCE)	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Dibromochloromethane	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2-Dibromoethane (EDB)	ND		0.00578		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Chlorobenzene	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,1,1,2-Tetrachloroethane	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Ethylbenzene	ND		0.0289		mg/Kg-dry	1	1/28/2021 2:02:32 AM
m,p-Xylene	ND		0.0578		mg/Kg-dry	1	1/28/2021 2:02:32 AM
o-Xylene	ND		0.0289		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Styrene	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Isopropylbenzene	ND		0.0231		mg/Kg-dry	1	1/28/2021 2:02:32 AM
Bromoform	ND		0.0578		mg/Kg-dry	1	1/28/2021 2:02:32 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
n-Propylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
Bromobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,3,5-Trimethylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
2-Chlorotoluene	ND	0.0289	mg/Kg-dry	1	1/28/2021 2:02:32 AM
4-Chlorotoluene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
tert-Butylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2,3-Trichloropropane	ND	0.0289	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2,4-Trichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
sec-Butylbenzene	ND	0.0289	mg/Kg-dry	1	1/28/2021 2:02:32 AM
4-Isopropyltoluene	ND	0.0289	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,3-Dichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,4-Dichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
n-Butylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2-Dichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2-Dibromo-3-chloropropane	ND	0.578	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2,4-Trimethylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
Hexachloro-1,3-butadiene	ND	0.0289	mg/Kg-dry	1	1/28/2021 2:02:32 AM
Naphthalene	ND	0.0578	mg/Kg-dry	1	1/28/2021 2:02:32 AM
1,2,3-Trichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 2:02:32 AM
Surr: Dibromofluoromethane	92.2	82.3 - 112	%Rec	1	1/28/2021 2:02:32 AM
Surr: Toluene-d8	97.0	90.7 - 109	%Rec	1	1/28/2021 2:02:32 AM
Surr: 1-Bromo-4-fluorobenzene	97.9	88.4 - 109	%Rec	1	1/28/2021 2:02:32 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	17.3	0.500	wt%	1	1/28/2021 9:09:43 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-006 **Collection Date:** 1/27/2021 11:43:00 AM
Client Sample ID: **EX-21** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	0.0229	Q	mg/Kg-dry	1	1/28/2021 2:32:44 AM
Chloromethane	ND	UJ	0.0573	Q	mg/Kg-dry	1	1/28/2021 2:32:44 AM
Vinyl chloride	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Bromomethane	ND		0.0573		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Trichlorofluoromethane (CFC-11)	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Chloroethane	ND		0.0573		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,1-Dichloroethene	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Methylene chloride	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
trans-1,2-Dichloroethene	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Methyl tert-butyl ether (MTBE)	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,1-Dichloroethane	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
cis-1,2-Dichloroethene	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Chloroform	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,1,1-Trichloroethane (TCA)	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,1-Dichloropropene	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Carbon tetrachloride	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2-Dichloroethane (EDC)	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Benzene	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Trichloroethene (TCE)	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2-Dichloropropane	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Bromodichloromethane	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Dibromomethane	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
cis-1,3-Dichloropropene	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Toluene	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
trans-1,3-Dichloropropylene	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,1,2-Trichloroethane	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,3-Dichloropropane	ND		0.0286		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Tetrachloroethene (PCE)	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Dibromochloromethane	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2-Dibromoethane (EDB)	ND		0.00573		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Chlorobenzene	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,1,1,2-Tetrachloroethane	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Ethylbenzene	ND		0.0286		mg/Kg-dry	1	1/28/2021 2:32:44 AM
m,p-Xylene	ND		0.0573		mg/Kg-dry	1	1/28/2021 2:32:44 AM
o-Xylene	ND		0.0286		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Styrene	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Isopropylbenzene	ND		0.0229		mg/Kg-dry	1	1/28/2021 2:32:44 AM
Bromoform	ND		0.0573		mg/Kg-dry	1	1/28/2021 2:32:44 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
n-Propylbenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
Bromobenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,3,5-Trimethylbenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
2-Chlorotoluene	ND	0.0286	mg/Kg-dry	1	1/28/2021 2:32:44 AM
4-Chlorotoluene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
tert-Butylbenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2,3-Trichloropropane	ND	0.0286	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2,4-Trichlorobenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
sec-Butylbenzene	ND	0.0286	mg/Kg-dry	1	1/28/2021 2:32:44 AM
4-Isopropyltoluene	ND	0.0286	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,3-Dichlorobenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,4-Dichlorobenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
n-Butylbenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2-Dichlorobenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2-Dibromo-3-chloropropane	ND	0.573	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2,4-Trimethylbenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
Hexachloro-1,3-butadiene	ND	0.0286	mg/Kg-dry	1	1/28/2021 2:32:44 AM
Naphthalene	ND	0.0573	mg/Kg-dry	1	1/28/2021 2:32:44 AM
1,2,3-Trichlorobenzene	ND	0.0229	mg/Kg-dry	1	1/28/2021 2:32:44 AM
Surr: Dibromofluoromethane	92.2	82.3 - 112	%Rec	1	1/28/2021 2:32:44 AM
Surr: Toluene-d8	97.2	90.7 - 109	%Rec	1	1/28/2021 2:32:44 AM
Surr: 1-Bromo-4-fluorobenzene	97.8	88.4 - 109	%Rec	1	1/28/2021 2:32:44 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	12.7	0.500	wt%	1	1/28/2021 9:09:43 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-007 **Collection Date:** 1/27/2021 11:50:00 AM
Client Sample ID: **EX-22** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	0.0237	Q	mg/Kg-dry	1	1/28/2021 3:02:59 AM
Chloromethane	ND	UJ	0.0593	Q	mg/Kg-dry	1	1/28/2021 3:02:59 AM
Vinyl chloride	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Bromomethane	ND		0.0593		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Trichlorofluoromethane (CFC-11)	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Chloroethane	ND		0.0593		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,1-Dichloroethene	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Methylene chloride	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
trans-1,2-Dichloroethene	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Methyl tert-butyl ether (MTBE)	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,1-Dichloroethane	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
cis-1,2-Dichloroethene	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Chloroform	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,1,1-Trichloroethane (TCA)	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,1-Dichloropropene	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Carbon tetrachloride	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2-Dichloroethane (EDC)	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Benzene	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Trichloroethene (TCE)	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2-Dichloropropane	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Bromodichloromethane	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Dibromomethane	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
cis-1,3-Dichloropropene	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Toluene	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
trans-1,3-Dichloropropylene	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,1,2-Trichloroethane	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,3-Dichloropropane	ND		0.0297		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Tetrachloroethene (PCE)	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Dibromochloromethane	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2-Dibromoethane (EDB)	ND		0.00593		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Chlorobenzene	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,1,1,2-Tetrachloroethane	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Ethylbenzene	ND		0.0297		mg/Kg-dry	1	1/28/2021 3:02:59 AM
m,p-Xylene	ND		0.0593		mg/Kg-dry	1	1/28/2021 3:02:59 AM
o-Xylene	ND		0.0297		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Styrene	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Isopropylbenzene	ND		0.0237		mg/Kg-dry	1	1/28/2021 3:02:59 AM
Bromoform	ND		0.0593		mg/Kg-dry	1	1/28/2021 3:02:59 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
n-Propylbenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
Bromobenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,3,5-Trimethylbenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
2-Chlorotoluene	ND	0.0297	mg/Kg-dry	1	1/28/2021 3:02:59 AM
4-Chlorotoluene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
tert-Butylbenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2,3-Trichloropropane	ND	0.0297	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2,4-Trichlorobenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
sec-Butylbenzene	ND	0.0297	mg/Kg-dry	1	1/28/2021 3:02:59 AM
4-Isopropyltoluene	ND	0.0297	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,3-Dichlorobenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,4-Dichlorobenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
n-Butylbenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2-Dichlorobenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2-Dibromo-3-chloropropane	ND	0.593	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2,4-Trimethylbenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
Hexachloro-1,3-butadiene	ND	0.0297	mg/Kg-dry	1	1/28/2021 3:02:59 AM
Naphthalene	ND	0.0593	mg/Kg-dry	1	1/28/2021 3:02:59 AM
1,2,3-Trichlorobenzene	ND	0.0237	mg/Kg-dry	1	1/28/2021 3:02:59 AM
Surr: Dibromofluoromethane	91.9	82.3 - 112	%Rec	1	1/28/2021 3:02:59 AM
Surr: Toluene-d8	97.1	90.7 - 109	%Rec	1	1/28/2021 3:02:59 AM
Surr: 1-Bromo-4-fluorobenzene	98.1	88.4 - 109	%Rec	1	1/28/2021 3:02:59 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	17.2	0.500	wt%	1	1/28/2021 9:09:43 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-008 **Collection Date:** 1/27/2021 11:53:00 AM
Client Sample ID: **EX-23** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	0.0273	Q	mg/Kg-dry	1	1/28/2021 3:33:10 AM
Chloromethane	ND	UJ	0.0684	Q	mg/Kg-dry	1	1/28/2021 3:33:10 AM
Vinyl chloride	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Bromomethane	ND		0.0684		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Trichlorofluoromethane (CFC-11)	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Chloroethane	ND		0.0684		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,1-Dichloroethene	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Methylene chloride	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
trans-1,2-Dichloroethene	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Methyl tert-butyl ether (MTBE)	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,1-Dichloroethane	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
cis-1,2-Dichloroethene	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Chloroform	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,1,1-Trichloroethane (TCA)	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,1-Dichloropropene	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Carbon tetrachloride	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2-Dichloroethane (EDC)	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Benzene	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Trichloroethene (TCE)	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2-Dichloropropane	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Bromodichloromethane	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Dibromomethane	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
cis-1,3-Dichloropropene	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Toluene	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
trans-1,3-Dichloropropylene	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,1,2-Trichloroethane	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,3-Dichloropropane	ND		0.0342		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Tetrachloroethene (PCE)	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Dibromochloromethane	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2-Dibromoethane (EDB)	ND		0.00684		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Chlorobenzene	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,1,1,2-Tetrachloroethane	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Ethylbenzene	ND		0.0342		mg/Kg-dry	1	1/28/2021 3:33:10 AM
m,p-Xylene	ND		0.0684		mg/Kg-dry	1	1/28/2021 3:33:10 AM
o-Xylene	ND		0.0342		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Styrene	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Isopropylbenzene	ND		0.0273		mg/Kg-dry	1	1/28/2021 3:33:10 AM
Bromoform	ND		0.0684		mg/Kg-dry	1	1/28/2021 3:33:10 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
n-Propylbenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
Bromobenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,3,5-Trimethylbenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
2-Chlorotoluene	ND	0.0342	mg/Kg-dry	1	1/28/2021 3:33:10 AM
4-Chlorotoluene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
tert-Butylbenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2,3-Trichloropropane	ND	0.0342	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2,4-Trichlorobenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
sec-Butylbenzene	ND	0.0342	mg/Kg-dry	1	1/28/2021 3:33:10 AM
4-Isopropyltoluene	ND	0.0342	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,3-Dichlorobenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,4-Dichlorobenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
n-Butylbenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2-Dichlorobenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2-Dibromo-3-chloropropane	ND	0.684	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2,4-Trimethylbenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
Hexachloro-1,3-butadiene	ND	0.0342	mg/Kg-dry	1	1/28/2021 3:33:10 AM
Naphthalene	ND	0.0684	mg/Kg-dry	1	1/28/2021 3:33:10 AM
1,2,3-Trichlorobenzene	ND	0.0273	mg/Kg-dry	1	1/28/2021 3:33:10 AM
Surr: Dibromofluoromethane	91.9	82.3 - 112	%Rec	1	1/28/2021 3:33:10 AM
Surr: Toluene-d8	98.3	90.7 - 109	%Rec	1	1/28/2021 3:33:10 AM
Surr: 1-Bromo-4-fluorobenzene	98.8	88.4 - 109	%Rec	1	1/28/2021 3:33:10 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	19.7	0.500	wt%	1	1/28/2021 9:09:43 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-009 **Collection Date:** 1/27/2021 11:57:00 AM
Client Sample ID: **EX-24** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	0.0242	Q	mg/Kg-dry	1	1/28/2021 4:03:29 AM
Chloromethane	ND	UJ	0.0605	Q	mg/Kg-dry	1	1/28/2021 4:03:29 AM
Vinyl chloride	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Bromomethane	ND		0.0605		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Trichlorofluoromethane (CFC-11)	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Chloroethane	ND		0.0605		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,1-Dichloroethene	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Methylene chloride	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
trans-1,2-Dichloroethene	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Methyl tert-butyl ether (MTBE)	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,1-Dichloroethane	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
cis-1,2-Dichloroethene	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Chloroform	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,1,1-Trichloroethane (TCA)	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,1-Dichloropropene	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Carbon tetrachloride	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2-Dichloroethane (EDC)	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Benzene	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Trichloroethene (TCE)	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2-Dichloropropane	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Bromodichloromethane	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Dibromomethane	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
cis-1,3-Dichloropropene	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Toluene	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
trans-1,3-Dichloropropylene	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,1,2-Trichloroethane	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,3-Dichloropropane	ND		0.0302		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Tetrachloroethene (PCE)	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Dibromochloromethane	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2-Dibromoethane (EDB)	ND		0.00605		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Chlorobenzene	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,1,1,2-Tetrachloroethane	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Ethylbenzene	ND		0.0302		mg/Kg-dry	1	1/28/2021 4:03:29 AM
m,p-Xylene	ND		0.0605		mg/Kg-dry	1	1/28/2021 4:03:29 AM
o-Xylene	ND		0.0302		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Styrene	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Isopropylbenzene	ND		0.0242		mg/Kg-dry	1	1/28/2021 4:03:29 AM
Bromoform	ND		0.0605		mg/Kg-dry	1	1/28/2021 4:03:29 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
n-Propylbenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
Bromobenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,3,5-Trimethylbenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
2-Chlorotoluene	ND	0.0302	mg/Kg-dry	1	1/28/2021 4:03:29 AM
4-Chlorotoluene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
tert-Butylbenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2,3-Trichloropropane	ND	0.0302	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2,4-Trichlorobenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
sec-Butylbenzene	ND	0.0302	mg/Kg-dry	1	1/28/2021 4:03:29 AM
4-Isopropyltoluene	ND	0.0302	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,3-Dichlorobenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,4-Dichlorobenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
n-Butylbenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2-Dichlorobenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2-Dibromo-3-chloropropane	ND	0.605	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2,4-Trimethylbenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
Hexachloro-1,3-butadiene	ND	0.0302	mg/Kg-dry	1	1/28/2021 4:03:29 AM
Naphthalene	ND	0.0605	mg/Kg-dry	1	1/28/2021 4:03:29 AM
1,2,3-Trichlorobenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 4:03:29 AM
Surr: Dibromofluoromethane	92.1	82.3 - 112	%Rec	1	1/28/2021 4:03:29 AM
Surr: Toluene-d8	99.4	90.7 - 109	%Rec	1	1/28/2021 4:03:29 AM
Surr: 1-Bromo-4-fluorobenzene	98.0	88.4 - 109	%Rec	1	1/28/2021 4:03:29 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	19.8	0.500	wt%	1	1/28/2021 9:09:43 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-010 **Collection Date:** 1/27/2021 12:00:00 PM
Client Sample ID: **EX-25** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	0.0264	Q	mg/Kg-dry	1	1/28/2021 4:33:40 AM
Chloromethane	ND	UJ	0.0660	Q	mg/Kg-dry	1	1/28/2021 4:33:40 AM
Vinyl chloride	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Bromomethane	ND		0.0660		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Trichlorofluoromethane (CFC-11)	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Chloroethane	ND		0.0660		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,1-Dichloroethene	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Methylene chloride	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
trans-1,2-Dichloroethene	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Methyl tert-butyl ether (MTBE)	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,1-Dichloroethane	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
cis-1,2-Dichloroethene	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Chloroform	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,1,1-Trichloroethane (TCA)	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,1-Dichloropropene	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Carbon tetrachloride	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2-Dichloroethane (EDC)	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Benzene	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Trichloroethene (TCE)	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2-Dichloropropane	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Bromodichloromethane	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Dibromomethane	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
cis-1,3-Dichloropropene	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Toluene	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
trans-1,3-Dichloropropylene	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,1,2-Trichloroethane	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,3-Dichloropropane	ND		0.0330		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Tetrachloroethene (PCE)	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Dibromochloromethane	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2-Dibromoethane (EDB)	ND		0.00660		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Chlorobenzene	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,1,1,2-Tetrachloroethane	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Ethylbenzene	ND		0.0330		mg/Kg-dry	1	1/28/2021 4:33:40 AM
m,p-Xylene	ND		0.0660		mg/Kg-dry	1	1/28/2021 4:33:40 AM
o-Xylene	ND		0.0330		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Styrene	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Isopropylbenzene	ND		0.0264		mg/Kg-dry	1	1/28/2021 4:33:40 AM
Bromoform	ND		0.0660		mg/Kg-dry	1	1/28/2021 4:33:40 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
n-Propylbenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
Bromobenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,3,5-Trimethylbenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
2-Chlorotoluene	ND	0.0330	mg/Kg-dry	1	1/28/2021 4:33:40 AM
4-Chlorotoluene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
tert-Butylbenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2,3-Trichloropropane	ND	0.0330	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2,4-Trichlorobenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
sec-Butylbenzene	ND	0.0330	mg/Kg-dry	1	1/28/2021 4:33:40 AM
4-Isopropyltoluene	ND	0.0330	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,3-Dichlorobenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,4-Dichlorobenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
n-Butylbenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2-Dichlorobenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2-Dibromo-3-chloropropane	ND	0.660	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2,4-Trimethylbenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
Hexachloro-1,3-butadiene	ND	0.0330	mg/Kg-dry	1	1/28/2021 4:33:40 AM
Naphthalene	ND	0.0660	mg/Kg-dry	1	1/28/2021 4:33:40 AM
1,2,3-Trichlorobenzene	ND	0.0264	mg/Kg-dry	1	1/28/2021 4:33:40 AM
Surr: Dibromofluoromethane	92.4	82.3 - 112	%Rec	1	1/28/2021 4:33:40 AM
Surr: Toluene-d8	99.5	90.7 - 109	%Rec	1	1/28/2021 4:33:40 AM
Surr: 1-Bromo-4-fluorobenzene	98.2	88.4 - 109	%Rec	1	1/28/2021 4:33:40 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	10.6	0.500	wt%	1	1/28/2021 9:09:43 AM

JC 4/8/21

Analytical Report

Work Order: **2101428**
Date Reported: **1/28/2021**

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-011 **Collection Date:** 1/27/2021 12:05:00 PM
Client Sample ID: **EX-26** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	0.0231	Q	mg/Kg-dry	1	1/28/2021 5:03:52 AM
Chloromethane	ND	UJ	0.0577	Q	mg/Kg-dry	1	1/28/2021 5:03:52 AM
Vinyl chloride	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Bromomethane	ND		0.0577		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Trichlorofluoromethane (CFC-11)	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Chloroethane	ND		0.0577		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,1-Dichloroethene	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Methylene chloride	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
trans-1,2-Dichloroethene	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Methyl tert-butyl ether (MTBE)	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,1-Dichloroethane	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
cis-1,2-Dichloroethene	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Chloroform	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,1,1-Trichloroethane (TCA)	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,1-Dichloropropene	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Carbon tetrachloride	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2-Dichloroethane (EDC)	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Benzene	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Trichloroethene (TCE)	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2-Dichloropropane	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Bromodichloromethane	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Dibromomethane	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
cis-1,3-Dichloropropene	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Toluene	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
trans-1,3-Dichloropropylene	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,1,2-Trichloroethane	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,3-Dichloropropane	ND		0.0289		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Tetrachloroethene (PCE)	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Dibromochloromethane	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2-Dibromoethane (EDB)	ND		0.00577		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Chlorobenzene	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,1,1,2-Tetrachloroethane	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Ethylbenzene	ND		0.0289		mg/Kg-dry	1	1/28/2021 5:03:52 AM
m,p-Xylene	ND		0.0577		mg/Kg-dry	1	1/28/2021 5:03:52 AM
o-Xylene	ND		0.0289		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Styrene	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Isopropylbenzene	ND		0.0231		mg/Kg-dry	1	1/28/2021 5:03:52 AM
Bromoform	ND		0.0577		mg/Kg-dry	1	1/28/2021 5:03:52 AM

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
n-Propylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
Bromobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,3,5-Trimethylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
2-Chlorotoluene	ND	0.0289	mg/Kg-dry	1	1/28/2021 5:03:52 AM
4-Chlorotoluene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
tert-Butylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2,3-Trichloropropane	ND	0.0289	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2,4-Trichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
sec-Butylbenzene	ND	0.0289	mg/Kg-dry	1	1/28/2021 5:03:52 AM
4-Isopropyltoluene	ND	0.0289	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,3-Dichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,4-Dichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
n-Butylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2-Dichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2-Dibromo-3-chloropropane	ND	0.577	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2,4-Trimethylbenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
Hexachloro-1,3-butadiene	ND	0.0289	mg/Kg-dry	1	1/28/2021 5:03:52 AM
Naphthalene	ND	0.0577	mg/Kg-dry	1	1/28/2021 5:03:52 AM
1,2,3-Trichlorobenzene	ND	0.0231	mg/Kg-dry	1	1/28/2021 5:03:52 AM
Surr: Dibromofluoromethane	93.0	82.3 - 112	%Rec	1	1/28/2021 5:03:52 AM
Surr: Toluene-d8	98.9	90.7 - 109	%Rec	1	1/28/2021 5:03:52 AM
Surr: 1-Bromo-4-fluorobenzene	97.7	88.4 - 109	%Rec	1	1/28/2021 5:03:52 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	19.2	0.500	wt%	1	1/28/2021 9:09:43 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Lab ID: 2101428-012 **Collection Date:** 1/27/2021 12:08:00 PM
Client Sample ID: **EX-27** **Matrix:** Soil

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

Analyses	Result		RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	UJ	0.0193	Q	mg/Kg-dry	1	1/28/2021 5:34:03 AM
Chloromethane	ND	UJ	0.0484	Q	mg/Kg-dry	1	1/28/2021 5:34:03 AM
Vinyl chloride	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Bromomethane	ND		0.0484		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Trichlorofluoromethane (CFC-11)	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Chloroethane	ND		0.0484		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,1-Dichloroethene	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Methylene chloride	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
trans-1,2-Dichloroethene	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Methyl tert-butyl ether (MTBE)	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,1-Dichloroethane	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
cis-1,2-Dichloroethene	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Chloroform	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,1,1-Trichloroethane (TCA)	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,1-Dichloropropene	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Carbon tetrachloride	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2-Dichloroethane (EDC)	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Benzene	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Trichloroethene (TCE)	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2-Dichloropropane	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Bromodichloromethane	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Dibromomethane	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
cis-1,3-Dichloropropene	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Toluene	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
trans-1,3-Dichloropropylene	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,1,2-Trichloroethane	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,3-Dichloropropane	ND		0.0242		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Tetrachloroethene (PCE)	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Dibromochloromethane	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2-Dibromoethane (EDB)	ND		0.00484		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Chlorobenzene	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,1,1,2-Tetrachloroethane	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Ethylbenzene	ND		0.0242		mg/Kg-dry	1	1/28/2021 5:34:03 AM
m,p-Xylene	ND		0.0484		mg/Kg-dry	1	1/28/2021 5:34:03 AM
o-Xylene	ND		0.0242		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Styrene	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Isopropylbenzene	ND		0.0193		mg/Kg-dry	1	1/28/2021 5:34:03 AM
Bromoform	ND		0.0484		mg/Kg-dry	1	1/28/2021 5:34:03 AM

JC 4/8/21

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 31185 Analyst: KT

1,1,2,2-Tetrachloroethane	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
n-Propylbenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
Bromobenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,3,5-Trimethylbenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
2-Chlorotoluene	ND	0.0242	mg/Kg-dry	1	1/28/2021 5:34:03 AM
4-Chlorotoluene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
tert-Butylbenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2,3-Trichloropropane	ND	0.0242	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2,4-Trichlorobenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
sec-Butylbenzene	ND	0.0242	mg/Kg-dry	1	1/28/2021 5:34:03 AM
4-Isopropyltoluene	ND	0.0242	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,3-Dichlorobenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,4-Dichlorobenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
n-Butylbenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2-Dichlorobenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2-Dibromo-3-chloropropane	ND	0.484	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2,4-Trimethylbenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
Hexachloro-1,3-butadiene	ND	0.0242	mg/Kg-dry	1	1/28/2021 5:34:03 AM
Naphthalene	ND	0.0484	mg/Kg-dry	1	1/28/2021 5:34:03 AM
1,2,3-Trichlorobenzene	ND	0.0193	mg/Kg-dry	1	1/28/2021 5:34:03 AM
Surr: Dibromofluoromethane	93.6	82.3 - 112	%Rec	1	1/28/2021 5:34:03 AM
Surr: Toluene-d8	99.1	90.7 - 109	%Rec	1	1/28/2021 5:34:03 AM
Surr: 1-Bromo-4-fluorobenzene	97.8	88.4 - 109	%Rec	1	1/28/2021 5:34:03 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample Moisture (Percent Moisture)

Batch ID: R64947 Analyst: RL

Percent Moisture	8.50	0.500	wt%	1	1/28/2021 9:09:43 AM

JC 4/8/21

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

LABORATORY REPORT

February 27, 2020

Matt Dahl
PES Environmental
1215 Fourth Avenue, Suite 1350
Seattle, WA 98161

RE: MVSC / 1358.001.02.015

Dear Matt:

Enclosed are the results of the sample submitted to our laboratory on February 14, 2020. For your reference, this analysis has been assigned our service request number P2000830.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

Kate Kaneko
Feb 27, 2020, 3:49 pm

Kate Kaneko
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: PES Environmental
Project: MVSC / 1358.001.02.015

Service Request No: P2000830

CASE NARRATIVE

The sample was received intact under chain of custody on February 14, 2020 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The spike recovery for 1,4-Dioxane in the Laboratory Control Sample (LCS) was outside the upper control criterion. The error associated with reduced recovery equates to a potential high bias; however, a duplicate laboratory control sample (DLCS) was analyzed and the recovery for the analyte in question meets the laboratory generated acceptance limits. No further corrective action was taken.

The container was cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.1 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1776326
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-007
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-19-10
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272019-10
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: PES Environmental
Service Request: P2000830
Project ID: MVSC / 1358.001.02.015

Date Received: 2/14/2020
Time Received: 09:15

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC Cans
STACK-021320	P2000830-001	Air	2/13/2020	10:25	1SS00593	0.73	5.65	X

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) (10 Day-Standard)

ALS Project No. P2000830

ALS Contact:

Company Name & Address (Reporting Information)	PES Environmental, 1215 4th Ave, #1358 Seattle, WA 98161
Project Name	MVSC
Project Number	1358.001.02.015
Project Manager	M. Dahl
P.O. # / Billing Information	
Phone	206 529 3980
Fax	206 529 3985
Email Address for Result Reporting	MDAHL@PESENV.COM
Sampler (Print & Sign)	S. Kownovsky

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TO-15		Comments e.g. Actual Preservative or specific instructions
STACK-021320		02/13/20	1025	15500593		-30	0	1L	X		

5 of 16

Report Tier Levels - please select

Tier I - Results (Default if not specified) _____
Tier II (Results + QC Summaries) _____
Tier III (Results + QC & Calibration Summaries) _____
Tier IV (Data Validation Package) 10% Surcharge _____

EDD required Yes / No
Type. _____ Units:_____

Chain of Custody Seal: (Circle)
INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date: 2/13/20	Time: 12:00	Received by: (Signature)	Date: 2/14/20	Time: 915
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____°C

ALS Environmental
Sample Acceptance Check Form

Client: PES Environmental Work order: P2000830

Project: MVSC / 1358.001.02.015

Sample(s) received on: 2/14/20 Date opened: 2/14/20 by: DENISE.POSADA

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2000830-001.01	1.0 L Source Silonite Canister					

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **STACK-021320** ALS Project ID: P2000830
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2000830-001

Test Code: EPA TO-15 Date Collected: 2/13/20
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 2/14/20
Analyst: Wida Ang Date Analyzed: 2/25/20
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00593

Initial Pressure (psig): 0.73 Final Pressure (psig): 5.65

Canister Dilution Factor: 1.32

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	1.7	ND	1.0	
75-71-8	Dichlorodifluoromethane (CFC 12)	**5.1**	1.7	**1.0**	0.35	
74-87-3	Chloromethane	ND	1.7	ND	0.85	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.7	ND	0.25	
75-01-4	Vinyl Chloride	ND	1.8	ND	0.70	
106-99-0	1,3-Butadiene	ND	1.7	ND	0.79	
74-83-9	Bromomethane	ND	1.8	ND	0.46	
75-00-3	Chloroethane	ND	1.8	ND	0.68	
64-17-5	Ethanol	**47**	17	**25**	9.1	
75-05-8	Acetonitrile	ND	1.7	ND	1.0	
107-02-8	Acrolein	ND	3.3	ND	1.4	
67-64-1	Acetone	ND	17	ND	7.4	
75-69-4	Trichlorofluoromethane (CFC 11)	**4.9**	1.7	**0.87**	0.31	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	6.9	ND	2.8	
107-13-1	Acrylonitrile	ND	1.7	ND	0.81	
75-35-4	1,1-Dichloroethene	ND	1.8	ND	0.45	
75-09-2	Methylene Chloride	ND	1.7	ND	0.50	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.8	ND	0.57	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	1.8	ND	0.23	
75-15-0	Carbon Disulfide	ND	3.6	ND	1.2	
156-60-5	trans-1,2-Dichloroethene	ND	1.8	ND	0.45	
75-34-3	1,1-Dichloroethane	ND	1.8	ND	0.45	
1634-04-4	Methyl tert-Butyl Ether	ND	1.8	ND	0.49	
108-05-4	Vinyl Acetate	ND	18	ND	5.1	
78-93-3	2-Butanone (MEK)	ND	3.6	ND	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**
Client Sample ID: **STACK-021320** ALS Project ID: P2000830
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2000830-001

Test Code: EPA TO-15 Date Collected: 2/13/20
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 2/14/20
Analyst: Wida Ang Date Analyzed: 2/25/20
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00593

Initial Pressure (psig): 0.73 Final Pressure (psig): 5.65

Canister Dilution Factor: 1.32

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	**2.4**	1.7	**0.60**	0.44	
141-78-6	Ethyl Acetate	**21**	3.6	**5.7**	1.0	
110-54-3	n-Hexane	ND	1.8	ND	0.51	
67-66-3	Chloroform	**4.7**	1.8	**0.96**	0.37	
109-99-9	Tetrahydrofuran (THF)	ND	1.8	ND	0.62	
107-06-2	1,2-Dichloroethane	ND	1.8	ND	0.44	
71-55-6	1,1,1-Trichloroethane	ND	1.8	ND	0.33	
71-43-2	Benzene	ND	1.7	ND	0.55	
56-23-5	Carbon Tetrachloride	ND	1.7	ND	0.28	
110-82-7	Cyclohexane	ND	3.6	ND	1.1	
78-87-5	1,2-Dichloropropane	ND	1.8	ND	0.39	
75-27-4	Bromodichloromethane	ND	1.8	ND	0.27	
79-01-6	Trichloroethene	ND	1.8	ND	0.33	
123-91-1	1,4-Dioxane	ND	1.8	ND	0.49	
80-62-6	Methyl Methacrylate	ND	3.6	ND	0.89	
142-82-5	n-Heptane	ND	1.8	ND	0.44	
10061-01-5	cis-1,3-Dichloropropene	ND	1.7	ND	0.38	
108-10-1	4-Methyl-2-pentanone	ND	1.7	ND	0.43	
10061-02-6	trans-1,3-Dichloropropene	ND	1.7	ND	0.39	
79-00-5	1,1,2-Trichloroethane	ND	1.8	ND	0.33	
108-88-3	Toluene	ND	1.8	ND	0.47	
591-78-6	2-Hexanone	ND	1.8	ND	0.44	
124-48-1	Dibromochloromethane	ND	1.8	ND	0.21	
106-93-4	1,2-Dibromoethane	ND	1.8	ND	0.23	
123-86-4	n-Butyl Acetate	ND	1.8	ND	0.38	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**
Client Sample ID: **STACK-021320** ALS Project ID: P2000830
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2000830-001

Test Code: EPA TO-15 Date Collected: 2/13/20
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 2/14/20
Analyst: Wida Ang Date Analyzed: 2/25/20
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00593

Initial Pressure (psig): 0.73 Final Pressure (psig): 5.65

Canister Dilution Factor: 1.32

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	1.8	ND	0.38	
127-18-4	Tetrachloroethene	**270**	1.7	**40**	0.25	
108-90-7	Chlorobenzene	ND	1.8	ND	0.39	
100-41-4	Ethylbenzene	ND	1.8	ND	0.41	
179601-23-1	m,p-Xylenes	ND	3.6	ND	0.84	
75-25-2	Bromoform	ND	1.8	ND	0.17	
100-42-5	Styrene	ND	1.7	ND	0.41	
95-47-6	o-Xylene	ND	1.8	ND	0.41	
111-84-2	n-Nonane	ND	1.8	ND	0.34	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	ND	0.26	
98-82-8	Cumene	ND	1.8	ND	0.36	
80-56-8	alpha-Pinene	ND	1.8	ND	0.32	
103-65-1	n-Propylbenzene	ND	1.8	ND	0.36	
622-96-8	4-Ethyltoluene	ND	1.8	ND	0.36	
108-67-8	1,3,5-Trimethylbenzene	ND	1.7	ND	0.36	
95-63-6	1,2,4-Trimethylbenzene	ND	1.8	ND	0.36	
100-44-7	Benzyl Chloride	ND	3.6	ND	0.70	
541-73-1	1,3-Dichlorobenzene	ND	1.8	ND	0.30	
106-46-7	1,4-Dichlorobenzene	ND	1.8	ND	0.30	
95-50-1	1,2-Dichlorobenzene	ND	1.8	ND	0.30	
5989-27-5	d-Limonene	ND	1.8	ND	0.32	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.7	ND	0.18	
120-82-1	1,2,4-Trichlorobenzene	ND	1.8	ND	0.24	
91-20-3	Naphthalene	ND	1.7	ND	0.33	
87-68-3	Hexachlorobutadiene	ND	1.7	ND	0.16	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **Method Blank** ALS Project ID: P2000830
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200225-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Topacio De Leon Date Analyzed: 2/25/20
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.53	ND	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	ND	0.11	
74-87-3	Chloromethane	ND	0.53	ND	0.26	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.53	ND	0.076	
75-01-4	Vinyl Chloride	ND	0.54	ND	0.21	
106-99-0	1,3-Butadiene	ND	0.53	ND	0.24	
74-83-9	Bromomethane	ND	0.54	ND	0.14	
75-00-3	Chloroethane	ND	0.54	ND	0.20	
64-17-5	Ethanol	ND	5.2	ND	2.8	
75-05-8	Acetonitrile	ND	0.53	ND	0.32	
107-02-8	Acrolein	ND	1.0	ND	0.44	
67-64-1	Acetone	ND	5.3	ND	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.53	ND	0.094	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	2.1	ND	0.85	
107-13-1	Acrylonitrile	ND	0.53	ND	0.24	
75-35-4	1,1-Dichloroethene	ND	0.54	ND	0.14	
75-09-2	Methylene Chloride	ND	0.53	ND	0.15	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.54	ND	0.17	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	ND	0.070	
75-15-0	Carbon Disulfide	ND	1.1	ND	0.35	
156-60-5	trans-1,2-Dichloroethene	ND	0.54	ND	0.14	
75-34-3	1,1-Dichloroethane	ND	0.55	ND	0.14	
1634-04-4	Methyl tert-Butyl Ether	ND	0.54	ND	0.15	
108-05-4	Vinyl Acetate	ND	5.4	ND	1.5	
78-93-3	2-Butanone (MEK)	ND	1.1	ND	0.37	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**

Client Sample ID: **Method Blank** ALS Project ID: P2000830

Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200225-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA

Analyst: Topacio De Leon Date Analyzed: 2/25/20

Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.53	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.1	ND	0.31	
110-54-3	n-Hexane	ND	0.54	ND	0.15	
67-66-3	Chloroform	ND	0.54	ND	0.11	
109-99-9	Tetrahydrofuran (THF)	ND	0.55	ND	0.19	
107-06-2	1,2-Dichloroethane	ND	0.54	ND	0.13	
71-55-6	1,1,1-Trichloroethane	ND	0.54	ND	0.099	
71-43-2	Benzene	ND	0.53	ND	0.17	
56-23-5	Carbon Tetrachloride	ND	0.53	ND	0.084	
110-82-7	Cyclohexane	ND	1.1	ND	0.32	
78-87-5	1,2-Dichloropropane	ND	0.54	ND	0.12	
75-27-4	Bromodichloromethane	ND	0.54	ND	0.081	
79-01-6	Trichloroethene	ND	0.54	ND	0.10	
123-91-1	1,4-Dioxane	ND	0.54	ND	0.15	
80-62-6	Methyl Methacrylate	ND	1.1	ND	0.27	
142-82-5	n-Heptane	ND	0.54	ND	0.13	
10061-01-5	cis-1,3-Dichloropropene	ND	0.52	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.53	ND	0.13	
10061-02-6	trans-1,3-Dichloropropene	ND	0.53	ND	0.12	
79-00-5	1,1,2-Trichloroethane	ND	0.54	ND	0.099	
108-88-3	Toluene	ND	0.54	ND	0.14	
591-78-6	2-Hexanone	ND	0.54	ND	0.13	
124-48-1	Dibromochloromethane	ND	0.54	ND	0.063	
106-93-4	1,2-Dibromoethane	ND	0.54	ND	0.070	
123-86-4	n-Butyl Acetate	ND	0.55	ND	0.12	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**
Client Sample ID: **Method Blank** ALS Project ID: P2000830
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200225-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Topacio De Leon Date Analyzed: 2/25/20
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.54	ND	0.12	
127-18-4	Tetrachloroethene	ND	0.52	ND	0.077	
108-90-7	Chlorobenzene	ND	0.54	ND	0.12	
100-41-4	Ethylbenzene	ND	0.54	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.1	ND	0.25	
75-25-2	Bromoform	ND	0.54	ND	0.052	
100-42-5	Styrene	ND	0.53	ND	0.12	
95-47-6	o-Xylene	ND	0.54	ND	0.12	
111-84-2	n-Nonane	ND	0.54	ND	0.10	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.54	ND	0.079	
98-82-8	Cumene	ND	0.54	ND	0.11	
80-56-8	alpha-Pinene	ND	0.54	ND	0.097	
103-65-1	n-Propylbenzene	ND	0.54	ND	0.11	
622-96-8	4-Ethyltoluene	ND	0.54	ND	0.11	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	ND	0.11	
95-63-6	1,2,4-Trimethylbenzene	ND	0.54	ND	0.11	
100-44-7	Benzyl Chloride	ND	1.1	ND	0.21	
541-73-1	1,3-Dichlorobenzene	ND	0.54	ND	0.090	
106-46-7	1,4-Dichlorobenzene	ND	0.54	ND	0.090	
95-50-1	1,2-Dichlorobenzene	ND	0.54	ND	0.090	
5989-27-5	d-Limonene	ND	0.54	ND	0.097	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.53	ND	0.055	
120-82-1	1,2,4-Trichlorobenzene	ND	0.54	ND	0.073	
91-20-3	Naphthalene	ND	0.52	ND	0.099	
87-68-3	Hexachlorobutadiene	ND	0.53	ND	0.050	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **PES Environmental**
Client Project ID: **MVSC / 1358.001.02.015** ALS Project ID: P2000830

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date(s) Collected: 2/13/20
Analyst: Topacio De Leon Date(s) Received: 2/14/20
Sample Type: 1.0 L Silonite Summa Canister(s) Date(s) Analyzed: 2/25/20
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P200225-MB	**102**	**98**	**97**	70-130	
Lab Control Sample	P200225-LCS	**99**	**99**	**99**	70-130	
Duplicate Lab Control Sample	P200225-DLCS	**99**	**99**	**99**	70-130	
STACK-021320	P2000830-001	**104**	**97**	**96**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2000830
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200225-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Topacio De Leon Date Analyzed: 2/25/20
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	210	185	179	**88**	**85**	51-133	3	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	210	184	179	**88**	**85**	64-115	3	25	
74-87-3	Chloromethane	212	173	153	**82**	**72**	49-127	13	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	206	185	183	**90**	**89**	65-114	1	25	
75-01-4	Vinyl Chloride	212	190	187	**90**	**88**	61-129	2	25	
106-99-0	1,3-Butadiene	212	205	206	**97**	**97**	54-140	0	25	
74-83-9	Bromomethane	212	193	194	**91**	**92**	68-120	1	25	
75-00-3	Chloroethane	214	194	201	**91**	**94**	63-123	3	25	
64-17-5	Ethanol	1,060	900	997	**85**	**94**	49-134	10	25	
75-05-8	Acetonitrile	214	185	206	**86**	**96**	50-137	11	25	
107-02-8	Acrolein	206	202	218	**98**	**106**	62-128	8	25	
67-64-1	Acetone	1,070	924	1010	**86**	**94**	56-125	9	25	
75-69-4	Trichlorofluoromethane (CFC 11)	212	183	191	**86**	**90**	64-115	5	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	422	411	450	**97**	**107**	57-133	10	25	
107-13-1	Acrylonitrile	212	206	225	**97**	**106**	64-136	9	25	
75-35-4	1,1-Dichloroethene	214	203	209	**95**	**98**	67-115	3	25	
75-09-2	Methylene Chloride	210	195	202	**93**	**96**	68-114	3	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	214	198	208	**93**	**97**	55-139	4	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	198	197	**92**	**91**	65-115	1	25	
75-15-0	Carbon Disulfide	212	193	197	**91**	**93**	68-113	2	25	
156-60-5	trans-1,2-Dichloroethene	214	224	221	**105**	**103**	65-122	2	25	
75-34-3	1,1-Dichloroethane	212	203	200	**96**	**94**	63-118	2	25	
1634-04-4	Methyl tert-Butyl Ether	214	152	143	**71**	**67**	57-131	6	25	
108-05-4	Vinyl Acetate	1,070	1190	1170	**111**	**109**	71-128	2	25	
78-93-3	2-Butanone (MEK)	212	235	232	**111**	**109**	67-123	2	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2000830
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200225-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Topacio De Leon Date Analyzed: 2/25/20
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	212	211	207	**100**	**98**	64-120	2	25	
141-78-6	Ethyl Acetate	432	492	485	**114**	**112**	64-131	2	25	
110-54-3	n-Hexane	216	211	209	**98**	**97**	58-125	1	25	
67-66-3	Chloroform	214	204	201	**95**	**94**	65-114	1	25	
109-99-9	Tetrahydrofuran (THF)	220	221	217	**100**	**99**	65-115	1	25	
107-06-2	1,2-Dichloroethane	214	204	200	**95**	**93**	59-119	2	25	
71-55-6	1,1,1-Trichloroethane	214	205	200	**96**	**93**	66-115	3	25	
71-43-2	Benzene	210	194	191	**92**	**91**	66-109	1	25	
56-23-5	Carbon Tetrachloride	208	202	198	**97**	**95**	66-119	2	25	
110-82-7	Cyclohexane	422	406	397	**96**	**94**	67-117	2	25	
78-87-5	1,2-Dichloropropane	214	214	210	**100**	**98**	66-119	2	25	
75-27-4	Bromodichloromethane	218	212	208	**97**	**95**	71-119	2	25	
79-01-6	Trichloroethene	216	209	205	**97**	**95**	70-114	2	25	
123-91-1	1,4-Dioxane	216	255	252	**118**	**117**	71-117	0.9	25	**L**
80-62-6	Methyl Methacrylate	430	498	492	**116**	**114**	76-121	2	25	
142-82-5	n-Heptane	214	217	213	**101**	**100**	66-119	1	25	
10061-01-5	cis-1,3-Dichloropropene	214	236	231	**110**	**108**	72-125	2	25	
108-10-1	4-Methyl-2-pentanone	212	255	252	**120**	**119**	68-130	0.8	25	
10061-02-6	trans-1,3-Dichloropropene	212	234	230	**110**	**108**	71-132	2	25	
79-00-5	1,1,2-Trichloroethane	214	210	207	**98**	**97**	70-117	1	25	
108-88-3	Toluene	212	201	197	**95**	**93**	67-113	2	25	
591-78-6	2-Hexanone	216	267	263	**124**	**122**	62-135	2	25	
124-48-1	Dibromochloromethane	214	219	214	**102**	**100**	73-126	2	25	
106-93-4	1,2-Dibromoethane	214	219	215	**102**	**100**	71-122	2	25	
123-86-4	n-Butyl Acetate	218	274	270	**126**	**124**	65-134	2	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.
L = Laboratory control sample recovery outside the specified limits, results may be biased high.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2000830
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200225-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Topacio De Leon Date Analyzed: 2/25/20
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	216	212	209	**98**	**97**	63-120	1	25	
127-18-4	Tetrachloroethene	208	194	191	**93**	**92**	64-120	1	25	
108-90-7	Chlorobenzene	214	196	193	**92**	**90**	65-116	2	25	
100-41-4	Ethylbenzene	212	208	205	**98**	**97**	65-117	1	25	
179601-23-1	m,p-Xylenes	426	411	405	**96**	**95**	64-121	1	25	
75-25-2	Bromoform	214	224	221	**105**	**103**	72-130	2	25	
100-42-5	Styrene	212	226	223	**107**	**105**	72-126	2	25	
95-47-6	o-Xylene	214	206	202	**96**	**94**	64-120	2	25	
111-84-2	n-Nonane	214	213	211	**100**	**99**	56-132	1	25	
79-34-5	1,1,2,2-Tetrachloroethane	214	220	216	**103**	**101**	66-122	2	25	
98-82-8	Cumene	214	205	201	**96**	**94**	64-121	2	25	
80-56-8	alpha-Pinene	212	218	215	**103**	**101**	62-136	2	25	
103-65-1	n-Propylbenzene	214	211	208	**99**	**97**	65-123	2	25	
622-96-8	4-Ethyltoluene	210	200	197	**95**	**94**	71-126	1	25	
108-67-8	1,3,5-Trimethylbenzene	212	209	206	**99**	**97**	65-120	2	25	
95-63-6	1,2,4-Trimethylbenzene	212	221	218	**104**	**103**	63-129	1	25	
100-44-7	Benzyl Chloride	214	234	233	**109**	**109**	66-138	0	25	
541-73-1	1,3-Dichlorobenzene	214	210	207	**98**	**97**	65-127	1	25	
106-46-7	1,4-Dichlorobenzene	214	208	204	**97**	**95**	65-125	2	25	
95-50-1	1,2-Dichlorobenzene	214	213	210	**100**	**98**	67-128	2	25	
5989-27-5	d-Limonene	212	242	237	**114**	**112**	65-136	2	25	
96-12-8	1,2-Dibromo-3-chloropropane	214	228	223	**107**	**104**	73-133	3	25	
120-82-1	1,2,4-Trichlorobenzene	216	213	209	**99**	**97**	62-140	2	25	
91-20-3	Naphthalene	212	248	245	**117**	**116**	57-149	0.9	25	
87-68-3	Hexachlorobutadiene	214	208	205	**97**	**96**	57-129	1	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

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LABORATORY REPORT

June 9, 2020

Matt Dahl
PES Environmental
1215 Fourth Avenue, Suite 1350
Seattle, WA 98161

RE: MVSC / 1358.001.02.015

Dear Matt:

Enclosed are the results of the sample submitted to our laboratory on May 26, 2020. For your reference, this analysis has been assigned our service request number P2002890.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

Kate Kaneko
Jun 09, 2020, 2:41 pm

Kate Kaneko
Project Manager

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Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: PES Environmental
Project: MVSC / 1358.001.02.015

Service Request No: P2002890

CASE NARRATIVE

The sample was received intact under chain of custody on May 26, 2020 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The container was cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.1 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1776326
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-007
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-19-10
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272019-10
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: PES Environmental
Service Request: P2002890
Project ID: MVSC / 1358.001.02.015

Date Received: 5/26/2020
Time Received: 14:00

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC Cans
Stack-051920	P2002890-001	Air	5/19/2020	11:20	1SC00911	-1.52	7.04	X

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle:
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

ALS Project No.: P1001890

ALS Contact:

Company Name & Address (Reporting Information)	Project Name	Project Manager	Phone	Fax	Email Address for Result Reporting	Sampler (Print & Sign)
PES Environmental 1215 4th Ave #1350 Seattle, WA 98161	MVSC	Matt Dahl	206-529-3980	206-529-3985	mdahl@pesenv.com	Sean Kounovsky

Project Number: 1358.001.02.015

P.O. # / Billing Information

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TO-15		Comments e.g. Actual Preservative or specific instructions
Stack-051920		5/19/20	1120	1SC00911	AV605087	-30	-4	1L	X		

5 of 16

Report Tier Levels - please select

Tier I - Results (Default if not specified) _____
Tier II (Results + QC Summaries) _____
Tier III (Results + QC & Calibration Summaries) _____
Tier IV (Data Validation Package) 10% Surcharge _____

EDD required: Yes / No — EIM/Epiphany
Type: _____ Units: _____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	5/19/20	1500		5/20/20	0400
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____ °C

ALS Environmental

Sample Acceptance Check Form

Client: PES Environmental Work order: P2002890

Project: MVSC / 1358.001.02.015

Sample(s) received on: 5/26/20 Date opened: 5/26/20 by: DENISE.POSADA

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2002890-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **Stack-051920** ALS Project ID: P2002890
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2002890-001

Test Code: EPA TO-15 Date Collected: 5/19/20
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 5/26/20
Analyst: Lusine Hakobyan Date Analyzed: 6/3/20
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00911

Initial Pressure (psig): -1.52 Final Pressure (psig): 7.04

Canister Dilution Factor: 1.65

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	2.2	ND	1.3	
75-71-8	Dichlorodifluoromethane (CFC 12)	**4.4**	2.2	**0.89**	0.44	
74-87-3	Chloromethane	ND	2.2	ND	1.1	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.2	ND	0.31	
75-01-4	Vinyl Chloride	ND	2.2	ND	0.87	
106-99-0	1,3-Butadiene	ND	2.2	ND	0.99	
74-83-9	Bromomethane	ND	2.2	ND	0.57	
75-00-3	Chloroethane	ND	2.2	ND	0.84	
64-17-5	Ethanol	ND	21	ND	11	
75-05-8	Acetonitrile	ND	2.2	ND	1.3	
107-02-8	Acrolein	**5.8**	4.1	**2.5**	1.8	
67-64-1	Acetone	**31**	22	**13**	9.2	
75-69-4	Trichlorofluoromethane (CFC 11)	**3.4**	2.2	**0.60**	0.39	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	8.7	ND	3.5	
107-13-1	Acrylonitrile	ND	2.2	ND	1.0	
75-35-4	1,1-Dichloroethene	ND	2.2	ND	0.56	
75-09-2	Methylene Chloride	**27**	2.2	**7.8**	0.63	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.2	ND	0.71	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.2	ND	0.29	
75-15-0	Carbon Disulfide	ND	4.5	ND	1.5	
156-60-5	trans-1,2-Dichloroethene	ND	2.2	ND	0.56	
75-34-3	1,1-Dichloroethane	ND	2.3	ND	0.56	
1634-04-4	Methyl tert-Butyl Ether	ND	2.2	ND	0.62	
108-05-4	Vinyl Acetate	ND	22	ND	6.3	
78-93-3	2-Butanone (MEK)	**9.1**	4.5	**3.1**	1.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **Stack-051920** ALS Project ID: P2002890
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2002890-001

Test Code: EPA TO-15 Date Collected: 5/19/20
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 5/26/20
Analyst: Lusine Hakobyan Date Analyzed: 6/3/20
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00911

Initial Pressure (psig): -1.52 Final Pressure (psig): 7.04

Canister Dilution Factor: 1.65

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	**2.5**	2.2	**0.64**	0.55	
141-78-6	Ethyl Acetate	**12**	4.5	**3.2**	1.3	
110-54-3	n-Hexane	**49**	2.2	**14**	0.63	
67-66-3	Chloroform	**13**	2.2	**2.7**	0.46	
109-99-9	Tetrahydrofuran (THF)	ND	2.3	ND	0.77	
107-06-2	1,2-Dichloroethane	ND	2.2	ND	0.55	
71-55-6	1,1,1-Trichloroethane	ND	2.2	ND	0.41	
71-43-2	Benzene	ND	2.2	ND	0.68	
56-23-5	Carbon Tetrachloride	ND	2.2	ND	0.35	
110-82-7	Cyclohexane	**560**	4.5	**160**	1.3	
78-87-5	1,2-Dichloropropane	ND	2.2	ND	0.48	
75-27-4	Bromodichloromethane	ND	2.2	ND	0.33	
79-01-6	Trichloroethene	**2.9**	2.2	**0.54**	0.41	
123-91-1	1,4-Dioxane	ND	2.2	ND	0.62	
80-62-6	Methyl Methacrylate	ND	4.5	ND	1.1	
142-82-5	n-Heptane	**230**	2.2	**56**	0.54	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.47	
108-10-1	4-Methyl-2-pentanone	ND	2.2	ND	0.53	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	ND	0.48	
79-00-5	1,1,2-Trichloroethane	ND	2.2	ND	0.41	
108-88-3	Toluene	**4.1**	2.2	**1.1**	0.59	
591-78-6	2-Hexanone	ND	2.2	ND	0.54	
124-48-1	Dibromochloromethane	ND	2.2	ND	0.26	
106-93-4	1,2-Dibromoethane	ND	2.2	ND	0.29	
123-86-4	n-Butyl Acetate	ND	2.3	ND	0.48	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **Stack-051920** ALS Project ID: P2002890
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2002890-001

Test Code: EPA TO-15 Date Collected: 5/19/20
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 5/26/20
Analyst: Lusine Hakobyan Date Analyzed: 6/3/20
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00911

Initial Pressure (psig): -1.52 Final Pressure (psig): 7.04

Canister Dilution Factor: 1.65

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	**7.8**	2.2	**1.7**	0.48	
127-18-4	Tetrachloroethene	**260**	2.1	**38**	0.32	
108-90-7	Chlorobenzene	ND	2.2	ND	0.48	
100-41-4	Ethylbenzene	ND	2.2	ND	0.51	
179601-23-1	m,p-Xylenes	**6.2**	4.5	**1.4**	1.0	
75-25-2	Bromoform	ND	2.2	ND	0.22	
100-42-5	Styrene	ND	2.2	ND	0.51	
95-47-6	o-Xylene	ND	2.2	ND	0.51	
111-84-2	n-Nonane	ND	2.2	ND	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	ND	0.32	
98-82-8	Cumene	ND	2.2	ND	0.45	
80-56-8	alpha-Pinene	ND	2.2	ND	0.40	
103-65-1	n-Propylbenzene	ND	2.2	ND	0.45	
622-96-8	4-Ethyltoluene	ND	2.2	ND	0.45	
108-67-8	1,3,5-Trimethylbenzene	ND	2.2	ND	0.44	
95-63-6	1,2,4-Trimethylbenzene	**2.3**	2.2	**0.47**	0.45	
100-44-7	Benzyl Chloride	ND	4.5	ND	0.88	
541-73-1	1,3-Dichlorobenzene	ND	2.2	ND	0.37	
106-46-7	1,4-Dichlorobenzene	ND	2.2	ND	0.37	
95-50-1	1,2-Dichlorobenzene	ND	2.2	ND	0.37	
5989-27-5	d-Limonene	**6.3**	2.2	**1.1**	0.40	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	ND	0.23	
120-82-1	1,2,4-Trichlorobenzene	ND	2.2	ND	0.30	
91-20-3	Naphthalene	ND	2.1	ND	0.41	
87-68-3	Hexachlorobutadiene	ND	2.2	ND	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **Method Blank** ALS Project ID: P2002890
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200603-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Lusine Hakobyan Date Analyzed: 6/3/20
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.53	ND	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	ND	0.11	
74-87-3	Chloromethane	ND	0.53	ND	0.26	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.53	ND	0.076	
75-01-4	Vinyl Chloride	ND	0.54	ND	0.21	
106-99-0	1,3-Butadiene	ND	0.53	ND	0.24	
74-83-9	Bromomethane	ND	0.54	ND	0.14	
75-00-3	Chloroethane	ND	0.54	ND	0.20	
64-17-5	Ethanol	ND	5.2	ND	2.8	
75-05-8	Acetonitrile	ND	0.53	ND	0.32	
107-02-8	Acrolein	ND	1.0	ND	0.44	
67-64-1	Acetone	ND	5.3	ND	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.53	ND	0.094	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	2.1	ND	0.85	
107-13-1	Acrylonitrile	ND	0.53	ND	0.24	
75-35-4	1,1-Dichloroethene	ND	0.54	ND	0.14	
75-09-2	Methylene Chloride	ND	0.53	ND	0.15	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.54	ND	0.17	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	ND	0.070	
75-15-0	Carbon Disulfide	ND	1.1	ND	0.35	
156-60-5	trans-1,2-Dichloroethene	ND	0.54	ND	0.14	
75-34-3	1,1-Dichloroethane	ND	0.55	ND	0.14	
1634-04-4	Methyl tert-Butyl Ether	ND	0.54	ND	0.15	
108-05-4	Vinyl Acetate	ND	5.4	ND	1.5	
78-93-3	2-Butanone (MEK)	ND	1.1	ND	0.37	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**

Client Sample ID: **Method Blank** ALS Project ID: P2002890

Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200603-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA

Analyst: Lusine Hakobyan Date Analyzed: 6/3/20

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.53	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.1	ND	0.31	
110-54-3	n-Hexane	ND	0.54	ND	0.15	
67-66-3	Chloroform	ND	0.54	ND	0.11	
109-99-9	Tetrahydrofuran (THF)	ND	0.55	ND	0.19	
107-06-2	1,2-Dichloroethane	ND	0.54	ND	0.13	
71-55-6	1,1,1-Trichloroethane	ND	0.54	ND	0.099	
71-43-2	Benzene	ND	0.53	ND	0.17	
56-23-5	Carbon Tetrachloride	ND	0.53	ND	0.084	
110-82-7	Cyclohexane	ND	1.1	ND	0.32	
78-87-5	1,2-Dichloropropane	ND	0.54	ND	0.12	
75-27-4	Bromodichloromethane	ND	0.54	ND	0.081	
79-01-6	Trichloroethene	ND	0.54	ND	0.10	
123-91-1	1,4-Dioxane	ND	0.54	ND	0.15	
80-62-6	Methyl Methacrylate	ND	1.1	ND	0.27	
142-82-5	n-Heptane	ND	0.54	ND	0.13	
10061-01-5	cis-1,3-Dichloropropene	ND	0.52	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.53	ND	0.13	
10061-02-6	trans-1,3-Dichloropropene	ND	0.53	ND	0.12	
79-00-5	1,1,2-Trichloroethane	ND	0.54	ND	0.099	
108-88-3	Toluene	ND	0.54	ND	0.14	
591-78-6	2-Hexanone	ND	0.54	ND	0.13	
124-48-1	Dibromochloromethane	ND	0.54	ND	0.063	
106-93-4	1,2-Dibromoethane	ND	0.54	ND	0.070	
123-86-4	n-Butyl Acetate	ND	0.55	ND	0.12	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**

Client Sample ID: **Method Blank** ALS Project ID: P2002890

Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200603-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA

Analyst: Lusine Hakobyan Date Analyzed: 6/3/20

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.54	ND	0.12	
127-18-4	Tetrachloroethene	ND	0.52	ND	0.077	
108-90-7	Chlorobenzene	ND	0.54	ND	0.12	
100-41-4	Ethylbenzene	ND	0.54	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.1	ND	0.25	
75-25-2	Bromoform	ND	0.54	ND	0.052	
100-42-5	Styrene	ND	0.53	ND	0.12	
95-47-6	o-Xylene	ND	0.54	ND	0.12	
111-84-2	n-Nonane	ND	0.54	ND	0.10	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.54	ND	0.079	
98-82-8	Cumene	ND	0.54	ND	0.11	
80-56-8	alpha-Pinene	ND	0.54	ND	0.097	
103-65-1	n-Propylbenzene	ND	0.54	ND	0.11	
622-96-8	4-Ethyltoluene	ND	0.54	ND	0.11	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	ND	0.11	
95-63-6	1,2,4-Trimethylbenzene	ND	0.54	ND	0.11	
100-44-7	Benzyl Chloride	ND	1.1	ND	0.21	
541-73-1	1,3-Dichlorobenzene	ND	0.54	ND	0.090	
106-46-7	1,4-Dichlorobenzene	ND	0.54	ND	0.090	
95-50-1	1,2-Dichlorobenzene	ND	0.54	ND	0.090	
5989-27-5	d-Limonene	ND	0.54	ND	0.097	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.53	ND	0.055	
120-82-1	1,2,4-Trichlorobenzene	ND	0.54	ND	0.073	
91-20-3	Naphthalene	ND	0.52	ND	0.099	
87-68-3	Hexachlorobutadiene	ND	0.53	ND	0.050	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **PES Environmental**
Client Project ID: **MVSC / 1358.001.02.015** ALS Project ID: P2002890

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date(s) Collected: 5/19/20
Analyst: Lusine Hakobyan Date(s) Received: 5/26/20
Sample Type: 1.0 L Summa Canister(s) Date(s) Analyzed: 6/3/20
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P200603-MB	**95**	**100**	**101**	70-130	
Lab Control Sample	P200603-LCS	**93**	**99**	**107**	70-130	
Duplicate Lab Control Sample	P200603-DLCS	**93**	**99**	**104**	70-130	
Stack-051920	P2002890-001	**97**	**101**	**100**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2002890
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200603-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Lusine Hakobyan Date Analyzed: 6/3/20
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	210	200	206	**95**	**98**	51-133	3	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	210	193	197	**92**	**94**	64-115	2	25	
74-87-3	Chloromethane	212	191	192	**90**	**91**	49-127	1	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	206	187	188	**91**	**91**	65-114	0	25	
75-01-4	Vinyl Chloride	212	196	193	**92**	**91**	61-129	1	25	
106-99-0	1,3-Butadiene	212	195	196	**92**	**92**	54-140	0	25	
74-83-9	Bromomethane	212	195	197	**92**	**93**	68-120	1	25	
75-00-3	Chloroethane	214	196	198	**92**	**93**	63-123	1	25	
64-17-5	Ethanol	1,060	961	996	**91**	**94**	49-134	3	25	
75-05-8	Acetonitrile	214	190	196	**89**	**92**	50-137	3	25	
107-02-8	Acrolein	206	189	193	**92**	**94**	62-128	2	25	
67-64-1	Acetone	1,070	1010	1030	**94**	**96**	56-125	2	25	
75-69-4	Trichlorofluoromethane (CFC 11)	212	197	199	**93**	**94**	64-115	1	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	422	410	421	**97**	**100**	57-133	3	25	
107-13-1	Acrylonitrile	212	196	201	**92**	**95**	64-136	3	25	
75-35-4	1,1-Dichloroethene	214	205	207	**96**	**97**	67-115	1	25	
75-09-2	Methylene Chloride	210	194	197	**92**	**94**	68-114	2	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	214	193	198	**90**	**93**	55-139	3	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	212	213	**98**	**99**	65-115	1	25	
75-15-0	Carbon Disulfide	212	198	200	**93**	**94**	68-113	1	25	
156-60-5	trans-1,2-Dichloroethene	214	198	201	**93**	**94**	65-122	1	25	
75-34-3	1,1-Dichloroethane	212	196	198	**92**	**93**	63-118	1	25	
1634-04-4	Methyl tert-Butyl Ether	214	192	196	**90**	**92**	57-131	2	25	
108-05-4	Vinyl Acetate	1,070	1100	1100	**103**	**103**	71-128	0	25	
78-93-3	2-Butanone (MEK)	212	197	202	**93**	**95**	67-123	2	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2002890
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200603-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Lusine Hakobyan Date Analyzed: 6/3/20
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	212	197	200	**93**	**94**	64-120	1	25	
141-78-6	Ethyl Acetate	432	453	453	**105**	**105**	64-131	0	25	
110-54-3	n-Hexane	216	215	214	**100**	**99**	58-125	1	25	
67-66-3	Chloroform	214	204	204	**95**	**95**	65-114	0	25	
109-99-9	Tetrahydrofuran (THF)	220	201	203	**91**	**92**	65-115	1	25	
107-06-2	1,2-Dichloroethane	214	195	196	**91**	**92**	59-119	1	25	
71-55-6	1,1,1-Trichloroethane	214	210	214	**98**	**100**	66-115	2	25	
71-43-2	Benzene	210	201	204	**96**	**97**	66-109	1	25	
56-23-5	Carbon Tetrachloride	208	205	209	**99**	**100**	66-119	1	25	
110-82-7	Cyclohexane	422	425	427	**101**	**101**	67-117	0	25	
78-87-5	1,2-Dichloropropane	214	210	212	**98**	**99**	66-119	1	25	
75-27-4	Bromodichloromethane	218	213	216	**98**	**99**	71-119	1	25	
79-01-6	Trichloroethene	216	213	214	**99**	**99**	70-114	0	25	
123-91-1	1,4-Dioxane	216	215	218	**100**	**101**	71-117	1	25	
80-62-6	Methyl Methacrylate	430	441	446	**103**	**104**	76-121	1	25	
142-82-5	n-Heptane	214	205	207	**96**	**97**	66-119	1	25	
10061-01-5	cis-1,3-Dichloropropene	214	221	224	**103**	**105**	72-125	2	25	
108-10-1	4-Methyl-2-pentanone	212	214	220	**101**	**104**	68-130	3	25	
10061-02-6	trans-1,3-Dichloropropene	212	225	227	**106**	**107**	71-132	0.9	25	
79-00-5	1,1,2-Trichloroethane	214	215	218	**100**	**102**	70-117	2	25	
108-88-3	Toluene	212	216	220	**102**	**104**	67-113	2	25	
591-78-6	2-Hexanone	216	233	239	**108**	**111**	62-135	3	25	
124-48-1	Dibromochloromethane	214	235	238	**110**	**111**	73-126	0.9	25	
106-93-4	1,2-Dibromoethane	214	230	231	**107**	**108**	71-122	0.9	25	
123-86-4	n-Butyl Acetate	218	243	249	**111**	**114**	65-134	3	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2002890
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200603-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Lusine Hakobyan Date Analyzed: 6/3/20
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	216	221	226	**102**	**105**	63-120	3	25	
127-18-4	Tetrachloroethene	208	225	225	**108**	**108**	64-120	0	25	
108-90-7	Chlorobenzene	214	215	217	**100**	**101**	65-116	1	25	
100-41-4	Ethylbenzene	212	230	233	**108**	**110**	65-117	2	25	
179601-23-1	m,p-Xylenes	426	472	476	**111**	**112**	64-121	0.9	25	
75-25-2	Bromoform	214	238	239	**111**	**112**	72-130	0.9	25	
100-42-5	Styrene	212	245	247	**116**	**117**	72-126	0.9	25	
95-47-6	o-Xylene	214	232	233	**108**	**109**	64-120	0.9	25	
111-84-2	n-Nonane	214	234	238	**109**	**111**	56-132	2	25	
79-34-5	1,1,2,2-Tetrachloroethane	214	238	239	**111**	**112**	66-122	0.9	25	
98-82-8	Cumene	214	237	238	**111**	**111**	64-121	0	25	
80-56-8	alpha-Pinene	212	230	234	**108**	**110**	62-136	2	25	
103-65-1	n-Propylbenzene	214	244	246	**114**	**115**	65-123	0.9	25	
622-96-8	4-Ethyltoluene	210	242	244	**115**	**116**	71-126	0.9	25	
108-67-8	1,3,5-Trimethylbenzene	212	241	242	**114**	**114**	65-120	0	25	
95-63-6	1,2,4-Trimethylbenzene	212	264	264	**125**	**125**	63-129	0	25	
100-44-7	Benzyl Chloride	214	249	252	**116**	**118**	66-138	2	25	
541-73-1	1,3-Dichlorobenzene	214	257	256	**120**	**120**	65-127	0	25	
106-46-7	1,4-Dichlorobenzene	214	260	261	**121**	**122**	65-125	0.8	25	
95-50-1	1,2-Dichlorobenzene	214	261	261	**122**	**122**	67-128	0	25	
5989-27-5	d-Limonene	212	249	250	**117**	**118**	65-136	0.9	25	
96-12-8	1,2-Dibromo-3-chloropropane	214	243	242	**114**	**113**	73-133	0.9	25	
120-82-1	1,2,4-Trichlorobenzene	216	278	277	**129**	**128**	62-140	0.8	25	
91-20-3	Naphthalene	212	296	294	**140**	**139**	57-149	0.7	25	
87-68-3	Hexachlorobutadiene	214	248	247	**116**	**115**	57-129	0.9	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

MEMORANDUM

TO: Project File **DATE:** June 17, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: Manhattan Village Shopping Center - Soil Vapor Extraction System Performance Data Review

PROJECT #: 1358.001.02.015

TASK: EIM Data Validation Level EPA2A – February and May 2020 - Quarterly Air Samples

LAB: ALS Environmental Service Request Numbers: P2000830 and P2002890

One soil vapor extraction sample was collected for February 13 and May 19, 2020 quarterly sampling events at the Manhattan Village Shopping Center in Normandy Park, Washington. The samples were analyzed for 75 VOCs by USEPA Method TO-15 (*Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air*, Second Edition, EPA/625/R-96/010B, January 1999). Laboratory analytical services were provided by ALS Environmental (ALS) (also known as ALS Global (ALS)) of Simi Valley, California. Analytical data are reported under ALS's service request number P2000830 and P2002890.

The quality assurance review of the analytical data is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017).

DATA VALIDATION

Completeness

The samples were collected and analyzed as requested. No concerns, issues, or anomalies were identified in the laboratory report.

Sample Collection and Preservation

The laboratory supplied Source Cans (1-Liter) for the air samples. The samples were shipped, delivered by FedEx, and received in good condition by the laboratory. The samples were

collected, handled, and delivered in an appropriate manner. No data qualifications were warranted based upon sampling and preservation techniques.

Holding Times

The analyses for VOCs by Method TO-15 were performed within the 30-day recommended holding time limit for the air samples collected in a Source Can. No data was qualified based upon holding times.

Initial and Continuing Calibration

Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Case narrative and laboratory notes do not indicate that there are any issues with calibrations.

Method Blank Results

Laboratory method blanks were included with the analytical batch per method requirement. The method blank results do not report any compounds at concentrations at or above the reporting detection limit (MRLs).

Trip Blank Results

A trip blank was not required for the VOCs by TO-15 analyses. No qualifications were warranted due to the lack of a trip blank for this method.

Field Duplicate Analyses

No field duplicates were required or collected during this field event.

Laboratory Duplicate/Replicate Analyses

Laboratory replicates were not performed. Refer to the Laboratory Control Sample section for additional precision information.

Surrogate Recoveries

The surrogate percent recovery (% R) results for the VOCs by TO-15 air samples, method blanks, and laboratory control samples are within the laboratory surrogate control limits of 70 - 130% R. No data qualifications were warranted.

Laboratory Control Samples

Laboratory control samples/laboratory control sample duplicates (LCS/LCSDs) were analyzed for the VOCs by TO-15 along with each analytical batch. LCS/LCSD %Rs and relative percent differences (RPDs) are within QC criteria with the following exception:

- Service Request P2000830: LCS recovery for 1,4-dioxane is marginally above control limit criteria. No action is taken since 1,4-dioxane is not detected in the associated sample.

Matrix Spike/Matrix Spike Duplicates

A matrix spike/matrix spike duplicate (MS/MSD) is not required for the VOCs by TO-15 method.

Other Quality Control Issues

No other laboratory quality control issues were identified in the laboratory report.

Quantitation Limits

Results of the VOCs by TO-15 analysis are reported based on laboratory MRLs (assuming standard temperature and pressure is equal to 24.45) and reported in units of ppbv and $\mu g/m^3$.

The MRLs indicate the minimum quantity of a target analyte that can be confidently determined by the reference method. The MRLs were acceptable for the project; therefore, no data qualifications were warranted.

Data Assessment

No data qualifiers are assigned. All data are judged to be acceptable for their intended use.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

LABORATORY REPORT

September 17, 2020

Matt Dahl
PES Environmental
1215 Fourth Avenue, Suite 1350
Seattle, WA 98161

RE: MVSC / 1358.001.02.015

Dear Matt:

Enclosed are the results of the sample submitted to our laboratory on September 2, 2020. For your reference, this analysis has been assigned our service request number P2004896.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 3:26 pm, Sep 17, 2020

For Kate Kaneko
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: PES Environmental
Project: MVSC / 1358.001.02.015

Service Request No: P2004896

CASE NARRATIVE

The sample was received intact under chain of custody on September 2, 2020 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The container was cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.1 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1776326
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-007
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-19-10
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272019-10
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: PES Environmental
Service Request: P2004896
Project ID: MVSC / 1358.001.02.015

Date Received: 9/2/2020
Time Received: 10:20

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC Cans
Stack-082820	P2004896-001	Air	8/28/2020	14:30	1SC00726	-0.39	6.84	X

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle:
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) ~~10 Day-Standard~~

ALS Project No. PY004896

ALS Contact:

Company Name & Address (Reporting Information)	PES Environmental, Inc. 1315 4th Ave #1350 Seattle, WA, 98161
Project Name	MVSC
Project Number	1358.001.02.015
Project Manager	Matt Dahl
P.O. # / Billing Information	
Phone	206-529-3980
Fax	206-529-3985
Email Address for Result Reporting	mdahl@pesenv.com
Sampler (Print & Sign)	Sean Kaunovsky

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	N-P		Comments e.g. Actual Preservative or specific instructions
Stack-082820	(1)	8/28/20	1430	1SC00726	None	-30	0	1L	X		

5 of 16

Report Tier Levels - please select

Tier I - Results (Default if not specified) ____ Tier III (Results + QC & Calibration Summaries) ____
Tier II (Results + QC Summaries) ____ Tier IV (Data Validation Package) 10% Surcharge ____

EDD required (Yes) No EIM/Epiphany
Type: _____ Units: _____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date: 8/28/20	Time: 1500	Received by: (Signature)	Date:	Time:	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date: 9-2-20	Time: 1020	Cooler / Blank Temperature ____ °C

ALS Environmental

Sample Acceptance Check Form

Client: PES Environmental Work order: P2004896

Project: MVSC / 1358.002.015

Sample(s) received on: 9/2/20 Date opened: 9/2/20 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2004896-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **Stack-082820** ALS Project ID: P2004896
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2004896-001

Test Code: EPA TO-15 Date Collected: 8/28/20
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 9/2/20
Analyst: Wida Ang Date Analyzed: 9/4/20
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00726

Initial Pressure (psig): -0.39 Final Pressure (psig): 6.84

Canister Dilution Factor: 1.51

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	2.0	ND	1.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	**5.7**	2.0	**1.1**	0.40	
74-87-3	Chloromethane	ND	2.0	ND	0.97	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.0	ND	0.29	
75-01-4	Vinyl Chloride	ND	2.0	ND	0.80	
106-99-0	1,3-Butadiene	ND	2.0	ND	0.90	
74-83-9	Bromomethane	ND	2.0	ND	0.53	
75-00-3	Chloroethane	ND	2.0	ND	0.77	
64-17-5	Ethanol	**82**	20	**44**	10	
75-05-8	Acetonitrile	ND	2.0	ND	1.2	
107-02-8	Acrolein	ND	3.8	ND	1.6	
67-64-1	Acetone	**24**	20	**10**	8.4	
75-69-4	Trichlorofluoromethane (CFC 11)	**4.5**	2.0	**0.80**	0.36	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	7.9	ND	3.2	
107-13-1	Acrylonitrile	ND	2.0	ND	0.92	
75-35-4	1,1-Dichloroethene	ND	2.0	ND	0.51	
75-09-2	Methylene Chloride	ND	2.0	ND	0.58	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.0	ND	0.65	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.0	ND	0.27	
75-15-0	Carbon Disulfide	ND	4.2	ND	1.3	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ND	0.51	
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.51	
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	ND	0.57	
108-05-4	Vinyl Acetate	ND	20	ND	5.8	
78-93-3	2-Butanone (MEK)	ND	4.2	ND	1.4	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **Stack-082820** ALS Project ID: P2004896
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2004896-001

Test Code: EPA TO-15 Date Collected: 8/28/20
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 9/2/20
Analyst: Wida Ang Date Analyzed: 9/4/20
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00726

Initial Pressure (psig): -0.39 Final Pressure (psig): 6.84

Canister Dilution Factor: 1.51

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	**9.9**	2.0	**2.5**	0.50	
141-78-6	Ethyl Acetate	ND	4.2	ND	1.2	
110-54-3	n-Hexane	**3.3**	2.0	**0.94**	0.58	
67-66-3	Chloroform	**5.1**	2.0	**1.0**	0.42	
109-99-9	Tetrahydrofuran (THF)	ND	2.1	ND	0.70	
107-06-2	1,2-Dichloroethane	ND	2.0	ND	0.50	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ND	0.37	
71-43-2	Benzene	ND	2.0	ND	0.63	
56-23-5	Carbon Tetrachloride	ND	2.0	ND	0.32	
110-82-7	Cyclohexane	ND	4.2	ND	1.2	
78-87-5	1,2-Dichloropropane	ND	2.0	ND	0.44	
75-27-4	Bromodichloromethane	ND	2.0	ND	0.30	
79-01-6	Trichloroethene	**3.1**	2.0	**0.58**	0.38	
123-91-1	1,4-Dioxane	ND	2.0	ND	0.57	
80-62-6	Methyl Methacrylate	ND	4.2	ND	1.0	
142-82-5	n-Heptane	ND	2.0	ND	0.50	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ND	0.43	
108-10-1	4-Methyl-2-pentanone	ND	2.0	ND	0.49	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ND	0.44	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ND	0.37	
108-88-3	Toluene	ND	2.0	ND	0.54	
591-78-6	2-Hexanone	ND	2.0	ND	0.50	
124-48-1	Dibromochloromethane	ND	2.0	ND	0.24	
106-93-4	1,2-Dibromoethane	ND	2.0	ND	0.27	
123-86-4	n-Butyl Acetate	ND	2.1	ND	0.44	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**
Client Sample ID: **Stack-082820** ALS Project ID: P2004896
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2004896-001

Test Code: EPA TO-15 Date Collected: 8/28/20
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 9/2/20
Analyst: Wida Ang Date Analyzed: 9/4/20
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00726

Initial Pressure (psig): -0.39 Final Pressure (psig): 6.84

Canister Dilution Factor: 1.51

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.0	ND	0.44	
127-18-4	Tetrachloroethene	**11**	2.0	**1.7**	0.29	
108-90-7	Chlorobenzene	ND	2.0	ND	0.44	
100-41-4	Ethylbenzene	ND	2.0	ND	0.47	
179601-23-1	m,p-Xylenes	ND	4.2	ND	0.96	
75-25-2	Bromoform	ND	2.0	ND	0.20	
100-42-5	Styrene	ND	2.0	ND	0.47	
95-47-6	o-Xylene	ND	2.0	ND	0.47	
111-84-2	n-Nonane	ND	2.0	ND	0.39	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ND	0.30	
98-82-8	Cumene	ND	2.0	ND	0.41	
80-56-8	alpha-Pinene	ND	2.0	ND	0.37	
103-65-1	n-Propylbenzene	ND	2.0	ND	0.41	
622-96-8	4-Ethyltoluene	ND	2.0	ND	0.41	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	ND	0.41	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	ND	0.41	
100-44-7	Benzyl Chloride	ND	4.2	ND	0.80	
541-73-1	1,3-Dichlorobenzene	ND	2.0	ND	0.34	
106-46-7	1,4-Dichlorobenzene	ND	2.0	ND	0.34	
95-50-1	1,2-Dichlorobenzene	ND	2.0	ND	0.34	
5989-27-5	d-Limonene	ND	2.0	ND	0.37	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	ND	0.21	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ND	0.27	
91-20-3	Naphthalene	ND	2.0	ND	0.37	
87-68-3	Hexachlorobutadiene	ND	2.0	ND	0.19	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **Method Blank** ALS Project ID: P2004896
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200904-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 9/4/20
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.53	ND	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	ND	0.11	
74-87-3	Chloromethane	ND	0.53	ND	0.26	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.53	ND	0.076	
75-01-4	Vinyl Chloride	ND	0.54	ND	0.21	
106-99-0	1,3-Butadiene	ND	0.53	ND	0.24	
74-83-9	Bromomethane	ND	0.54	ND	0.14	
75-00-3	Chloroethane	ND	0.54	ND	0.20	
64-17-5	Ethanol	ND	5.2	ND	2.8	
75-05-8	Acetonitrile	ND	0.53	ND	0.32	
107-02-8	Acrolein	ND	1.0	ND	0.44	
67-64-1	Acetone	ND	5.3	ND	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.53	ND	0.094	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	2.1	ND	0.85	
107-13-1	Acrylonitrile	ND	0.53	ND	0.24	
75-35-4	1,1-Dichloroethene	ND	0.54	ND	0.14	
75-09-2	Methylene Chloride	ND	0.53	ND	0.15	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.54	ND	0.17	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	ND	0.070	
75-15-0	Carbon Disulfide	ND	1.1	ND	0.35	
156-60-5	trans-1,2-Dichloroethene	ND	0.54	ND	0.14	
75-34-3	1,1-Dichloroethane	ND	0.55	ND	0.14	
1634-04-4	Methyl tert-Butyl Ether	ND	0.54	ND	0.15	
108-05-4	Vinyl Acetate	ND	5.4	ND	1.5	
78-93-3	2-Butanone (MEK)	ND	1.1	ND	0.37	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**

Client Sample ID: **Method Blank** ALS Project ID: P2004896

Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200904-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA

Analyst: Wida Ang Date Analyzed: 9/4/20

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.53	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.1	ND	0.31	
110-54-3	n-Hexane	ND	0.54	ND	0.15	
67-66-3	Chloroform	ND	0.54	ND	0.11	
109-99-9	Tetrahydrofuran (THF)	ND	0.55	ND	0.19	
107-06-2	1,2-Dichloroethane	ND	0.54	ND	0.13	
71-55-6	1,1,1-Trichloroethane	ND	0.54	ND	0.099	
71-43-2	Benzene	ND	0.53	ND	0.17	
56-23-5	Carbon Tetrachloride	ND	0.53	ND	0.084	
110-82-7	Cyclohexane	ND	1.1	ND	0.32	
78-87-5	1,2-Dichloropropane	ND	0.54	ND	0.12	
75-27-4	Bromodichloromethane	ND	0.54	ND	0.081	
79-01-6	Trichloroethene	ND	0.54	ND	0.10	
123-91-1	1,4-Dioxane	ND	0.54	ND	0.15	
80-62-6	Methyl Methacrylate	ND	1.1	ND	0.27	
142-82-5	n-Heptane	ND	0.54	ND	0.13	
10061-01-5	cis-1,3-Dichloropropene	ND	0.52	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.53	ND	0.13	
10061-02-6	trans-1,3-Dichloropropene	ND	0.53	ND	0.12	
79-00-5	1,1,2-Trichloroethane	ND	0.54	ND	0.099	
108-88-3	Toluene	ND	0.54	ND	0.14	
591-78-6	2-Hexanone	ND	0.54	ND	0.13	
124-48-1	Dibromochloromethane	ND	0.54	ND	0.063	
106-93-4	1,2-Dibromoethane	ND	0.54	ND	0.070	
123-86-4	n-Butyl Acetate	ND	0.55	ND	0.12	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**

Client Sample ID: **Method Blank** ALS Project ID: P2004896

Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200904-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA

Analyst: Wida Ang Date Analyzed: 9/4/20

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.54	ND	0.12	
127-18-4	Tetrachloroethene	ND	0.52	ND	0.077	
108-90-7	Chlorobenzene	ND	0.54	ND	0.12	
100-41-4	Ethylbenzene	ND	0.54	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.1	ND	0.25	
75-25-2	Bromoform	ND	0.54	ND	0.052	
100-42-5	Styrene	ND	0.53	ND	0.12	
95-47-6	o-Xylene	ND	0.54	ND	0.12	
111-84-2	n-Nonane	ND	0.54	ND	0.10	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.54	ND	0.079	
98-82-8	Cumene	ND	0.54	ND	0.11	
80-56-8	alpha-Pinene	ND	0.54	ND	0.097	
103-65-1	n-Propylbenzene	ND	0.54	ND	0.11	
622-96-8	4-Ethyltoluene	ND	0.54	ND	0.11	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	ND	0.11	
95-63-6	1,2,4-Trimethylbenzene	ND	0.54	ND	0.11	
100-44-7	Benzyl Chloride	ND	1.1	ND	0.21	
541-73-1	1,3-Dichlorobenzene	ND	0.54	ND	0.090	
106-46-7	1,4-Dichlorobenzene	ND	0.54	ND	0.090	
95-50-1	1,2-Dichlorobenzene	ND	0.54	ND	0.090	
5989-27-5	d-Limonene	ND	0.54	ND	0.097	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.53	ND	0.055	
120-82-1	1,2,4-Trichlorobenzene	ND	0.54	ND	0.073	
91-20-3	Naphthalene	ND	0.52	ND	0.099	
87-68-3	Hexachlorobutadiene	ND	0.53	ND	0.050	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **PES Environmental**
Client Project ID: **MVSC / 1358.001.02.015** ALS Project ID: P2004896

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date(s) Collected: 8/28/20
Analyst: Wida Ang Date(s) Received: 9/2/20
Sample Type: 1.0 L Summa Canister(s) Date(s) Analyzed: 9/4/20
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P200904-MB	**101**	**98**	**103**	70-130	
Lab Control Sample	P200904-LCS	**100**	**99**	**107**	70-130	
Duplicate Lab Control Sample	P200904-DLCS	**98**	**100**	**108**	70-130	
Stack-082820	P2004896-001	**102**	**99**	**98**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2004896
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200904-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 9/4/20
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	210	203	189	**97**	**90**	51-133	7	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	210	196	186	**93**	**89**	64-115	4	25	
74-87-3	Chloromethane	212	174	164	**82**	**77**	49-127	6	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	206	187	185	**91**	**90**	65-114	1	25	
75-01-4	Vinyl Chloride	212	192	187	**91**	**88**	61-129	3	25	
106-99-0	1,3-Butadiene	212	225	214	**106**	**101**	54-140	5	25	
74-83-9	Bromomethane	212	201	191	**95**	**90**	68-120	5	25	
75-00-3	Chloroethane	214	205	197	**96**	**92**	63-123	4	25	
64-17-5	Ethanol	1,060	965	931	**91**	**88**	49-134	3	25	
75-05-8	Acetonitrile	214	216	207	**101**	**97**	50-137	4	25	
107-02-8	Acrolein	206	216	207	**105**	**100**	62-128	5	25	
67-64-1	Acetone	1,070	982	945	**92**	**88**	56-125	4	25	
75-69-4	Trichlorofluoromethane (CFC 11)	212	196	191	**92**	**90**	64-115	2	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	422	416	401	**99**	**95**	57-133	4	25	
107-13-1	Acrylonitrile	212	226	220	**107**	**104**	64-136	3	25	
75-35-4	1,1-Dichloroethene	214	206	203	**96**	**95**	67-115	1	25	
75-09-2	Methylene Chloride	210	204	200	**97**	**95**	68-114	2	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	214	206	198	**96**	**93**	55-139	3	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	201	199	**93**	**92**	65-115	1	25	
75-15-0	Carbon Disulfide	212	183	179	**86**	**84**	68-113	2	25	
156-60-5	trans-1,2-Dichloroethene	214	221	216	**103**	**101**	65-122	2	25	
75-34-3	1,1-Dichloroethane	212	204	199	**96**	**94**	63-118	2	25	
1634-04-4	Methyl tert-Butyl Ether	214	208	205	**97**	**96**	57-131	1	25	
108-05-4	Vinyl Acetate	1,070	1120	1110	**105**	**104**	71-128	1	25	
78-93-3	2-Butanone (MEK)	212	217	213	**102**	**100**	67-123	2	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2004896
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200904-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 9/4/20
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	212	206	203	**97**	**96**	64-120	1	25	
141-78-6	Ethyl Acetate	432	465	456	**108**	**106**	64-131	2	25	
110-54-3	n-Hexane	216	199	194	**92**	**90**	58-125	2	25	
67-66-3	Chloroform	214	203	199	**95**	**93**	65-114	2	25	
109-99-9	Tetrahydrofuran (THF)	220	205	201	**93**	**91**	65-115	2	25	
107-06-2	1,2-Dichloroethane	214	209	206	**98**	**96**	59-119	2	25	
71-55-6	1,1,1-Trichloroethane	214	206	206	**96**	**96**	66-115	0	25	
71-43-2	Benzene	210	198	197	**94**	**94**	66-109	0	25	
56-23-5	Carbon Tetrachloride	208	199	199	**96**	**96**	66-119	0	25	
110-82-7	Cyclohexane	422	395	392	**94**	**93**	67-117	1	25	
78-87-5	1,2-Dichloropropane	214	205	202	**96**	**94**	66-119	2	25	
75-27-4	Bromodichloromethane	218	209	207	**96**	**95**	71-119	1	25	
79-01-6	Trichloroethene	216	206	207	**95**	**96**	70-114	1	25	
123-91-1	1,4-Dioxane	216	232	230	**107**	**106**	71-117	0.9	25	
80-62-6	Methyl Methacrylate	430	459	460	**107**	**107**	76-121	0	25	
142-82-5	n-Heptane	214	204	227	**95**	**106**	66-119	11	25	
10061-01-5	cis-1,3-Dichloropropene	214	229	229	**107**	**107**	72-125	0	25	
108-10-1	4-Methyl-2-pentanone	212	219	220	**103**	**104**	68-130	1	25	
10061-02-6	trans-1,3-Dichloropropene	212	217	217	**102**	**102**	71-132	0	25	
79-00-5	1,1,2-Trichloroethane	214	209	207	**98**	**97**	70-117	1	25	
108-88-3	Toluene	212	198	199	**93**	**94**	67-113	1	25	
591-78-6	2-Hexanone	216	229	230	**106**	**106**	62-135	0	25	
124-48-1	Dibromochloromethane	214	214	217	**100**	**101**	73-126	1	25	
106-93-4	1,2-Dibromoethane	214	219	220	**102**	**103**	71-122	1	25	
123-86-4	n-Butyl Acetate	218	242	240	**111**	**110**	65-134	0.9	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2004896
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P200904-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 9/4/20
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	216	201	199	**93**	**92**	63-120	1	25	
127-18-4	Tetrachloroethene	208	195	197	**94**	**95**	64-120	1	25	
108-90-7	Chlorobenzene	214	199	201	**93**	**94**	65-116	1	25	
100-41-4	Ethylbenzene	212	199	200	**94**	**94**	65-117	0	25	
179601-23-1	m,p-Xylenes	426	385	388	**90**	**91**	64-121	1	25	
75-25-2	Bromoform	214	226	230	**106**	**107**	72-130	0.9	25	
100-42-5	Styrene	212	215	216	**101**	**102**	72-126	1	25	
95-47-6	o-Xylene	214	195	196	**91**	**92**	64-120	1	25	
111-84-2	n-Nonane	214	199	199	**93**	**93**	56-132	0	25	
79-34-5	1,1,2,2-Tetrachloroethane	214	205	206	**96**	**96**	66-122	0	25	
98-82-8	Cumene	214	197	199	**92**	**93**	64-121	1	25	
80-56-8	alpha-Pinene	212	201	203	**95**	**96**	62-136	1	25	
103-65-1	n-Propylbenzene	214	197	200	**92**	**93**	65-123	1	25	
622-96-8	4-Ethyltoluene	210	183	186	**87**	**89**	71-126	2	25	
108-67-8	1,3,5-Trimethylbenzene	212	192	195	**91**	**92**	65-120	1	25	
95-63-6	1,2,4-Trimethylbenzene	212	200	202	**94**	**95**	63-129	1	25	
100-44-7	Benzyl Chloride	214	233	235	**109**	**110**	66-138	0.9	25	
541-73-1	1,3-Dichlorobenzene	214	203	205	**95**	**96**	65-127	1	25	
106-46-7	1,4-Dichlorobenzene	214	199	202	**93**	**94**	65-125	1	25	
95-50-1	1,2-Dichlorobenzene	214	202	206	**94**	**96**	67-128	2	25	
5989-27-5	d-Limonene	212	208	209	**98**	**99**	65-136	1	25	
96-12-8	1,2-Dibromo-3-chloropropane	214	220	223	**103**	**104**	73-133	1	25	
120-82-1	1,2,4-Trichlorobenzene	216	225	229	**104**	**106**	62-140	2	25	
91-20-3	Naphthalene	212	219	221	**103**	**104**	57-149	1	25	
87-68-3	Hexachlorobutadiene	214	203	206	**95**	**96**	57-129	1	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

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LABORATORY REPORT

January 11, 2021

Matt Dahl
PES Environmental
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

RE: MVSC / 1358.001.02.015

Dear Matt:

Enclosed are the results of the sample submitted to our laboratory on December 28, 2020. For your reference, this analysis has been assigned our service request number P2007236.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 4:25 pm, Jan 11, 2021

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: PES Environmental
Project: MVSC / 1358.001.02.015

Service Request No: P2007236

CASE NARRATIVE

The sample was received intact under chain of custody on December 28, 2020 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The container was cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.3 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

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Simi Valley, CA 93065
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www.alsglobal.com

ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1776326
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-007
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-19-10
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272019-10
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: PES Environmental
Service Request: P2007236
Project ID: MVSC / 1358.001.02.015

Date Received: 12/28/2020
Time Received: 09:30

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC Cans
STACK-121820	P2007236-001	Air	12/18/2020	11:20	1SC01171	-0.10	8.61	X

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

ALS Project No.: P2007236

ALS Contact:

Company Name & Address (Reporting Information)	Project Name	Analysis Method	Comments e.g. Actual Preservative or specific instructions
PES Environmental 2101 4th Ave # 1310 Seattle, WA, 98121	MVSC		
Project Manager: Matt Dahl	Project Number: 1358.001.02.015		
Phone: 206-529-3980 Fax: 206-529-3985	P.O. # / Billing Information		
Email Address for Result Reporting: mdahl@pesenv.com	Sampler (Print & Sign): Sean Kaunovsky		

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	ST-PL		
STACK-121820		12/18/20	1120	1SC01171	N/A	-29	-1	1L	X		

5 of 16

Report Tier Levels - please select

Tier I - Results (Default if not specified) ____ Tier III (Results + QC & Calibration Summaries) ____
Tier II (Results + QC Summaries) ____ Tier IV (Data Validation Package) 10% Surcharge ____

EDD required Yes / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle)
INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	12/18/20	1200		12/18/20	0930
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____°C

ALS Environmental
Sample Acceptance Check Form

Client: PES Environmental Work order: P2007236

Project: MVSC / 1358.001.02.015

Sample(s) received on: 12/28/20 Date opened: 12/28/20 by: MBERGKAMP

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2007236-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **STACK-121820** ALS Project ID: P2007236
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2007236-001

Test Code: EPA TO-15 Date Collected: 12/18/20
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 12/28/20
Analyst: Simon Cao Date Analyzed: 1/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC01171

Initial Pressure (psig): -0.10 Final Pressure (psig): 8.61

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	2.1	ND	1.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	**5.2**	2.1	**1.0**	0.42	
74-87-3	Chloromethane	ND	2.1	ND	1.0	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	ND	0.30	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.83	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.94	
74-83-9	Bromomethane	ND	2.1	ND	0.54	
75-00-3	Chloroethane	ND	2.1	ND	0.79	
64-17-5	Ethanol	ND	21	ND	11	
75-05-8	Acetonitrile	ND	2.1	ND	1.3	
107-02-8	Acrolein	ND	4.4	ND	1.9	
67-64-1	Acetone	ND	21	ND	8.8	
75-69-4	Trichlorofluoromethane (CFC 11)	**3.7**	2.0	**0.65**	0.36	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	4.0	ND	1.6	
107-13-1	Acrylonitrile	ND	4.0	ND	1.8	
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.52	
75-09-2	Methylene Chloride	ND	2.1	ND	0.60	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	ND	0.66	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.1	ND	0.28	
75-15-0	Carbon Disulfide	ND	4.0	ND	1.3	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.53	
75-34-3	1,1-Dichloroethane	ND	2.2	ND	0.53	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.58	
108-05-4	Vinyl Acetate	ND	22	ND	6.3	
78-93-3	2-Butanone (MEK)	ND	4.0	ND	1.4	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**
Client Sample ID: **STACK-121820** ALS Project ID: P2007236
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2007236-001

Test Code: EPA TO-15 Date Collected: 12/18/20
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 12/28/20
Analyst: Simon Cao Date Analyzed: 1/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC01171

Initial Pressure (psig): -0.10 Final Pressure (psig): 8.61

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ND	0.52	
141-78-6	Ethyl Acetate	ND	4.0	ND	1.1	**L**
110-54-3	n-Hexane	ND	2.1	ND	0.59	
67-66-3	Chloroform	**4.3**	2.1	**0.89**	0.43	
109-99-9	Tetrahydrofuran (THF)	ND	4.0	ND	1.4	
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.51	
71-55-6	1,1,1-Trichloroethane	ND	2.1	ND	0.38	
71-43-2	Benzene	ND	2.1	ND	0.65	
56-23-5	Carbon Tetrachloride	ND	2.0	ND	0.32	
110-82-7	Cyclohexane	ND	4.0	ND	1.2	
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.45	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.31	
79-01-6	Trichloroethene	ND	2.0	ND	0.38	
123-91-1	1,4-Dioxane	ND	2.1	ND	0.58	
80-62-6	Methyl Methacrylate	ND	4.0	ND	0.98	
142-82-5	n-Heptane	ND	2.1	ND	0.51	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.47	
108-10-1	4-Methyl-2-pentanone	ND	4.0	ND	0.98	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ND	0.45	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.38	
108-88-3	Toluene	ND	2.1	ND	0.55	
591-78-6	2-Hexanone	ND	4.0	ND	0.98	
124-48-1	Dibromochloromethane	ND	2.1	ND	0.24	
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.27	
123-86-4	n-Butyl Acetate	ND	4.0	ND	0.84	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
L = Laboratory control sample recovery outside the specified limits, results may be biased high.

Client: **PES Environmental**
Client Sample ID: **STACK-121820** ALS Project ID: P2007236
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2007236-001

Test Code: EPA TO-15 Date Collected: 12/18/20
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 12/28/20
Analyst: Simon Cao Date Analyzed: 1/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC01171

Initial Pressure (psig): -0.10 Final Pressure (psig): 8.61

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.1	ND	0.45	
127-18-4	Tetrachloroethene	**210**	2.1	**31**	0.31	
108-90-7	Chlorobenzene	ND	2.1	ND	0.45	
100-41-4	Ethylbenzene	ND	2.1	ND	0.48	
179601-23-1	m,p-Xylenes	ND	4.0	ND	0.92	
75-25-2	Bromoform	ND	2.1	ND	0.21	
100-42-5	Styrene	ND	2.1	ND	0.49	
95-47-6	o-Xylene	ND	2.1	ND	0.49	
111-84-2	n-Nonane	ND	2.1	ND	0.40	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.31	
98-82-8	Cumene	ND	2.1	ND	0.42	
80-56-8	alpha-Pinene	ND	2.1	ND	0.38	
103-65-1	n-Propylbenzene	ND	2.1	ND	0.42	
622-96-8	4-Ethyltoluene	ND	2.1	ND	0.43	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	ND	0.43	
95-63-6	1,2,4-Trimethylbenzene	ND	2.1	ND	0.42	
100-44-7	Benzyl Chloride	ND	4.2	ND	0.81	
541-73-1	1,3-Dichlorobenzene	ND	2.1	ND	0.35	
106-46-7	1,4-Dichlorobenzene	ND	2.1	ND	0.35	
95-50-1	1,2-Dichlorobenzene	ND	2.1	ND	0.35	
5989-27-5	d-Limonene	ND	2.1	ND	0.37	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	ND	0.41	
120-82-1	1,2,4-Trichlorobenzene	ND	4.0	ND	0.54	
91-20-3	Naphthalene	ND	2.1	ND	0.40	
87-68-3	Hexachlorobutadiene	ND	2.1	ND	0.20	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **Method Blank** ALS Project ID: P2007236
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210105-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	ND	0.30	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.52	ND	0.11	
74-87-3	Chloromethane	ND	0.52	ND	0.25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.52	ND	0.074	
75-01-4	Vinyl Chloride	ND	0.53	ND	0.21	
106-99-0	1,3-Butadiene	ND	0.52	ND	0.24	
74-83-9	Bromomethane	ND	0.52	ND	0.13	
75-00-3	Chloroethane	ND	0.52	ND	0.20	
64-17-5	Ethanol	ND	5.3	ND	2.8	
75-05-8	Acetonitrile	ND	0.53	ND	0.32	
107-02-8	Acrolein	ND	1.1	ND	0.48	
67-64-1	Acetone	ND	5.2	ND	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.51	ND	0.091	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	ND	0.41	
107-13-1	Acrylonitrile	ND	1.0	ND	0.46	
75-35-4	1,1-Dichloroethene	ND	0.52	ND	0.13	
75-09-2	Methylene Chloride	ND	0.52	ND	0.15	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.52	ND	0.17	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.53	ND	0.069	
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.54	ND	0.13	
1634-04-4	Methyl tert-Butyl Ether	ND	0.52	ND	0.14	
108-05-4	Vinyl Acetate	ND	5.5	ND	1.6	
78-93-3	2-Butanone (MEK)	ND	1.0	ND	0.34	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**

Client Sample ID: **Method Blank** ALS Project ID: P2007236

Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210105-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA

Analyst: Simon Cao Date Analyzed: 1/5/21

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	**L**
110-54-3	n-Hexane	ND	0.52	ND	0.15	
67-66-3	Chloroform	ND	0.53	ND	0.11	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	ND	0.34	
107-06-2	1,2-Dichloroethane	ND	0.52	ND	0.13	
71-55-6	1,1,1-Trichloroethane	ND	0.52	ND	0.095	
71-43-2	Benzene	ND	0.52	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.51	ND	0.081	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.52	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.52	ND	0.078	
79-01-6	Trichloroethene	ND	0.51	ND	0.095	
123-91-1	1,4-Dioxane	ND	0.52	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.52	ND	0.13	
10061-01-5	cis-1,3-Dichloropropene	ND	0.53	ND	0.12	
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.52	ND	0.095	
108-88-3	Toluene	ND	0.52	ND	0.14	
591-78-6	2-Hexanone	ND	1.0	ND	0.24	
124-48-1	Dibromochloromethane	ND	0.52	ND	0.061	
106-93-4	1,2-Dibromoethane	ND	0.52	ND	0.068	
123-86-4	n-Butyl Acetate	ND	1.0	ND	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

L = Laboratory control sample recovery outside the specified limits, results may be biased high.

Client: **PES Environmental**
Client Sample ID: **Method Blank** ALS Project ID: P2007236
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210105-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.52	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.52	ND	0.077	
108-90-7	Chlorobenzene	ND	0.52	ND	0.11	
100-41-4	Ethylbenzene	ND	0.52	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.53	ND	0.051	
100-42-5	Styrene	ND	0.52	ND	0.12	
95-47-6	o-Xylene	ND	0.53	ND	0.12	
111-84-2	n-Nonane	ND	0.53	ND	0.10	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.53	ND	0.077	
98-82-8	Cumene	ND	0.52	ND	0.11	
80-56-8	alpha-Pinene	ND	0.53	ND	0.095	
103-65-1	n-Propylbenzene	ND	0.52	ND	0.11	
622-96-8	4-Ethyltoluene	ND	0.53	ND	0.11	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	ND	0.11	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	ND	0.11	
100-44-7	Benzyl Chloride	ND	1.1	ND	0.20	
541-73-1	1,3-Dichlorobenzene	ND	0.53	ND	0.088	
106-46-7	1,4-Dichlorobenzene	ND	0.52	ND	0.087	
95-50-1	1,2-Dichlorobenzene	ND	0.53	ND	0.088	
5989-27-5	d-Limonene	ND	0.52	ND	0.093	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	ND	0.10	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	ND	0.13	
91-20-3	Naphthalene	ND	0.52	ND	0.099	
87-68-3	Hexachlorobutadiene	ND	0.52	ND	0.049	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **PES Environmental**
Client Project ID: **MVSC / 1358.001.02.015** ALS Project ID: P2007236

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date(s) Collected: 12/18/20
Analyst: Simon Cao Date(s) Received: 12/28/20
Sample Type: 1.0 L Summa Canister(s) Date(s) Analyzed: 1/5/21
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P210105-MB	**104**	**100**	**96**	70-130	
Lab Control Sample	P210105-LCS	**99**	**97**	**108**	70-130	
Duplicate Lab Control Sample	P210105-DLCS	**94**	**100**	**110**	70-130	
STACK-121820	P2007236-001	**102**	**98**	**107**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2007236
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210105-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	210	201	193	**96**	**92**	51-133	4	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	210	181	178	**86**	**85**	64-115	1	25	
74-87-3	Chloromethane	206	222	216	**108**	**105**	49-127	3	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	216	182	184	**84**	**85**	65-114	1	25	
75-01-4	Vinyl Chloride	208	194	186	**93**	**89**	61-129	4	25	
106-99-0	1,3-Butadiene	210	205	192	**98**	**91**	54-140	7	25	
74-83-9	Bromomethane	212	166	170	**78**	**80**	68-120	3	25	
75-00-3	Chloroethane	204	184	181	**90**	**89**	63-123	1	25	
64-17-5	Ethanol	998	906	868	**91**	**87**	49-134	4	25	
75-05-8	Acetonitrile	202	210	201	**104**	**100**	50-137	4	25	
107-02-8	Acrolein	436	409	389	**94**	**89**	62-128	5	25	
67-64-1	Acetone	1,030	940	887	**91**	**86**	56-125	6	25	
75-69-4	Trichlorofluoromethane (CFC 11)	204	181	179	**89**	**88**	64-115	1	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	408	398	378	**98**	**93**	57-133	5	25	
107-13-1	Acrylonitrile	410	412	389	**100**	**95**	64-136	5	25	
75-35-4	1,1-Dichloroethene	212	192	191	**91**	**90**	67-115	1	25	
75-09-2	Methylene Chloride	208	193	189	**93**	**91**	68-114	2	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	210	205	194	**98**	**92**	55-139	6	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	214	194	198	**91**	**93**	65-115	2	25	
75-15-0	Carbon Disulfide	428	411	398	**96**	**93**	68-113	3	25	
156-60-5	trans-1,2-Dichloroethene	212	209	202	**99**	**95**	65-122	4	25	
75-34-3	1,1-Dichloroethane	212	191	185	**90**	**87**	63-118	3	25	
1634-04-4	Methyl tert-Butyl Ether	212	216	212	**102**	**100**	57-131	2	25	
108-05-4	Vinyl Acetate	1,100	920	896	**84**	**81**	71-128	4	25	
78-93-3	2-Butanone (MEK)	412	409	393	**99**	**95**	67-123	4	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2007236
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210105-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	208	197	190	**95**	**91**	64-120	4	25	
141-78-6	Ethyl Acetate	422	633	599	**150**	**142**	64-131	5	25	**L**
110-54-3	n-Hexane	212	229	216	**108**	**102**	58-125	6	25	
67-66-3	Chloroform	214	192	186	**90**	**87**	65-114	3	25	
109-99-9	Tetrahydrofuran (THF)	400	369	355	**92**	**89**	65-115	3	25	
107-06-2	1,2-Dichloroethane	208	191	184	**92**	**88**	59-119	4	25	
71-55-6	1,1,1-Trichloroethane	206	188	187	**91**	**91**	66-115	0	25	
71-43-2	Benzene	204	170	168	**83**	**82**	66-109	1	25	
56-23-5	Carbon Tetrachloride	210	187	188	**89**	**90**	66-119	1	25	
110-82-7	Cyclohexane	416	397	394	**95**	**95**	67-117	0	25	
78-87-5	1,2-Dichloropropane	206	190	186	**92**	**90**	66-119	2	25	
75-27-4	Bromodichloromethane	210	198	196	**94**	**93**	71-119	1	25	
79-01-6	Trichloroethene	206	186	188	**90**	**91**	70-114	1	25	
123-91-1	1,4-Dioxane	208	192	191	**92**	**92**	71-117	0	25	
80-62-6	Methyl Methacrylate	416	414	414	**100**	**100**	76-121	0	25	
142-82-5	n-Heptane	210	197	192	**94**	**91**	66-119	3	25	
10061-01-5	cis-1,3-Dichloropropene	210	217	213	**103**	**101**	72-125	2	25	
108-10-1	4-Methyl-2-pentanone	416	442	427	**106**	**103**	68-130	3	25	
10061-02-6	trans-1,3-Dichloropropene	202	220	217	**109**	**107**	71-132	2	25	
79-00-5	1,1,2-Trichloroethane	206	196	194	**95**	**94**	70-117	1	25	
108-88-3	Toluene	206	183	187	**89**	**91**	67-113	2	25	
591-78-6	2-Hexanone	404	416	424	**103**	**105**	62-135	2	25	
124-48-1	Dibromochloromethane	210	210	217	**100**	**103**	73-126	3	25	
106-93-4	1,2-Dibromoethane	208	201	208	**97**	**100**	71-122	3	25	
123-86-4	n-Butyl Acetate	406	426	431	**105**	**106**	65-134	0.9	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.
L = Laboratory control sample recovery outside the specified limits, results may be biased high.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2007236
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210105-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	210	196	197	**93**	**94**	63-120	1	25	
127-18-4	Tetrachloroethene	206	197	207	**96**	**100**	64-120	4	25	
108-90-7	Chlorobenzene	206	192	198	**93**	**96**	65-116	3	25	
100-41-4	Ethylbenzene	206	194	198	**94**	**96**	65-117	2	25	
179601-23-1	m,p-Xylenes	412	387	396	**94**	**96**	64-121	2	25	
75-25-2	Bromoform	208	217	224	**104**	**108**	72-130	4	25	
100-42-5	Styrene	206	208	212	**101**	**103**	72-126	2	25	
95-47-6	o-Xylene	206	197	201	**96**	**98**	64-120	2	25	
111-84-2	n-Nonane	208	198	200	**95**	**96**	56-132	1	25	
79-34-5	1,1,2,2-Tetrachloroethane	206	195	198	**95**	**96**	66-122	1	25	
98-82-8	Cumene	208	198	202	**95**	**97**	64-121	2	25	
80-56-8	alpha-Pinene	214	218	223	**102**	**104**	62-136	2	25	
103-65-1	n-Propylbenzene	208	200	204	**96**	**98**	65-123	2	25	
622-96-8	4-Ethyltoluene	210	207	211	**99**	**100**	71-126	1	25	
108-67-8	1,3,5-Trimethylbenzene	206	200	204	**97**	**99**	65-120	2	25	
95-63-6	1,2,4-Trimethylbenzene	204	220	224	**108**	**110**	63-129	2	25	
100-44-7	Benzyl Chloride	402	454	469	**113**	**117**	66-138	3	25	
541-73-1	1,3-Dichlorobenzene	206	214	219	**104**	**106**	65-127	2	25	
106-46-7	1,4-Dichlorobenzene	204	205	209	**100**	**102**	65-125	2	25	
95-50-1	1,2-Dichlorobenzene	206	213	218	**103**	**106**	67-128	3	25	
5989-27-5	d-Limonene	208	206	212	**99**	**102**	65-136	3	25	
96-12-8	1,2-Dibromo-3-chloropropane	370	428	440	**116**	**119**	73-133	3	25	
120-82-1	1,2,4-Trichlorobenzene	388	452	467	**116**	**120**	62-140	3	25	
91-20-3	Naphthalene	198	224	233	**113**	**118**	57-149	4	25	
87-68-3	Hexachlorobutadiene	210	205	215	**98**	**102**	57-129	4	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

MEMORANDUM

TO: Project File **DATE:** January 21, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: Manhattan Village Shopping Center - Soil Vapor Extraction System Performance Data Review

PROJECT #: 1358.001.01.015

TASK: EIM Data Validation Level EPA2A – August and December 2020 - Quarterly Air Samples

LAB: ALS Environmental Service Request Numbers: P2004896 and P2007236

Two soil vapor extraction samples were collected August 28 and December 18, 2020 for SVE system stack samples at the Manhattan Village Shopping Center in Normandy Park, Washington. The samples were analyzed for 75 VOCs by USEPA Method TO-15 (*Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air*, Second Edition, EPA/625/R-96/010B, January 1999). Laboratory analytical services were provided by ALS Environmental (ALS) (also known as ALS Global (ALS)) of Simi Valley, California. Analytical data are reported under ALS's service request numbers P2004896 and P2007236.

The quality assurance review of the analytical data is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017).

DATA VALIDATION

Completeness

The samples were collected and analyzed as requested. No concerns, issues, or anomalies were identified in the laboratory report.

Sample Collection and Preservation

The laboratory supplied Source Cans (1-Liter) for the air samples. The samples were shipped, delivered by FedEx, and received in good condition by the laboratory. The samples were

collected, handled, and delivered in an appropriate manner. No data qualifications were warranted based upon sampling and preservation techniques.

Holding Times

The analyses for VOCs by Method TO-15 were performed within the 30-day recommended holding time limit for the air samples collected in a Source Can. No data was qualified based upon holding times.

Initial and Continuing Calibration

Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Case narrative and laboratory notes do not indicate that there are any issues with calibrations.

Method Blank Results

Laboratory method blanks were included with the analytical batch per method requirement. The method blank results do not report any compounds at concentrations at or above the reporting detection limit (MRLs).

Trip Blank Results

A trip blank was not required for the VOCs by TO-15 analyses. No qualifications were warranted due to the lack of a trip blank for this method.

Field Duplicate Analyses

No field duplicates were required or collected during this field event.

Laboratory Duplicate/Replicate Analyses

Laboratory replicates were not performed. Refer to the Laboratory Control Sample section for additional precision information.

Surrogate Recoveries

The surrogate percent recovery (% R) results for the VOCs by TO-15 air samples, method blanks, and laboratory control samples are within the laboratory surrogate control limits of 70 - 130% R. No data qualifications were warranted.

Laboratory Control Samples

Laboratory control samples/laboratory control sample duplicates (LCS/LCSDs) were analyzed for the VOCs by TO-15 along with each analytical batch. LCS/LCSD %Rs and relative percent differences (RPDs) are within QC criteria with the following exception:

- Service Request P2007236: LCS/LCSD recoveries for ethyl acetate were recovered above control limit criteria. No action is taken since ethyl acetate is not detected in the associated sample.

Matrix Spike/Matrix Spike Duplicates

A matrix spike/matrix spike duplicate (MS/MSD) is not required for the VOCs by TO-15 method.

Other Quality Control Issues

No other laboratory quality control issues were identified in the laboratory report.

Quantitation Limits

Results of the VOCs by TO-15 analysis are reported based on laboratory MRLs (assuming standard temperature and pressure is equal to 24.45) and reported in units of ppbv and $\mu g/m^3$.

The MRLs indicate the minimum quantity of a target analyte that can be confidently determined by the reference method. The MRLs were acceptable for the project; therefore, no data qualifications were warranted.

Data Assessment

No data qualifiers are assigned. All data are judged to be acceptable for their intended use.

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LABORATORY REPORT

March 16, 2021

Matt Dahl
PES Environmental
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

RE: MVSC / 1358.001.02.015

Dear Matt:

Enclosed are the results of the samples submitted to our laboratory on March 4, 2021. For your reference, these analyses have been assigned our service request number P2101098.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 5:54 pm, Mar 16, 2021

Sue Anderson
Project Manager

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Client: PES Environmental
Project: MVSC / 1358.001.02.015

Service Request No: P2101098

CASE NARRATIVE

The samples were received intact under chain of custody on March 4, 2021 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.3 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1776326
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-008
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-19-10
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272019-10
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: PES Environmental
Project ID: MVSC / 1358.001.02.015
Service Request: P2101098

Date Received: 3/4/2021
Time Received: 11:00

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC Cans
SVE-20-030221	P2101098-001	Air	3/2/2021	14:45	1SC00276	-3.46	7.71	X
SVE-21-030221	P2101098-002	Air	3/2/2021	14:48	1SS00893	-0.42	7.21	X
SVE-22-030221	P2101098-003	Air	3/2/2021	14:51	1SC00431	-0.83	7.26	X
SVE-23-030221	P2101098-004	Air	3/2/2021	14:54	1SC00877	-1.34	6.94	X
SVE-24-030221	P2101098-005	Air	3/2/2021	14:57	1SC01098	0.05	6.51	X
SVE-25-030221	P2101098-006	Air	3/2/2021	15:00	1SS00056	-1.76	7.85	X
STACK-030221	P2101098-007	Air	3/2/2021	14:40	1SC01205	-0.19	6.43	X

Air - Chain of Custody Record & Analytical Service Request

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Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle:
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

ALS Project No. P2101098

ALS Contact:

Company Name & Address (Reporting Information)	Project Name	Analysis Method
PES Environmental 2101 4th Ave #1310 Seattle, WA, ~~98101~~ 98121	MUSC	
	Project Number: 13358.001.02.015	
Project Manager: Matt Dahl	P.O. # / Billing Information	
Phone: 206-529-3980 / Fax: 206-529-3985		
Email Address for Result Reporting: mdahl@pesenv.com	Sampler (Print & Sign): Sean Kourousky	

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Comments e.g. Actual Preservative or specific instructions
SVE-20-030221	1	3/2/21	1445	276	AVG04968	-31	-8	1L	
SVE-21-030221	2		1448	1SS00893	AVG05152	-30	-3	1L	
SVE-22-030221	3		1451	1SC00431	AVG04674	-24	-2	1L	
SVE-23-030221	4		1454	1SC00877	AVG03598	-30	-5	1L	
SVE-24-030221	5		1457	1SC01098	unknown	-25	-2	1L	
SVE-25-030221	6		1500	1SS00056	unknown	-29	-4	1L	
STACK-030221	7	↓	1440	1SC01205	unknown	-30	-1	1L	

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Report Tier Levels - please select

Tier I - Results (Default if not specified) ____ Tier II (Results + QC Summaries) ____ Tier III (Results + QC & Calibration Summaries) ____ Tier IV (Data Validation Package) 10% Surcharge ____

EDD required Yes / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Sean Kourousky	3/2/21	1530			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
				3-4-21	1100

Cooler / Blank Temperature ____ °C

ALS Environmental

Sample Acceptance Check Form

Client: PES Environmental Work order: P2101098

Project: Manhattan Village Shopping Center / 1358.001.02.015

Sample(s) received on: 3/4/21 Date opened: 3/4/21 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2101098-001.01	1.0 L Source Can					
P2101098-002.01	1.0 L Source Silonite Canister					
P2101098-003.01	1.0 L Source Can					
P2101098-004.01	1.0 L Source Can					
P2101098-005.01	1.0 L Source Can					
P2101098-006.01	1.0 L Source Silonite Canister					
P2101098-007.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-20-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-001

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Topacio Zavala Date Analyzed: 3/12/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00276

Initial Pressure (psig): -3.46 Final Pressure (psig): 7.71

Canister Dilution Factor: 1.99

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	2.6	ND	1.5	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	2.6	ND	0.52	
74-87-3	Chloromethane	ND	2.6	ND	1.3	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.6	ND	0.37	
75-01-4	Vinyl Chloride	ND	2.6	ND	1.0	
106-99-0	1,3-Butadiene	ND	2.6	ND	1.2	
74-83-9	Bromomethane	ND	2.6	ND	0.67	
75-00-3	Chloroethane	ND	2.6	ND	0.98	
64-17-5	Ethanol	**30**	26	**16**	14	
75-05-8	Acetonitrile	ND	2.6	ND	1.6	
107-02-8	Acrolein	ND	5.5	ND	2.4	
67-64-1	Acetone	**62**	26	**26**	11	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.5	ND	0.45	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	5.0	ND	2.0	
107-13-1	Acrylonitrile	ND	5.0	ND	2.3	
75-35-4	1,1-Dichloroethene	ND	2.6	ND	0.65	
75-09-2	Methylene Chloride	ND	2.6	ND	0.74	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.6	ND	0.83	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.6	ND	0.34	
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6	
156-60-5	trans-1,2-Dichloroethene	ND	2.6	ND	0.67	
75-34-3	1,1-Dichloroethane	ND	2.7	ND	0.66	
1634-04-4	Methyl tert-Butyl Ether	ND	2.6	ND	0.72	
108-05-4	Vinyl Acetate	ND	27	ND	7.8	
78-93-3	2-Butanone (MEK)	**28**	5.0	**9.6**	1.7	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-20-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-001

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Topacio Zavala Date Analyzed: 3/12/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00276

Initial Pressure (psig): -3.46 Final Pressure (psig): 7.71

Canister Dilution Factor: 1.99

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.6	ND	0.65	
141-78-6	Ethyl Acetate	ND	5.0	ND	1.4	
110-54-3	n-Hexane	ND	2.6	ND	0.73	
67-66-3	Chloroform	ND	2.6	ND	0.54	
109-99-9	Tetrahydrofuran (THF)	**61**	5.0	**21**	1.7	
107-06-2	1,2-Dichloroethane	ND	2.6	ND	0.64	
71-55-6	1,1,1-Trichloroethane	ND	2.6	ND	0.47	
71-43-2	Benzene	ND	2.6	ND	0.81	
56-23-5	Carbon Tetrachloride	ND	2.5	ND	0.40	
110-82-7	Cyclohexane	ND	5.0	ND	1.4	
78-87-5	1,2-Dichloropropane	ND	2.6	ND	0.56	
75-27-4	Bromodichloromethane	ND	2.6	ND	0.39	
79-01-6	Trichloroethene	ND	2.5	ND	0.47	
123-91-1	1,4-Dioxane	ND	2.6	ND	0.72	
80-62-6	Methyl Methacrylate	ND	5.0	ND	1.2	
142-82-5	n-Heptane	ND	2.6	ND	0.63	
10061-01-5	cis-1,3-Dichloropropene	ND	2.6	ND	0.58	
108-10-1	4-Methyl-2-pentanone	ND	5.0	ND	1.2	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	ND	0.56	
79-00-5	1,1,2-Trichloroethane	ND	2.6	ND	0.47	
108-88-3	Toluene	ND	2.6	ND	0.69	
591-78-6	2-Hexanone	ND	5.0	ND	1.2	
124-48-1	Dibromochloromethane	ND	2.6	ND	0.30	
106-93-4	1,2-Dibromoethane	ND	2.6	ND	0.34	
123-86-4	n-Butyl Acetate	ND	5.0	ND	1.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
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ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-20-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-001

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Topacio Zavala Date Analyzed: 3/12/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00276

Initial Pressure (psig): -3.46 Final Pressure (psig): 7.71

Canister Dilution Factor: 1.99

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.6	ND	0.55	
127-18-4	Tetrachloroethene	**170**	2.6	**25**	0.38	
108-90-7	Chlorobenzene	ND	2.6	ND	0.56	
100-41-4	Ethylbenzene	**2.7**	2.6	**0.63**	0.60	
179601-23-1	m,p-Xylenes	**8.8**	5.0	**2.0**	1.1	
75-25-2	Bromoform	ND	2.6	ND	0.26	
100-42-5	Styrene	ND	2.6	ND	0.61	
95-47-6	o-Xylene	ND	2.6	ND	0.61	
111-84-2	n-Nonane	ND	2.6	ND	0.50	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.6	ND	0.38	
98-82-8	Cumene	ND	2.6	ND	0.53	
80-56-8	alpha-Pinene	ND	2.6	ND	0.47	
103-65-1	n-Propylbenzene	ND	2.6	ND	0.53	
622-96-8	4-Ethyltoluene	ND	2.6	ND	0.54	
108-67-8	1,3,5-Trimethylbenzene	ND	2.6	ND	0.54	
95-63-6	1,2,4-Trimethylbenzene	**3.3**	2.6	**0.67**	0.53	
100-44-7	Benzyl Chloride	ND	5.2	ND	1.0	
541-73-1	1,3-Dichlorobenzene	ND	2.6	ND	0.44	
106-46-7	1,4-Dichlorobenzene	ND	2.6	ND	0.43	
95-50-1	1,2-Dichlorobenzene	ND	2.6	ND	0.44	
5989-27-5	d-Limonene	**3.2**	2.6	**0.57**	0.46	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ND	0.51	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ND	0.67	
91-20-3	Naphthalene	ND	2.6	ND	0.49	
87-68-3	Hexachlorobutadiene	ND	2.6	ND	0.24	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-21-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-002

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Topacio Zavala Date Analyzed: 3/12/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00893

Initial Pressure (psig): -0.42 Final Pressure (psig): 7.21

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	2.0	ND	1.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.1**	2.0	**0.43**	0.40	
74-87-3	Chloromethane	ND	2.0	ND	0.96	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.0	ND	0.28	
75-01-4	Vinyl Chloride	ND	2.0	ND	0.79	
106-99-0	1,3-Butadiene	ND	2.0	ND	0.90	
74-83-9	Bromomethane	ND	2.0	ND	0.51	
75-00-3	Chloroethane	ND	2.0	ND	0.75	
64-17-5	Ethanol	ND	20	ND	11	
75-05-8	Acetonitrile	ND	2.0	ND	1.2	
107-02-8	Acrolein	ND	4.2	ND	1.8	
67-64-1	Acetone	ND	20	ND	8.4	
75-69-4	Trichlorofluoromethane (CFC 11)	**2.8**	2.0	**0.49**	0.35	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	3.8	ND	1.6	
107-13-1	Acrylonitrile	ND	3.8	ND	1.8	
75-35-4	1,1-Dichloroethene	ND	2.0	ND	0.50	
75-09-2	Methylene Chloride	ND	2.0	ND	0.57	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.0	ND	0.64	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.0	ND	0.26	
75-15-0	Carbon Disulfide	ND	3.8	ND	1.2	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ND	0.51	
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.51	
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	ND	0.55	
108-05-4	Vinyl Acetate	ND	21	ND	6.0	
78-93-3	2-Butanone (MEK)	**7.4**	3.8	**2.5**	1.3	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-21-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-002

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Topacio Zavala Date Analyzed: 3/12/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00893

Initial Pressure (psig): -0.42 Final Pressure (psig): 7.21

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ND	0.50	
141-78-6	Ethyl Acetate	ND	3.8	ND	1.1	
110-54-3	n-Hexane	ND	2.0	ND	0.56	
67-66-3	Chloroform	**2.9**	2.0	**0.59**	0.42	
109-99-9	Tetrahydrofuran (THF)	**25**	3.8	**8.5**	1.3	
107-06-2	1,2-Dichloroethane	ND	2.0	ND	0.49	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ND	0.36	
71-43-2	Benzene	ND	2.0	ND	0.62	
56-23-5	Carbon Tetrachloride	ND	2.0	ND	0.31	
110-82-7	Cyclohexane	ND	3.8	ND	1.1	
78-87-5	1,2-Dichloropropane	ND	2.0	ND	0.43	
75-27-4	Bromodichloromethane	ND	2.0	ND	0.30	
79-01-6	Trichloroethene	ND	2.0	ND	0.36	
123-91-1	1,4-Dioxane	ND	2.0	ND	0.55	
80-62-6	Methyl Methacrylate	ND	3.8	ND	0.93	
142-82-5	n-Heptane	ND	2.0	ND	0.49	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ND	0.45	
108-10-1	4-Methyl-2-pentanone	ND	3.8	ND	0.93	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ND	0.43	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ND	0.36	
108-88-3	Toluene	ND	2.0	ND	0.53	
591-78-6	2-Hexanone	ND	3.8	ND	0.93	
124-48-1	Dibromochloromethane	ND	2.0	ND	0.23	
106-93-4	1,2-Dibromoethane	ND	2.0	ND	0.26	
123-86-4	n-Butyl Acetate	ND	3.8	ND	0.81	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-21-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-002

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Topacio Zavala Date Analyzed: 3/12/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00893

Initial Pressure (psig): -0.42 Final Pressure (psig): 7.21

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.0	ND	0.43	
127-18-4	Tetrachloroethene	**310**	2.0	**46**	0.29	
108-90-7	Chlorobenzene	ND	2.0	ND	0.43	
100-41-4	Ethylbenzene	ND	2.0	ND	0.46	
179601-23-1	m,p-Xylenes	**4.9**	3.8	**1.1**	0.88	
75-25-2	Bromoform	ND	2.0	ND	0.20	
100-42-5	Styrene	ND	2.0	ND	0.47	
95-47-6	o-Xylene	ND	2.0	ND	0.47	
111-84-2	n-Nonane	ND	2.0	ND	0.39	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ND	0.30	
98-82-8	Cumene	ND	2.0	ND	0.40	
80-56-8	alpha-Pinene	ND	2.0	ND	0.36	
103-65-1	n-Propylbenzene	ND	2.0	ND	0.40	
622-96-8	4-Ethyltoluene	ND	2.0	ND	0.41	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	ND	0.41	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	ND	0.40	
100-44-7	Benzyl Chloride	ND	4.0	ND	0.78	
541-73-1	1,3-Dichlorobenzene	ND	2.0	ND	0.34	
106-46-7	1,4-Dichlorobenzene	ND	2.0	ND	0.33	
95-50-1	1,2-Dichlorobenzene	ND	2.0	ND	0.34	
5989-27-5	d-Limonene	ND	2.0	ND	0.36	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.8	ND	0.40	
120-82-1	1,2,4-Trichlorobenzene	ND	3.8	ND	0.52	
91-20-3	Naphthalene	ND	2.0	ND	0.38	
87-68-3	Hexachlorobutadiene	ND	2.0	ND	0.19	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-22-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-003

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Topacio Zavala Date Analyzed: 3/12/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00431

Initial Pressure (psig): -0.83 Final Pressure (psig): 7.26

Canister Dilution Factor: 1.58

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**3.6**	2.1	**2.1**	1.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.1**	2.1	**0.43**	0.42	
74-87-3	Chloromethane	ND	2.1	ND	1.0	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	ND	0.29	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.82	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.93	
74-83-9	Bromomethane	ND	2.1	ND	0.53	
75-00-3	Chloroethane	ND	2.1	ND	0.78	
64-17-5	Ethanol	**190**	21	**100**	11	
75-05-8	Acetonitrile	ND	2.1	ND	1.2	
107-02-8	Acrolein	ND	4.3	ND	1.9	
67-64-1	Acetone	**280**	21	**120**	8.7	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.0	ND	0.36	
67-63-0	2-Propanol (Isopropyl Alcohol)	**9.1**	4.0	**3.7**	1.6	
107-13-1	Acrylonitrile	ND	4.0	ND	1.8	
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.52	
75-09-2	Methylene Chloride	ND	2.1	ND	0.59	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	ND	0.66	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.1	ND	0.27	
75-15-0	Carbon Disulfide	**5.5**	4.0	**1.8**	1.3	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.53	
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.53	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.57	
108-05-4	Vinyl Acetate	ND	22	ND	6.2	
78-93-3	2-Butanone (MEK)	**230**	4.0	**79**	1.3	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-22-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-003

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Topacio Zavala Date Analyzed: 3/12/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00431

Initial Pressure (psig): -0.83 Final Pressure (psig): 7.26

Canister Dilution Factor: 1.58

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ND	0.52	
141-78-6	Ethyl Acetate	**54**	4.0	**15**	1.1	
110-54-3	n-Hexane	ND	2.1	ND	0.58	
67-66-3	Chloroform	ND	2.1	ND	0.43	
109-99-9	Tetrahydrofuran (THF)	**430**	4.0	**150**	1.3	
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.51	
71-55-6	1,1,1-Trichloroethane	ND	2.1	ND	0.38	
71-43-2	Benzene	ND	2.1	ND	0.64	
56-23-5	Carbon Tetrachloride	ND	2.0	ND	0.32	
110-82-7	Cyclohexane	ND	4.0	ND	1.1	
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.44	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.31	
79-01-6	Trichloroethene	ND	2.0	ND	0.37	
123-91-1	1,4-Dioxane	ND	2.1	ND	0.57	
80-62-6	Methyl Methacrylate	ND	4.0	ND	0.97	
142-82-5	n-Heptane	ND	2.1	ND	0.50	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.46	
108-10-1	4-Methyl-2-pentanone	ND	4.0	ND	0.96	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ND	0.44	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.38	
108-88-3	Toluene	**4.5**	2.1	**1.2**	0.55	
591-78-6	2-Hexanone	ND	4.0	ND	0.96	
124-48-1	Dibromochloromethane	ND	2.1	ND	0.24	
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.27	
123-86-4	n-Butyl Acetate	ND	4.0	ND	0.83	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**
Client Sample ID: **SVE-22-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-003

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Topacio Zavala Date Analyzed: 3/12/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00431

Initial Pressure (psig): -0.83 Final Pressure (psig): 7.26

Canister Dilution Factor: 1.58

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.1	ND	0.44	
127-18-4	Tetrachloroethene	**230**	2.1	**34**	0.30	
108-90-7	Chlorobenzene	ND	2.1	ND	0.45	
100-41-4	Ethylbenzene	**2.4**	2.1	**0.54**	0.47	
179601-23-1	m,p-Xylenes	**7.4**	4.0	**1.7**	0.91	
75-25-2	Bromoform	ND	2.1	ND	0.20	
100-42-5	Styrene	ND	2.1	ND	0.48	
95-47-6	o-Xylene	**2.2**	2.1	**0.50**	0.48	
111-84-2	n-Nonane	**2.2**	2.1	**0.42**	0.40	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.30	
98-82-8	Cumene	ND	2.1	ND	0.42	
80-56-8	alpha-Pinene	ND	2.1	ND	0.38	
103-65-1	n-Propylbenzene	ND	2.1	ND	0.42	
622-96-8	4-Ethyltoluene	ND	2.1	ND	0.43	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	ND	0.43	
95-63-6	1,2,4-Trimethylbenzene	ND	2.1	ND	0.42	
100-44-7	Benzyl Chloride	ND	4.1	ND	0.80	
541-73-1	1,3-Dichlorobenzene	ND	2.1	ND	0.35	
106-46-7	1,4-Dichlorobenzene	ND	2.1	ND	0.34	
95-50-1	1,2-Dichlorobenzene	ND	2.1	ND	0.35	
5989-27-5	d-Limonene	**2.7**	2.1	**0.49**	0.37	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	ND	0.41	
120-82-1	1,2,4-Trichlorobenzene	ND	4.0	ND	0.53	
91-20-3	Naphthalene	ND	2.1	ND	0.39	
87-68-3	Hexachlorobutadiene	ND	2.1	ND	0.19	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-23-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-004

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Simon Cao Date Analyzed: 3/12/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00877

Initial Pressure (psig): -1.34 Final Pressure (psig): 6.94

Canister Dilution Factor: 1.62

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	2.1	ND	1.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	**5.1**	2.1	**1.0**	0.43	
74-87-3	Chloromethane	**2.9**	2.1	**1.4**	1.0	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	ND	0.30	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.84	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.95	
74-83-9	Bromomethane	ND	2.1	ND	0.54	
75-00-3	Chloroethane	ND	2.1	ND	0.80	
64-17-5	Ethanol	ND	21	ND	11	
75-05-8	Acetonitrile	ND	2.1	ND	1.3	
107-02-8	Acrolein	ND	4.5	ND	1.9	
67-64-1	Acetone	**68**	21	**29**	8.9	
75-69-4	Trichlorofluoromethane (CFC 11)	**2.1**	2.1	**0.38**	0.37	
67-63-0	2-Propanol (Isopropyl Alcohol)	**6.1**	4.1	**2.5**	1.6	
107-13-1	Acrylonitrile	ND	4.1	ND	1.9	
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.53	
75-09-2	Methylene Chloride	ND	2.1	ND	0.61	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	ND	0.67	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.1	ND	0.28	
75-15-0	Carbon Disulfide	ND	4.1	ND	1.3	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.54	
75-34-3	1,1-Dichloroethane	ND	2.2	ND	0.54	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.58	
108-05-4	Vinyl Acetate	ND	22	ND	6.3	
78-93-3	2-Butanone (MEK)	**160**	4.1	**53**	1.4	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-23-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-004

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Simon Cao Date Analyzed: 3/12/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00877

Initial Pressure (psig): -1.34 Final Pressure (psig): 6.94

Canister Dilution Factor: 1.62

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ND	0.53	
141-78-6	Ethyl Acetate	ND	4.1	ND	1.1	
110-54-3	n-Hexane	ND	2.1	ND	0.60	
67-66-3	Chloroform	**28**	2.1	**5.8**	0.44	
109-99-9	Tetrahydrofuran (THF)	**760**	4.1	**260**	1.4	
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.52	
71-55-6	1,1,1-Trichloroethane	ND	2.1	ND	0.39	
71-43-2	Benzene	ND	2.1	ND	0.66	
56-23-5	Carbon Tetrachloride	ND	2.1	ND	0.33	
110-82-7	Cyclohexane	ND	4.1	ND	1.2	
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.46	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.31	
79-01-6	Trichloroethene	ND	2.1	ND	0.38	
123-91-1	1,4-Dioxane	ND	2.1	ND	0.58	
80-62-6	Methyl Methacrylate	ND	4.1	ND	0.99	
142-82-5	n-Heptane	ND	2.1	ND	0.51	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.47	
108-10-1	4-Methyl-2-pentanone	ND	4.1	ND	0.99	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	ND	0.46	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.39	
108-88-3	Toluene	ND	2.1	ND	0.56	
591-78-6	2-Hexanone	ND	4.1	ND	0.99	
124-48-1	Dibromochloromethane	ND	2.1	ND	0.25	
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.27	
123-86-4	n-Butyl Acetate	ND	4.1	ND	0.85	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-23-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-004

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Simon Cao Date Analyzed: 3/12/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00877

Initial Pressure (psig): -1.34 Final Pressure (psig): 6.94

Canister Dilution Factor: 1.62

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.1	ND	0.45	
127-18-4	Tetrachloroethene	**170**	2.1	**25**	0.31	
108-90-7	Chlorobenzene	ND	2.1	ND	0.46	
100-41-4	Ethylbenzene	ND	2.1	ND	0.49	
179601-23-1	m,p-Xylenes	**4.4**	4.1	**1.0**	0.93	
75-25-2	Bromoform	ND	2.1	ND	0.21	
100-42-5	Styrene	ND	2.1	ND	0.49	
95-47-6	o-Xylene	ND	2.1	ND	0.49	
111-84-2	n-Nonane	ND	2.1	ND	0.41	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.31	
98-82-8	Cumene	ND	2.1	ND	0.43	
80-56-8	alpha-Pinene	ND	2.1	ND	0.39	
103-65-1	n-Propylbenzene	ND	2.1	ND	0.43	
622-96-8	4-Ethyltoluene	ND	2.1	ND	0.44	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	ND	0.44	
95-63-6	1,2,4-Trimethylbenzene	ND	2.1	ND	0.43	
100-44-7	Benzyl Chloride	ND	4.3	ND	0.82	
541-73-1	1,3-Dichlorobenzene	ND	2.1	ND	0.36	
106-46-7	1,4-Dichlorobenzene	ND	2.1	ND	0.35	
95-50-1	1,2-Dichlorobenzene	ND	2.1	ND	0.36	
5989-27-5	d-Limonene	**2.4**	2.1	**0.44**	0.38	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.1	ND	0.42	
120-82-1	1,2,4-Trichlorobenzene	ND	4.1	ND	0.55	
91-20-3	Naphthalene	ND	2.1	ND	0.40	
87-68-3	Hexachlorobutadiene	ND	2.1	ND	0.20	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-24-030221**
Client Project ID: **MVSC / 1358.001.02.015**

ALS Project ID: P2101098
ALS Sample ID: P2101098-005

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9
Analyst: Simon Cao
Sample Type: 1.0 L Summa Canister
Test Notes:
Container ID: 1SC01098

Date Collected: 3/2/21
Date Received: 3/4/21
Date Analyzed: 3/12/21
Volume(s) Analyzed: 0.40 Liter(s)
0.040 Liter(s)

Initial Pressure (psig): 0.05 Final Pressure (psig): 6.51

Canister Dilution Factor: 1.44

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	1.9	ND	1.1	
75-71-8	Dichlorodifluoromethane (CFC 12)	**3.0**	1.9	**0.60**	0.38	
74-87-3	Chloromethane	ND	1.9	ND	0.91	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.9	ND	0.27	
75-01-4	Vinyl Chloride	ND	1.9	ND	0.75	
106-99-0	1,3-Butadiene	ND	1.9	ND	0.85	
74-83-9	Bromomethane	ND	1.9	ND	0.48	
75-00-3	Chloroethane	ND	1.9	ND	0.71	
64-17-5	Ethanol	**140**	19	**76**	10	
75-05-8	Acetonitrile	ND	1.9	ND	1.1	
107-02-8	Acrolein	ND	4.0	ND	1.7	
67-64-1	Acetone	**180**	19	**77**	7.9	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.8**	1.8	**0.33**	0.33	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	3.6	ND	1.5	
107-13-1	Acrylonitrile	ND	3.6	ND	1.7	
75-35-4	1,1-Dichloroethene	ND	1.9	ND	0.47	
75-09-2	Methylene Chloride	**6.3**	1.9	**1.8**	0.54	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.9	ND	0.60	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	1.9	ND	0.25	
75-15-0	Carbon Disulfide	ND	3.6	ND	1.2	
156-60-5	trans-1,2-Dichloroethene	ND	1.9	ND	0.48	
75-34-3	1,1-Dichloroethane	ND	1.9	ND	0.48	
1634-04-4	Methyl tert-Butyl Ether	ND	1.9	ND	0.52	
108-05-4	Vinyl Acetate	ND	20	ND	5.6	
78-93-3	2-Butanone (MEK)	**210**	3.6	**72**	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-24-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-005

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Simon Cao Date Analyzed: 3/12/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: 0.040 Liter(s)
Container ID: 1SC01098

Initial Pressure (psig): 0.05 Final Pressure (psig): 6.51

Canister Dilution Factor: 1.44

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	1.9	ND	0.47	
141-78-6	Ethyl Acetate	**56**	3.6	**16**	1.0	
110-54-3	n-Hexane	ND	1.9	ND	0.53	
67-66-3	Chloroform	**2.7**	1.9	**0.55**	0.39	
109-99-9	Tetrahydrofuran (THF)	**730**	36	**250**	12	**D**
107-06-2	1,2-Dichloroethane	ND	1.9	ND	0.46	
71-55-6	1,1,1-Trichloroethane	ND	1.9	ND	0.34	
71-43-2	Benzene	ND	1.9	ND	0.59	
56-23-5	Carbon Tetrachloride	ND	1.8	ND	0.29	
110-82-7	Cyclohexane	ND	3.6	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.9	ND	0.41	
75-27-4	Bromodichloromethane	ND	1.9	ND	0.28	
79-01-6	Trichloroethene	ND	1.8	ND	0.34	
123-91-1	1,4-Dioxane	ND	1.9	ND	0.52	
80-62-6	Methyl Methacrylate	ND	3.6	ND	0.88	
142-82-5	n-Heptane	ND	1.9	ND	0.46	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	ND	0.42	
108-10-1	4-Methyl-2-pentanone	ND	3.6	ND	0.88	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	ND	0.40	
79-00-5	1,1,2-Trichloroethane	ND	1.9	ND	0.34	
108-88-3	Toluene	**16**	1.9	**4.3**	0.50	
591-78-6	2-Hexanone	ND	3.6	ND	0.88	
124-48-1	Dibromochloromethane	ND	1.9	ND	0.22	
106-93-4	1,2-Dibromoethane	ND	1.9	ND	0.24	
123-86-4	n-Butyl Acetate	ND	3.6	ND	0.76	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

Client: **PES Environmental**
Client Sample ID: **SVE-24-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-005

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Simon Cao Date Analyzed: 3/12/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: 0.040 Liter(s)
Container ID: 1SC01098

Initial Pressure (psig): 0.05 Final Pressure (psig): 6.51

Canister Dilution Factor: 1.44

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	1.9	ND	0.40	
127-18-4	Tetrachloroethene	**69**	1.9	**10**	0.28	
108-90-7	Chlorobenzene	ND	1.9	ND	0.41	
100-41-4	Ethylbenzene	**2.9**	1.9	**0.67**	0.43	
179601-23-1	m,p-Xylenes	**9.9**	3.6	**2.3**	0.83	
75-25-2	Bromoform	ND	1.9	ND	0.18	
100-42-5	Styrene	ND	1.9	ND	0.44	
95-47-6	o-Xylene	**3.4**	1.9	**0.78**	0.44	
111-84-2	n-Nonane	**2.4**	1.9	**0.46**	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	ND	0.28	
98-82-8	Cumene	ND	1.9	ND	0.38	
80-56-8	alpha-Pinene	ND	1.9	ND	0.34	
103-65-1	n-Propylbenzene	ND	1.9	ND	0.38	
622-96-8	4-Ethyltoluene	ND	1.9	ND	0.39	
108-67-8	1,3,5-Trimethylbenzene	ND	1.9	ND	0.39	
95-63-6	1,2,4-Trimethylbenzene	**3.3**	1.9	**0.66**	0.38	
100-44-7	Benzyl Chloride	ND	3.8	ND	0.73	
541-73-1	1,3-Dichlorobenzene	ND	1.9	ND	0.32	
106-46-7	1,4-Dichlorobenzene	ND	1.9	ND	0.31	
95-50-1	1,2-Dichlorobenzene	ND	1.9	ND	0.32	
5989-27-5	d-Limonene	**5.3**	1.9	**0.96**	0.34	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.6	ND	0.37	
120-82-1	1,2,4-Trichlorobenzene	ND	3.6	ND	0.49	
91-20-3	Naphthalene	ND	1.9	ND	0.36	
87-68-3	Hexachlorobutadiene	ND	1.9	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-25-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-006

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Simon Cao Date Analyzed: 3/12/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00056

Initial Pressure (psig): -1.76 Final Pressure (psig): 7.85

Canister Dilution Factor: 1.74

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	2.3	ND	1.3	
75-71-8	Dichlorodifluoromethane (CFC 12)	**61**	2.3	**12**	0.46	
74-87-3	Chloromethane	ND	2.3	ND	1.1	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.3	ND	0.32	
75-01-4	Vinyl Chloride	ND	2.3	ND	0.90	
106-99-0	1,3-Butadiene	ND	2.3	ND	1.0	
74-83-9	Bromomethane	ND	2.3	ND	0.58	
75-00-3	Chloroethane	ND	2.3	ND	0.86	
64-17-5	Ethanol	ND	23	ND	12	
75-05-8	Acetonitrile	ND	2.3	ND	1.4	
107-02-8	Acrolein	ND	4.8	ND	2.1	
67-64-1	Acetone	**29**	23	**12**	9.5	
75-69-4	Trichlorofluoromethane (CFC 11)	**46**	2.2	**8.2**	0.39	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	4.4	ND	1.8	
107-13-1	Acrylonitrile	ND	4.4	ND	2.0	
75-35-4	1,1-Dichloroethene	ND	2.3	ND	0.57	
75-09-2	Methylene Chloride	ND	2.3	ND	0.65	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.3	ND	0.72	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.3	ND	0.30	
75-15-0	Carbon Disulfide	**21**	4.4	**6.7**	1.4	
156-60-5	trans-1,2-Dichloroethene	ND	2.3	ND	0.58	
75-34-3	1,1-Dichloroethane	ND	2.3	ND	0.58	
1634-04-4	Methyl tert-Butyl Ether	ND	2.3	ND	0.63	
108-05-4	Vinyl Acetate	ND	24	ND	6.8	
78-93-3	2-Butanone (MEK)	**34**	4.4	**12**	1.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-25-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-006

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Simon Cao Date Analyzed: 3/12/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00056

Initial Pressure (psig): -1.76 Final Pressure (psig): 7.85

Canister Dilution Factor: 1.74

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.3	ND	0.57	
141-78-6	Ethyl Acetate	ND	4.4	ND	1.2	
110-54-3	n-Hexane	ND	2.3	ND	0.64	
67-66-3	Chloroform	ND	2.3	ND	0.47	
109-99-9	Tetrahydrofuran (THF)	**190**	4.4	**65**	1.5	
107-06-2	1,2-Dichloroethane	ND	2.3	ND	0.56	
71-55-6	1,1,1-Trichloroethane	ND	2.3	ND	0.41	
71-43-2	Benzene	ND	2.3	ND	0.71	
56-23-5	Carbon Tetrachloride	ND	2.2	ND	0.35	
110-82-7	Cyclohexane	ND	4.4	ND	1.3	
78-87-5	1,2-Dichloropropane	ND	2.3	ND	0.49	
75-27-4	Bromodichloromethane	ND	2.3	ND	0.34	
79-01-6	Trichloroethene	ND	2.2	ND	0.41	
123-91-1	1,4-Dioxane	ND	2.3	ND	0.63	
80-62-6	Methyl Methacrylate	ND	4.4	ND	1.1	
142-82-5	n-Heptane	ND	2.3	ND	0.55	
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	ND	0.51	
108-10-1	4-Methyl-2-pentanone	ND	4.4	ND	1.1	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	ND	0.49	
79-00-5	1,1,2-Trichloroethane	ND	2.3	ND	0.41	
108-88-3	Toluene	ND	2.3	ND	0.60	
591-78-6	2-Hexanone	ND	4.4	ND	1.1	
124-48-1	Dibromochloromethane	ND	2.3	ND	0.27	
106-93-4	1,2-Dibromoethane	ND	2.3	ND	0.29	
123-86-4	n-Butyl Acetate	ND	4.4	ND	0.92	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **SVE-25-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-006

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Simon Cao Date Analyzed: 3/12/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00056

Initial Pressure (psig): -1.76 Final Pressure (psig): 7.85

Canister Dilution Factor: 1.74

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.3	ND	0.48	
127-18-4	Tetrachloroethene	**7.4**	2.3	**1.1**	0.33	
108-90-7	Chlorobenzene	ND	2.3	ND	0.49	
100-41-4	Ethylbenzene	ND	2.3	ND	0.52	
179601-23-1	m,p-Xylenes	ND	4.4	ND	1.0	
75-25-2	Bromoform	ND	2.3	ND	0.22	
100-42-5	Styrene	ND	2.3	ND	0.53	
95-47-6	o-Xylene	ND	2.3	ND	0.53	
111-84-2	n-Nonane	ND	2.3	ND	0.44	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.3	ND	0.34	
98-82-8	Cumene	ND	2.3	ND	0.46	
80-56-8	alpha-Pinene	ND	2.3	ND	0.41	
103-65-1	n-Propylbenzene	ND	2.3	ND	0.46	
622-96-8	4-Ethyltoluene	ND	2.3	ND	0.47	
108-67-8	1,3,5-Trimethylbenzene	ND	2.3	ND	0.47	
95-63-6	1,2,4-Trimethylbenzene	ND	2.3	ND	0.46	
100-44-7	Benzyl Chloride	ND	4.6	ND	0.88	
541-73-1	1,3-Dichlorobenzene	ND	2.3	ND	0.38	
106-46-7	1,4-Dichlorobenzene	ND	2.3	ND	0.38	
95-50-1	1,2-Dichlorobenzene	ND	2.3	ND	0.38	
5989-27-5	d-Limonene	ND	2.3	ND	0.41	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.4	ND	0.45	
120-82-1	1,2,4-Trichlorobenzene	ND	4.4	ND	0.59	
91-20-3	Naphthalene	ND	2.3	ND	0.43	
87-68-3	Hexachlorobutadiene	ND	2.3	ND	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **STACK-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-007

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Simon Cao Date Analyzed: 3/12/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC01205

Initial Pressure (psig): -0.19 Final Pressure (psig): 6.43

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	1.9	ND	1.1	
75-71-8	Dichlorodifluoromethane (CFC 12)	**7.4**	1.9	**1.5**	0.38	
74-87-3	Chloromethane	ND	1.9	ND	0.92	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.9	ND	0.27	
75-01-4	Vinyl Chloride	ND	1.9	ND	0.76	
106-99-0	1,3-Butadiene	ND	1.9	ND	0.86	
74-83-9	Bromomethane	ND	1.9	ND	0.49	
75-00-3	Chloroethane	ND	1.9	ND	0.72	
64-17-5	Ethanol	ND	19	ND	10	
75-05-8	Acetonitrile	ND	1.9	ND	1.2	
107-02-8	Acrolein	ND	4.0	ND	1.8	
67-64-1	Acetone	ND	19	ND	8.0	
75-69-4	Trichlorofluoromethane (CFC 11)	**5.3**	1.9	**0.95**	0.33	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	3.7	ND	1.5	
107-13-1	Acrylonitrile	ND	3.7	ND	1.7	
75-35-4	1,1-Dichloroethene	ND	1.9	ND	0.48	
75-09-2	Methylene Chloride	ND	1.9	ND	0.55	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.9	ND	0.61	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	1.9	ND	0.25	
75-15-0	Carbon Disulfide	ND	3.7	ND	1.2	
156-60-5	trans-1,2-Dichloroethene	ND	1.9	ND	0.49	
75-34-3	1,1-Dichloroethane	ND	2.0	ND	0.49	
1634-04-4	Methyl tert-Butyl Ether	ND	1.9	ND	0.53	
108-05-4	Vinyl Acetate	ND	20	ND	5.7	
78-93-3	2-Butanone (MEK)	**30**	3.7	**10**	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **STACK-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-007

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Simon Cao Date Analyzed: 3/12/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC01205

Initial Pressure (psig): -0.19 Final Pressure (psig): 6.43

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	1.9	ND	0.48	
141-78-6	Ethyl Acetate	ND	3.7	ND	1.0	
110-54-3	n-Hexane	ND	1.9	ND	0.54	
67-66-3	Chloroform	**7.2**	1.9	**1.5**	0.40	
109-99-9	Tetrahydrofuran (THF)	**100**	3.7	**34**	1.2	
107-06-2	1,2-Dichloroethane	ND	1.9	ND	0.47	
71-55-6	1,1,1-Trichloroethane	ND	1.9	ND	0.35	
71-43-2	Benzene	ND	1.9	ND	0.59	
56-23-5	Carbon Tetrachloride	ND	1.9	ND	0.30	
110-82-7	Cyclohexane	ND	3.7	ND	1.1	
78-87-5	1,2-Dichloropropane	ND	1.9	ND	0.41	
75-27-4	Bromodichloromethane	ND	1.9	ND	0.28	
79-01-6	Trichloroethene	ND	1.9	ND	0.35	
123-91-1	1,4-Dioxane	ND	1.9	ND	0.53	
80-62-6	Methyl Methacrylate	ND	3.7	ND	0.89	
142-82-5	n-Heptane	ND	1.9	ND	0.46	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	ND	0.43	
108-10-1	4-Methyl-2-pentanone	ND	3.7	ND	0.89	
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	ND	0.41	
79-00-5	1,1,2-Trichloroethane	ND	1.9	ND	0.35	
108-88-3	Toluene	ND	1.9	ND	0.50	
591-78-6	2-Hexanone	ND	3.7	ND	0.89	
124-48-1	Dibromochloromethane	ND	1.9	ND	0.22	
106-93-4	1,2-Dibromoethane	ND	1.9	ND	0.25	
123-86-4	n-Butyl Acetate	ND	3.7	ND	0.77	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **STACK-030221** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101098-007

Test Code: EPA TO-15 Date Collected: 3/2/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 3/4/21
Analyst: Simon Cao Date Analyzed: 3/12/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC01205

Initial Pressure (psig): -0.19 Final Pressure (psig): 6.43

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	1.9	ND	0.41	
127-18-4	Tetrachloroethene	**180**	1.9	**27**	0.28	
108-90-7	Chlorobenzene	ND	1.9	ND	0.41	
100-41-4	Ethylbenzene	**2.4**	1.9	**0.55**	0.44	
179601-23-1	m,p-Xylenes	**8.1**	3.7	**1.9**	0.84	
75-25-2	Bromoform	ND	1.9	ND	0.19	
100-42-5	Styrene	ND	1.9	ND	0.45	
95-47-6	o-Xylene	**2.1**	1.9	**0.49**	0.45	
111-84-2	n-Nonane	ND	1.9	ND	0.37	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	ND	0.28	
98-82-8	Cumene	ND	1.9	ND	0.39	
80-56-8	alpha-Pinene	ND	1.9	ND	0.35	
103-65-1	n-Propylbenzene	ND	1.9	ND	0.39	
622-96-8	4-Ethyltoluene	ND	1.9	ND	0.39	
108-67-8	1,3,5-Trimethylbenzene	ND	1.9	ND	0.39	
95-63-6	1,2,4-Trimethylbenzene	**3.0**	1.9	**0.61**	0.39	
100-44-7	Benzyl Chloride	ND	3.8	ND	0.74	
541-73-1	1,3-Dichlorobenzene	ND	1.9	ND	0.32	
106-46-7	1,4-Dichlorobenzene	ND	1.9	ND	0.32	
95-50-1	1,2-Dichlorobenzene	ND	1.9	ND	0.32	
5989-27-5	d-Limonene	**2.8**	1.9	**0.51**	0.34	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.7	ND	0.38	
120-82-1	1,2,4-Trichlorobenzene	ND	3.7	ND	0.49	
91-20-3	Naphthalene	ND	1.9	ND	0.36	
87-68-3	Hexachlorobutadiene	ND	1.9	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **Method Blank** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210311-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Topacio Zavala Date Analyzed: 3/11/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	ND	0.30	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.52	ND	0.11	
74-87-3	Chloromethane	ND	0.52	ND	0.25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.52	ND	0.074	
75-01-4	Vinyl Chloride	ND	0.53	ND	0.21	
106-99-0	1,3-Butadiene	ND	0.52	ND	0.24	
74-83-9	Bromomethane	ND	0.52	ND	0.13	
75-00-3	Chloroethane	ND	0.52	ND	0.20	
64-17-5	Ethanol	ND	5.3	ND	2.8	
75-05-8	Acetonitrile	ND	0.53	ND	0.32	
107-02-8	Acrolein	ND	1.1	ND	0.48	
67-64-1	Acetone	ND	5.2	ND	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.51	ND	0.091	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	ND	0.41	
107-13-1	Acrylonitrile	ND	1.0	ND	0.46	
75-35-4	1,1-Dichloroethene	ND	0.52	ND	0.13	
75-09-2	Methylene Chloride	ND	0.52	ND	0.15	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.52	ND	0.17	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.53	ND	0.069	
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.54	ND	0.13	
1634-04-4	Methyl tert-Butyl Ether	ND	0.52	ND	0.14	
108-05-4	Vinyl Acetate	ND	5.5	ND	1.6	
78-93-3	2-Butanone (MEK)	ND	1.0	ND	0.34	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**

Client Sample ID: **Method Blank** ALS Project ID: P2101098

Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210311-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA

Analyst: Topacio Zavala Date Analyzed: 3/11/21

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.52	ND	0.15	
67-66-3	Chloroform	ND	0.53	ND	0.11	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	ND	0.34	
107-06-2	1,2-Dichloroethane	ND	0.52	ND	0.13	
71-55-6	1,1,1-Trichloroethane	ND	0.52	ND	0.095	
71-43-2	Benzene	ND	0.52	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.51	ND	0.081	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.52	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.52	ND	0.078	
79-01-6	Trichloroethene	ND	0.51	ND	0.095	
123-91-1	1,4-Dioxane	ND	0.52	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.52	ND	0.13	
10061-01-5	cis-1,3-Dichloropropene	ND	0.53	ND	0.12	
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.52	ND	0.095	
108-88-3	Toluene	ND	0.52	ND	0.14	
591-78-6	2-Hexanone	ND	1.0	ND	0.24	
124-48-1	Dibromochloromethane	ND	0.52	ND	0.061	
106-93-4	1,2-Dibromoethane	ND	0.52	ND	0.068	
123-86-4	n-Butyl Acetate	ND	1.0	ND	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**

Client Sample ID: **Method Blank** ALS Project ID: P2101098

Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210311-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA

Analyst: Topacio Zavala Date Analyzed: 3/11/21

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.52	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.52	ND	0.077	
108-90-7	Chlorobenzene	ND	0.52	ND	0.11	
100-41-4	Ethylbenzene	ND	0.52	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.53	ND	0.051	
100-42-5	Styrene	ND	0.52	ND	0.12	
95-47-6	o-Xylene	ND	0.53	ND	0.12	
111-84-2	n-Nonane	ND	0.53	ND	0.10	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.53	ND	0.077	
98-82-8	Cumene	ND	0.52	ND	0.11	
80-56-8	alpha-Pinene	ND	0.53	ND	0.095	
103-65-1	n-Propylbenzene	ND	0.52	ND	0.11	
622-96-8	4-Ethyltoluene	ND	0.53	ND	0.11	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	ND	0.11	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	ND	0.11	
100-44-7	Benzyl Chloride	ND	1.1	ND	0.20	
541-73-1	1,3-Dichlorobenzene	ND	0.53	ND	0.088	
106-46-7	1,4-Dichlorobenzene	ND	0.52	ND	0.087	
95-50-1	1,2-Dichlorobenzene	ND	0.53	ND	0.088	
5989-27-5	d-Limonene	ND	0.52	ND	0.093	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	ND	0.10	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	ND	0.13	
91-20-3	Naphthalene	ND	0.52	ND	0.099	
87-68-3	Hexachlorobutadiene	ND	0.52	ND	0.049	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **PES Environmental**
Client Project ID: **MVSC / 1358.001.02.015** ALS Project ID: P2101098

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date(s) Collected: 3/2/21
Analyst: Simon Cao/Topacio Zavala Date(s) Received: 3/4/21
Sample Type: 1.0 L Summa Canister(s) / 1.0 L Silonite Summa Canister(s) Date(s) Analyzed: 3/11 - 3/12/21
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P210311-MB	**105**	**104**	**100**	70-130	
Lab Control Sample	P210311-LCS	**99**	**99**	**101**	70-130	
Duplicate Lab Control Sample	P210311-DLCS	**99**	**99**	**101**	70-130	
SVE-20-030221	P2101098-001	**98**	**104**	**102**	70-130	
SVE-21-030221	P2101098-002	**102**	**103**	**101**	70-130	
SVE-22-030221	P2101098-003	**102**	**103**	**100**	70-130	
SVE-23-030221	P2101098-004	**104**	**102**	**99**	70-130	
SVE-24-030221	P2101098-005	**104**	**103**	**100**	70-130	
SVE-25-030221	P2101098-006	**104**	**103**	**98**	70-130	
STACK-030221	P2101098-007	**105**	**102**	**100**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210311-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Topacio Zavala Date Analyzed: 3/11/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	210	183	179	**87**	**85**	56-128	2	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	210	178	176	**85**	**84**	71-112	1	25	
74-87-3	Chloromethane	206	177	170	**86**	**83**	53-126	4	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	216	169	175	**78**	**81**	62-121	4	25	
75-01-4	Vinyl Chloride	208	183	183	**88**	**88**	63-123	0	25	
106-99-0	1,3-Butadiene	210	200	197	**95**	**94**	63-135	1	25	
74-83-9	Bromomethane	212	178	182	**84**	**86**	71-112	2	25	
75-00-3	Chloroethane	204	180	181	**88**	**89**	66-117	1	25	
64-17-5	Ethanol	998	812	802	**81**	**80**	57-117	1	25	
75-05-8	Acetonitrile	202	188	187	**93**	**93**	59-131	0	25	
107-02-8	Acrolein	436	403	404	**92**	**93**	71-123	1	25	
67-64-1	Acetone	1,030	927	922	**90**	**90**	60-117	0	25	
75-69-4	Trichlorofluoromethane (CFC 11)	204	176	176	**86**	**86**	71-114	0	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	408	379	374	**93**	**92**	61-124	1	25	
107-13-1	Acrylonitrile	410	395	394	**96**	**96**	65-130	0	25	
75-35-4	1,1-Dichloroethene	212	186	189	**88**	**89**	74-114	1	25	
75-09-2	Methylene Chloride	208	184	186	**88**	**89**	75-112	1	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	210	202	200	**96**	**95**	57-127	1	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	214	183	186	**86**	**87**	73-114	1	25	
75-15-0	Carbon Disulfide	428	389	389	**91**	**91**	70-113	0	25	
156-60-5	trans-1,2-Dichloroethene	212	201	202	**95**	**95**	76-119	0	25	
75-34-3	1,1-Dichloroethane	212	184	185	**87**	**87**	70-114	0	25	
1634-04-4	Methyl tert-Butyl Ether	212	193	194	**91**	**92**	72-118	1	25	
108-05-4	Vinyl Acetate	1,100	842	851	**77**	**77**	56-137	0	25	
78-93-3	2-Butanone (MEK)	412	410	414	**100**	**100**	74-121	0	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210311-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Topacio Zavala Date Analyzed: 3/11/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	208	191	192	**92**	**92**	73-117	0	25	
141-78-6	Ethyl Acetate	422	548	542	**130**	**128**	59-161	2	25	
110-54-3	n-Hexane	212	195	193	**92**	**91**	55-130	1	25	
67-66-3	Chloroform	214	184	184	**86**	**86**	71-114	0	25	
109-99-9	Tetrahydrofuran (THF)	400	361	365	**90**	**91**	73-114	1	25	
107-06-2	1,2-Dichloroethane	208	185	185	**89**	**89**	71-119	0	25	
71-55-6	1,1,1-Trichloroethane	206	181	181	**88**	**88**	73-119	0	25	
71-43-2	Benzene	204	178	180	**87**	**88**	72-113	1	25	
56-23-5	Carbon Tetrachloride	210	181	182	**86**	**87**	67-123	1	25	
110-82-7	Cyclohexane	416	374	379	**90**	**91**	70-119	1	25	
78-87-5	1,2-Dichloropropane	206	185	186	**90**	**90**	70-118	0	25	
75-27-4	Bromodichloromethane	210	191	192	**91**	**91**	74-119	0	25	
79-01-6	Trichloroethene	206	182	184	**88**	**89**	74-115	1	25	
123-91-1	1,4-Dioxane	208	203	205	**98**	**99**	77-124	1	25	
80-62-6	Methyl Methacrylate	416	398	403	**96**	**97**	78-126	1	25	
142-82-5	n-Heptane	210	191	193	**91**	**92**	70-119	1	25	
10061-01-5	cis-1,3-Dichloropropene	210	212	214	**101**	**102**	81-126	1	25	
108-10-1	4-Methyl-2-pentanone	416	412	412	**99**	**99**	73-129	0	25	
10061-02-6	trans-1,3-Dichloropropene	202	197	199	**98**	**99**	80-127	1	25	
79-00-5	1,1,2-Trichloroethane	206	187	189	**91**	**92**	78-117	1	25	
108-88-3	Toluene	206	179	182	**87**	**88**	70-118	1	25	
591-78-6	2-Hexanone	404	407	405	**101**	**100**	74-132	1	25	
124-48-1	Dibromochloromethane	210	204	206	**97**	**98**	69-137	1	25	
106-93-4	1,2-Dibromoethane	208	198	201	**95**	**97**	76-128	2	25	
123-86-4	n-Butyl Acetate	406	443	442	**109**	**109**	75-134	0	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2101098
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210311-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Topacio Zavala Date Analyzed: 3/11/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	210	192	194	**91**	**92**	68-120	1	25	
127-18-4	Tetrachloroethene	206	180	182	**87**	**88**	63-130	1	25	
108-90-7	Chlorobenzene	206	183	185	**89**	**90**	70-118	1	25	
100-41-4	Ethylbenzene	206	188	190	**91**	**92**	71-123	1	25	
179601-23-1	m,p-Xylenes	412	377	381	**92**	**92**	67-127	0	25	
75-25-2	Bromoform	208	198	200	**95**	**96**	65-149	1	25	
100-42-5	Styrene	206	204	206	**99**	**100**	76-132	1	25	
95-47-6	o-Xylene	206	190	191	**92**	**93**	69-124	1	25	
111-84-2	n-Nonane	208	197	196	**95**	**94**	64-127	1	25	
79-34-5	1,1,2,2-Tetrachloroethane	206	193	194	**94**	**94**	69-128	0	25	
98-82-8	Cumene	208	189	191	**91**	**92**	69-125	1	25	
80-56-8	alpha-Pinene	214	201	202	**94**	**94**	68-129	0	25	
103-65-1	n-Propylbenzene	208	197	197	**95**	**95**	70-127	0	25	
622-96-8	4-Ethyltoluene	210	204	203	**97**	**97**	69-127	0	25	
108-67-8	1,3,5-Trimethylbenzene	206	192	192	**93**	**93**	66-129	0	25	
95-63-6	1,2,4-Trimethylbenzene	204	201	200	**99**	**98**	63-142	1	25	
100-44-7	Benzyl Chloride	402	430	432	**107**	**107**	73-145	0	25	
541-73-1	1,3-Dichlorobenzene	206	201	202	**98**	**98**	67-136	0	25	
106-46-7	1,4-Dichlorobenzene	204	188	187	**92**	**92**	63-134	0	25	
95-50-1	1,2-Dichlorobenzene	206	196	196	**95**	**95**	64-139	0	25	
5989-27-5	d-Limonene	208	194	193	**93**	**93**	63-137	0	25	
96-12-8	1,2-Dibromo-3-chloropropane	370	411	410	**111**	**111**	72-145	0	25	
120-82-1	1,2,4-Trichlorobenzene	388	411	407	**106**	**105**	62-154	0.9	25	
91-20-3	Naphthalene	198	214	213	**108**	**108**	62-156	0	25	
87-68-3	Hexachlorobutadiene	210	194	194	**92**	**92**	55-142	0	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

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LABORATORY REPORT

March 25, 2021

Matt Dahl
PES Environmental
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

RE: MVSC / 1358.001.02.015

Dear Matt:

Enclosed are the results of the sample submitted to our laboratory on March 15, 2021. For your reference, this analysis has been assigned our service request number P2101308.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 1:17 pm, Mar 25, 2021
Sue Anderson
Project Manager

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Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: PES Environmental
Project: MVSC / 1358.001.02.015

Service Request No: P2101308

CASE NARRATIVE

The sample was received intact under chain of custody on March 15, 2021 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The container was cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.3 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

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Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1776326
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-008
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-19-10
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272019-10
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: PES Environmental
Service Request: P2101308
Project ID: MVSC / 1358.001.02.015

Date Received: 3/15/2021
Time Received: 09:30

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC Cans
STACK-031221	P2101308-001	Air	3/12/2021	16:30	1SC00632	-0.62	5.48	X

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle:
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

ALS Project No. P2101308

Company Name & Address (Reporting Information)	PES Environmental 2101 4th Ave #1310 Seattle, WA, 98121
Project Name	MUSC
Project Number	1358.001.02.015
Project Manager	Matt Dahl
P.O. # / Billing Information	
Phone	206-529-3980
Fax	206-529-3985
Email Address for Result Reporting	mdahl@pesenv.com
Sampler (Print & Sign)	Sean Kounousky
ALS Contact:	

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TO-15		Comments e.g. Actual Preservative or specific instructions
STACK-031221	1	3/12/21	1630	1SC00632	NA	-27	-3	1L	X		

Report Tier Levels - please select

Tier I - Results (Default if not specified) ____
Tier II (Results + QC Summaries) ____
Tier III (Results + QC & Calibration Summaries) ____
Tier IV (Data Validation Package) 10% Surcharge ____

EDD required Yes / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle)
INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date: 3/12/21	Time: 1645	Received by: (Signature)	Date: 3/15/21	Time: 0930	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	Cooler / Blank Temperature ____°C

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ALS Environmental
Sample Acceptance Check Form

Client: PES Environmental Work order: P2101308

Project: MUSC / 1358.001.02.015

Sample(s) received on: 3/15/21 Date opened: 3/15/21 by: JEREMY.ANDERSOI

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2101308-001.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **STACK-031221** ALS Project ID: P2101308
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101308-001

Test Code: EPA TO-15 Date Collected: 3/12/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 3/15/21
Analyst: Wida Ang Date Analyzed: 3/18/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00632

Initial Pressure (psig): -0.62 Final Pressure (psig): 5.48

Canister Dilution Factor: 1.43

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	1.9	ND	1.1	
75-71-8	Dichlorodifluoromethane (CFC 12)	**6.3**	1.9	**1.3**	0.38	
74-87-3	Chloromethane	ND	1.9	ND	0.90	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.9	ND	0.27	
75-01-4	Vinyl Chloride	ND	1.9	ND	0.74	
106-99-0	1,3-Butadiene	ND	1.9	ND	0.84	
74-83-9	Bromomethane	ND	1.9	ND	0.48	
75-00-3	Chloroethane	ND	1.9	ND	0.70	
64-17-5	Ethanol	**220**	19	**120**	10	
75-05-8	Acetonitrile	ND	1.9	ND	1.1	
107-02-8	Acrolein	ND	3.9	ND	1.7	
67-64-1	Acetone	**28**	19	**12**	7.8	
75-69-4	Trichlorofluoromethane (CFC 11)	**5.0**	1.8	**0.88**	0.32	
67-63-0	2-Propanol (Isopropyl Alcohol)	**14**	3.6	**5.9**	1.5	
107-13-1	Acrylonitrile	ND	3.6	ND	1.6	
75-35-4	1,1-Dichloroethene	ND	1.9	ND	0.47	
75-09-2	Methylene Chloride	ND	1.9	ND	0.54	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.9	ND	0.59	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	1.9	ND	0.25	
75-15-0	Carbon Disulfide	ND	3.6	ND	1.1	
156-60-5	trans-1,2-Dichloroethene	ND	1.9	ND	0.48	
75-34-3	1,1-Dichloroethane	ND	1.9	ND	0.48	
1634-04-4	Methyl tert-Butyl Ether	ND	1.9	ND	0.52	
108-05-4	Vinyl Acetate	ND	20	ND	5.6	
78-93-3	2-Butanone (MEK)	**17**	3.6	**5.6**	1.2	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **STACK-031221** ALS Project ID: P2101308
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101308-001

Test Code: EPA TO-15 Date Collected: 3/12/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 3/15/21
Analyst: Wida Ang Date Analyzed: 3/18/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00632

Initial Pressure (psig): -0.62 Final Pressure (psig): 5.48

Canister Dilution Factor: 1.43

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	1.9	ND	0.47	
141-78-6	Ethyl Acetate	**37**	3.6	**10**	0.99	
110-54-3	n-Hexane	ND	1.9	ND	0.53	
67-66-3	Chloroform	**7.0**	1.9	**1.4**	0.39	
109-99-9	Tetrahydrofuran (THF)	**31**	3.6	**10**	1.2	
107-06-2	1,2-Dichloroethane	ND	1.9	ND	0.46	
71-55-6	1,1,1-Trichloroethane	ND	1.9	ND	0.34	
71-43-2	Benzene	ND	1.9	ND	0.58	
56-23-5	Carbon Tetrachloride	ND	1.8	ND	0.29	
110-82-7	Cyclohexane	ND	3.6	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.9	ND	0.40	
75-27-4	Bromodichloromethane	ND	1.9	ND	0.28	
79-01-6	Trichloroethene	ND	1.8	ND	0.34	
123-91-1	1,4-Dioxane	ND	1.9	ND	0.52	
80-62-6	Methyl Methacrylate	ND	3.6	ND	0.87	
142-82-5	n-Heptane	ND	1.9	ND	0.45	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	ND	0.42	
108-10-1	4-Methyl-2-pentanone	ND	3.6	ND	0.87	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	ND	0.40	
79-00-5	1,1,2-Trichloroethane	ND	1.9	ND	0.34	
108-88-3	Toluene	**7.3**	1.9	**1.9**	0.49	
591-78-6	2-Hexanone	ND	3.6	ND	0.87	
124-48-1	Dibromochloromethane	ND	1.9	ND	0.22	
106-93-4	1,2-Dibromoethane	ND	1.9	ND	0.24	
123-86-4	n-Butyl Acetate	ND	3.6	ND	0.75	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **STACK-031221** ALS Project ID: P2101308
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P2101308-001

Test Code: EPA TO-15 Date Collected: 3/12/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 3/15/21
Analyst: Wida Ang Date Analyzed: 3/18/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00632

Initial Pressure (psig): -0.62 Final Pressure (psig): 5.48

Canister Dilution Factor: 1.43

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	1.9	ND	0.40	
127-18-4	Tetrachloroethene	**210**	1.9	**31**	0.27	
108-90-7	Chlorobenzene	ND	1.9	ND	0.40	
100-41-4	Ethylbenzene	**2.0**	1.9	**0.46**	0.43	
179601-23-1	m,p-Xylenes	**7.5**	3.6	**1.7**	0.82	
75-25-2	Bromoform	ND	1.9	ND	0.18	
100-42-5	Styrene	ND	1.9	ND	0.44	
95-47-6	o-Xylene	**2.2**	1.9	**0.52**	0.44	
111-84-2	n-Nonane	**2.2**	1.9	**0.41**	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	ND	0.28	
98-82-8	Cumene	ND	1.9	ND	0.38	
80-56-8	alpha-Pinene	ND	1.9	ND	0.34	
103-65-1	n-Propylbenzene	ND	1.9	ND	0.38	
622-96-8	4-Ethyltoluene	ND	1.9	ND	0.39	
108-67-8	1,3,5-Trimethylbenzene	ND	1.9	ND	0.39	
95-63-6	1,2,4-Trimethylbenzene	**3.7**	1.9	**0.75**	0.38	
100-44-7	Benzyl Chloride	ND	3.8	ND	0.73	
541-73-1	1,3-Dichlorobenzene	ND	1.9	ND	0.32	
106-46-7	1,4-Dichlorobenzene	ND	1.9	ND	0.31	
95-50-1	1,2-Dichlorobenzene	ND	1.9	ND	0.32	
5989-27-5	d-Limonene	**7.9**	1.9	**1.4**	0.33	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.6	ND	0.37	
120-82-1	1,2,4-Trichlorobenzene	ND	3.6	ND	0.48	
91-20-3	Naphthalene	ND	1.9	ND	0.35	
87-68-3	Hexachlorobutadiene	ND	1.9	ND	0.17	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **Method Blank** ALS Project ID: P2101308
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210318-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/18/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	ND	0.30	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.52	ND	0.11	
74-87-3	Chloromethane	ND	0.52	ND	0.25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.52	ND	0.074	
75-01-4	Vinyl Chloride	ND	0.53	ND	0.21	
106-99-0	1,3-Butadiene	ND	0.52	ND	0.24	
74-83-9	Bromomethane	ND	0.52	ND	0.13	
75-00-3	Chloroethane	ND	0.52	ND	0.20	
64-17-5	Ethanol	ND	5.3	ND	2.8	
75-05-8	Acetonitrile	ND	0.53	ND	0.32	
107-02-8	Acrolein	ND	1.1	ND	0.48	
67-64-1	Acetone	ND	5.2	ND	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.51	ND	0.091	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	ND	0.41	
107-13-1	Acrylonitrile	ND	1.0	ND	0.46	
75-35-4	1,1-Dichloroethene	ND	0.52	ND	0.13	
75-09-2	Methylene Chloride	ND	0.52	ND	0.15	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.52	ND	0.17	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.53	ND	0.069	
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.54	ND	0.13	
1634-04-4	Methyl tert-Butyl Ether	ND	0.52	ND	0.14	
108-05-4	Vinyl Acetate	ND	5.5	ND	1.6	
78-93-3	2-Butanone (MEK)	ND	1.0	ND	0.34	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **PES Environmental**
Client Sample ID: **Method Blank** ALS Project ID: P2101308
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210318-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/18/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.52	ND	0.15	
67-66-3	Chloroform	ND	0.53	ND	0.11	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	ND	0.34	
107-06-2	1,2-Dichloroethane	ND	0.52	ND	0.13	
71-55-6	1,1,1-Trichloroethane	ND	0.52	ND	0.095	
71-43-2	Benzene	ND	0.52	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.51	ND	0.081	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.52	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.52	ND	0.078	
79-01-6	Trichloroethene	ND	0.51	ND	0.095	
123-91-1	1,4-Dioxane	ND	0.52	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.52	ND	0.13	
10061-01-5	cis-1,3-Dichloropropene	ND	0.53	ND	0.12	
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.52	ND	0.095	
108-88-3	Toluene	ND	0.52	ND	0.14	
591-78-6	2-Hexanone	ND	1.0	ND	0.24	
124-48-1	Dibromochloromethane	ND	0.52	ND	0.061	
106-93-4	1,2-Dibromoethane	ND	0.52	ND	0.068	
123-86-4	n-Butyl Acetate	ND	1.0	ND	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **PES Environmental**

Client Sample ID: **Method Blank** ALS Project ID: P2101308

Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210318-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA

Analyst: Wida Ang Date Analyzed: 3/18/21

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.52	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.52	ND	0.077	
108-90-7	Chlorobenzene	ND	0.52	ND	0.11	
100-41-4	Ethylbenzene	ND	0.52	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.53	ND	0.051	
100-42-5	Styrene	ND	0.52	ND	0.12	
95-47-6	o-Xylene	ND	0.53	ND	0.12	
111-84-2	n-Nonane	ND	0.53	ND	0.10	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.53	ND	0.077	
98-82-8	Cumene	ND	0.52	ND	0.11	
80-56-8	alpha-Pinene	ND	0.53	ND	0.095	
103-65-1	n-Propylbenzene	ND	0.52	ND	0.11	
622-96-8	4-Ethyltoluene	ND	0.53	ND	0.11	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	ND	0.11	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	ND	0.11	
100-44-7	Benzyl Chloride	ND	1.1	ND	0.20	
541-73-1	1,3-Dichlorobenzene	ND	0.53	ND	0.088	
106-46-7	1,4-Dichlorobenzene	ND	0.52	ND	0.087	
95-50-1	1,2-Dichlorobenzene	ND	0.53	ND	0.088	
5989-27-5	d-Limonene	ND	0.52	ND	0.093	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	ND	0.10	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	ND	0.13	
91-20-3	Naphthalene	ND	0.52	ND	0.099	
87-68-3	Hexachlorobutadiene	ND	0.52	ND	0.049	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **PES Environmental**
Client Project ID: **MVSC / 1358.001.02.015** ALS Project ID: P2101308

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date(s) Collected: 3/12/21
Analyst: Wida Ang Date(s) Received: 3/15/21
Sample Type: 1.0 L Summa Canister(s) Date(s) Analyzed: 3/18/21
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P210318-MB	**90**	**105**	**119**	70-130	
Lab Control Sample	P210318-LCS	**94**	**102**	**114**	70-130	
Duplicate Lab Control Sample	P210318-DLCS	**94**	**102**	**112**	70-130	
STACK-031221	P2101308-001	**96**	**103**	**116**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2101308
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210318-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/18/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	210	175	172	**83**	**82**	56-128	1	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	210	201	196	**96**	**93**	71-112	3	25	
74-87-3	Chloromethane	206	210	191	**102**	**93**	53-126	9	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	216	225	211	**104**	**98**	62-121	6	25	
75-01-4	Vinyl Chloride	208	231	222	**111**	**107**	63-123	4	25	
106-99-0	1,3-Butadiene	210	217	214	**103**	**102**	63-135	1	25	
74-83-9	Bromomethane	212	216	212	**102**	**100**	71-112	2	25	
75-00-3	Chloroethane	204	195	193	**96**	**95**	66-117	1	25	
64-17-5	Ethanol	998	814	810	**82**	**81**	57-117	1	25	
75-05-8	Acetonitrile	202	185	187	**92**	**93**	59-131	1	25	
107-02-8	Acrolein	436	424	424	**97**	**97**	71-123	0	25	
67-64-1	Acetone	1,030	939	938	**91**	**91**	60-117	0	25	
75-69-4	Trichlorofluoromethane (CFC 11)	204	196	195	**96**	**96**	71-114	0	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	408	413	410	**101**	**100**	61-124	1	25	
107-13-1	Acrylonitrile	410	399	400	**97**	**98**	65-130	1	25	
75-35-4	1,1-Dichloroethene	212	218	216	**103**	**102**	74-114	1	25	
75-09-2	Methylene Chloride	208	207	207	**100**	**100**	75-112	0	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	210	199	199	**95**	**95**	57-127	0	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	214	223	222	**104**	**104**	73-114	0	25	
75-15-0	Carbon Disulfide	428	393	389	**92**	**91**	70-113	1	25	
156-60-5	trans-1,2-Dichloroethene	212	220	220	**104**	**104**	76-119	0	25	
75-34-3	1,1-Dichloroethane	212	204	203	**96**	**96**	70-114	0	25	
1634-04-4	Methyl tert-Butyl Ether	212	228	228	**108**	**108**	72-118	0	25	
108-05-4	Vinyl Acetate	1,100	888	888	**81**	**81**	56-137	0	25	
78-93-3	2-Butanone (MEK)	412	444	447	**108**	**108**	74-121	0	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2101308
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210318-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/18/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	208	206	206	**99**	**99**	73-117	0	25	
141-78-6	Ethyl Acetate	422	560	561	**133**	**133**	59-161	0	25	
110-54-3	n-Hexane	212	189	189	**89**	**89**	55-130	0	25	
67-66-3	Chloroform	214	206	205	**96**	**96**	71-114	0	25	
109-99-9	Tetrahydrofuran (THF)	400	394	396	**99**	**99**	73-114	0	25	
107-06-2	1,2-Dichloroethane	208	206	205	**99**	**99**	71-119	0	25	
71-55-6	1,1,1-Trichloroethane	206	205	202	**100**	**98**	73-119	2	25	
71-43-2	Benzene	204	201	200	**99**	**98**	72-113	1	25	
56-23-5	Carbon Tetrachloride	210	203	201	**97**	**96**	67-123	1	25	
110-82-7	Cyclohexane	416	423	422	**102**	**101**	70-119	1	25	
78-87-5	1,2-Dichloropropane	206	199	199	**97**	**97**	70-118	0	25	
75-27-4	Bromodichloromethane	210	213	211	**101**	**100**	74-119	1	25	
79-01-6	Trichloroethene	206	218	217	**106**	**105**	74-115	0.9	25	
123-91-1	1,4-Dioxane	208	218	216	**105**	**104**	77-124	1	25	
80-62-6	Methyl Methacrylate	416	483	476	**116**	**114**	78-126	2	25	
142-82-5	n-Heptane	210	206	204	**98**	**97**	70-119	1	25	
10061-01-5	cis-1,3-Dichloropropene	210	212	210	**101**	**100**	81-126	1	25	
108-10-1	4-Methyl-2-pentanone	416	413	411	**99**	**99**	73-129	0	25	
10061-02-6	trans-1,3-Dichloropropene	202	212	210	**105**	**104**	80-127	1	25	
79-00-5	1,1,2-Trichloroethane	206	218	215	**106**	**104**	78-117	2	25	
108-88-3	Toluene	206	214	214	**104**	**104**	70-118	0	25	
591-78-6	2-Hexanone	404	430	433	**106**	**107**	74-132	0.9	25	
124-48-1	Dibromochloromethane	210	243	243	**116**	**116**	69-137	0	25	
106-93-4	1,2-Dibromoethane	208	246	245	**118**	**118**	76-128	0	25	
123-86-4	n-Butyl Acetate	406	428	430	**105**	**106**	75-134	0.9	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **PES Environmental**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2101308
Client Project ID: **MVSC / 1358.001.02.015** ALS Sample ID: P210318-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/18/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	210	208	210	**99**	**100**	68-120	1	25	
127-18-4	Tetrachloroethene	206	227	226	**110**	**110**	63-130	0	25	
108-90-7	Chlorobenzene	206	217	216	**105**	**105**	70-118	0	25	
100-41-4	Ethylbenzene	206	225	226	**109**	**110**	71-123	0.9	25	
179601-23-1	m,p-Xylenes	412	438	437	**106**	**106**	67-127	0	25	
75-25-2	Bromoform	208	267	267	**128**	**128**	65-149	0	25	
100-42-5	Styrene	206	235	235	**114**	**114**	76-132	0	25	
95-47-6	o-Xylene	206	224	222	**109**	**108**	69-124	0.9	25	
111-84-2	n-Nonane	208	199	199	**96**	**96**	64-127	0	25	
79-34-5	1,1,2,2-Tetrachloroethane	206	217	217	**105**	**105**	69-128	0	25	
98-82-8	Cumene	208	226	226	**109**	**109**	69-125	0	25	
80-56-8	alpha-Pinene	214	246	246	**115**	**115**	68-129	0	25	
103-65-1	n-Propylbenzene	208	228	228	**110**	**110**	70-127	0	25	
622-96-8	4-Ethyltoluene	210	242	241	**115**	**115**	69-127	0	25	
108-67-8	1,3,5-Trimethylbenzene	206	215	216	**104**	**105**	66-129	1	25	
95-63-6	1,2,4-Trimethylbenzene	204	233	232	**114**	**114**	63-142	0	25	
100-44-7	Benzyl Chloride	402	470	472	**117**	**117**	73-145	0	25	
541-73-1	1,3-Dichlorobenzene	206	237	236	**115**	**115**	67-136	0	25	
106-46-7	1,4-Dichlorobenzene	204	211	211	**103**	**103**	63-134	0	25	
95-50-1	1,2-Dichlorobenzene	206	229	229	**111**	**111**	64-139	0	25	
5989-27-5	d-Limonene	208	231	231	**111**	**111**	63-137	0	25	
96-12-8	1,2-Dibromo-3-chloropropane	370	449	448	**121**	**121**	72-145	0	25	
120-82-1	1,2,4-Trichlorobenzene	388	461	460	**119**	**119**	62-154	0	25	
91-20-3	Naphthalene	198	234	235	**118**	**119**	62-156	0.8	25	
87-68-3	Hexachlorobutadiene	210	228	226	**109**	**108**	55-142	0.9	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

MEMORANDUM

TO: Project File **DATE:** April 8, 2021

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: Manhattan Village Shopping Center - Soil Vapor Extraction System Performance Data Review

PROJECT #: 1358.001.02.015

TASK: EIM Data Validation Level EPA2A – March 2021 - Quarterly Air Samples

LAB: ALS Environmental Service Request Numbers: P2101098 and P2101308

Six soil vapor extraction samples and one stack sample were collected March 2, 2021. One stack sample was collected on March 12, 2021. Samples were collected from the Manhattan Village Shopping Center in Normandy Park, Washington. The samples were analyzed for 75 VOCs by USEPA Method TO-15 (*Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air*, Second Edition, EPA/625/R-96/010B, January 1999). Laboratory analytical services were provided by ALS Environmental (ALS) (also known as ALS Global (ALS)) of Simi Valley, California. Analytical data are reported under ALS's service request numbers P2101098 and P2101308.

The quality assurance review of the analytical data is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017).

DATA VALIDATION

Completeness

The samples were collected and analyzed as requested. No concerns, issues, or anomalies were identified in the laboratory report.

Sample Collection and Preservation

The laboratory supplied Source Cans (1-Liter) for the air samples. The samples were shipped, delivered by FedEx, and received in good condition by the laboratory. The samples were

collected, handled, and delivered in an appropriate manner. No data qualifications were warranted based upon sampling and preservation techniques.

Holding Times

The analyses for VOCs by Method TO-15 were performed within the 30-day recommended holding time limit for the air samples collected in a Source Can. No data was qualified based upon holding times.

Initial and Continuing Calibration

Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Case narrative and laboratory notes do not indicate that there are any issues with calibrations.

Method Blank Results

Laboratory method blanks were included with the analytical batch per method requirement. The method blank results do not report any compounds at concentrations at or above the reporting detection limit (MRLs).

Trip Blank Results

A trip blank was not required for the VOCs by TO-15 analyses. No qualifications were warranted due to the lack of a trip blank for this method.

Field Duplicate Analyses

No field duplicates were required or collected during this field event.

Laboratory Duplicate/Replicate Analyses

Laboratory replicates were not performed. Refer to the Laboratory Control Sample section for additional precision information.

Surrogate Recoveries

The surrogate percent recovery (% R) results for the VOCs by TO-15 air samples, method blanks, and laboratory control samples are within the laboratory surrogate control limits of 70 - 130% R. No data qualifications were warranted.

Laboratory Control Samples

Laboratory control samples/laboratory control sample duplicates (LCS/LCSDs) were analyzed for the VOCs by TO-15 along with each analytical batch. LCS/LCSD %Rs and relative percent differences (RPDs) are within QC criteria.

Matrix Spike/Matrix Spike Duplicates

A matrix spike/matrix spike duplicate (MS/MSD) is not required for the VOCs by TO-15 method.

Other Quality Control Issues

No other laboratory quality control issues were identified in the laboratory report.

Quantitation Limits

Results of the VOCs by TO-15 analysis are reported based on laboratory MRLs (assuming standard temperature and pressure is equal to 24.45) and reported in units of ppbv and $\mu g/m^3$.

The MRLs indicate the minimum quantity of a target analyte that can be confidently determined by the reference method. The MRLs were acceptable for the project; therefore, no data qualifications were warranted.

Data Assessment

No data qualifiers are assigned. All data are judged to be acceptable for their intended use.

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

PES Environmental, Inc.
Matt Dahl
1215 Fourth Avenue, Suite 1350
Seattle, WA 98161

RE: MVSC - Harris
Work Order Number: 2006067

June 10, 2020

Attention Matt Dahl:

Fremont Analytical, Inc. received 3 sample(s) on 6/3/2020 for the analyses presented in the following report.

Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,



Brianna Barnes
Project Manager

Date: *06/10/2020*

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris
Work Order: 2006067

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2006067-001	MW-20-060320	06/03/2020 10:40 AM	06/03/2020 1:50 PM
2006067-002	MW-17-060320	06/03/2020 12:00 PM	06/03/2020 1:50 PM
2006067-003	TB-060320	06/03/2020 1:30 PM	06/03/2020 1:50 PM

Case Narrative

WO#: **2006067**
Date: **6/10/2020**

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: PES Environmental, Inc.
Collection Date: 6/3/2020 10:40:00 AM
Project: MVSC - Harris
Lab ID: 2006067-001
Matrix: Groundwater
Client Sample ID: MW-20-060320

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28543 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Chloromethane	ND	2.00		µg/L	1	6/4/2020 9:38:17 PM
Vinyl chloride	ND	0.200		µg/L	1	6/4/2020 9:38:17 PM
Bromomethane	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Chloroethane	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Methylene chloride	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Chloroform	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Carbon tetrachloride	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Benzene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	6/4/2020 9:38:17 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Bromodichloromethane	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Dibromomethane	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Toluene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Dibromochloromethane	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	6/4/2020 9:38:17 PM
Chlorobenzene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Ethylbenzene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
m,p-Xylene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
o-Xylene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Styrene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Isopropylbenzene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Bromoform	ND	2.00		µg/L	1	6/4/2020 9:38:17 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM

Client: PES Environmental, Inc.
Collection Date: 6/3/2020 10:40:00 AM
Project: MVSC - Harris
Lab ID: 2006067-001
Matrix: Groundwater
Client Sample ID: MW-20-060320

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28543		Analyst: KT
n-Propylbenzene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Bromobenzene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
2-Chlorotoluene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
4-Chlorotoluene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
tert-Butylbenzene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	6/4/2020 9:38:17 PM
sec-Butylbenzene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
n-Butylbenzene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	6/4/2020 9:38:17 PM
Naphthalene	ND	1.00		µg/L	1	6/4/2020 9:38:17 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	6/4/2020 9:38:17 PM
Surr: Dibromofluoromethane	99.8	83.7 - 117		%Rec	1	6/4/2020 9:38:17 PM
Surr: Toluene-d8	99.2	87.6 - 113		%Rec	1	6/4/2020 9:38:17 PM
Surr: 1-Bromo-4-fluorobenzene	96.2	81.2 - 113		%Rec	1	6/4/2020 9:38:17 PM

Client: PES Environmental, Inc.
Collection Date: 6/3/2020 12:00:00 PM
Project: MVSC - Harris
Lab ID: 2006067-002
Matrix: Groundwater
Client Sample ID: MW-17-060320

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 28543 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Chloromethane	ND	2.00		µg/L	1	6/4/2020 10:08:29 PM
Vinyl chloride	ND	0.200		µg/L	1	6/4/2020 10:08:29 PM
Bromomethane	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Chloroethane	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Methylene chloride	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Chloroform	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Carbon tetrachloride	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Benzene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	6/4/2020 10:08:29 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Bromodichloromethane	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Dibromomethane	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Toluene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Tetrachloroethene (PCE)	5.35	1.00		µg/L	1	6/4/2020 10:08:29 PM
Dibromochloromethane	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	6/4/2020 10:08:29 PM
Chlorobenzene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Ethylbenzene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
m,p-Xylene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
o-Xylene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Styrene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Isopropylbenzene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Bromoform	ND	2.00		µg/L	1	6/4/2020 10:08:29 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM

Client: PES Environmental, Inc.
Collection Date: 6/3/2020 12:00:00 PM
Project: MVSC - Harris
Lab ID: 2006067-002
Matrix: Groundwater
Client Sample ID: **MW-17-060320**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 28543		Analyst: KT
n-Propylbenzene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Bromobenzene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
2-Chlorotoluene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
4-Chlorotoluene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
tert-Butylbenzene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	6/4/2020 10:08:29 PM
sec-Butylbenzene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
n-Butylbenzene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	6/4/2020 10:08:29 PM
Naphthalene	ND	1.00		µg/L	1	6/4/2020 10:08:29 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	6/4/2020 10:08:29 PM
Surr: Dibromofluoromethane	99.9	83.7 - 117		%Rec	1	6/4/2020 10:08:29 PM
Surr: Toluene-d8	101	87.6 - 113		%Rec	1	6/4/2020 10:08:29 PM
Surr: 1-Bromo-4-fluorobenzene	95.7	81.2 - 113		%Rec	1	6/4/2020 10:08:29 PM

Work Order: 2006067
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28543** SampType: **LCS** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **LCSW** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192403**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	28.3	1.00	20.00	0	141	20.6	156				
Chloromethane	23.1	2.00	20.00	0	115	37.6	157				
Vinyl chloride	23.1	0.200	20.00	0	116	63.7	126				
Bromomethane	18.2	1.00	20.00	0	91.2	53.5	142				
Trichlorofluoromethane (CFC-11)	22.8	1.00	20.00	0	114	80	118				
Chloroethane	22.0	1.00	20.00	0	110	69.7	122				
1,1-Dichloroethene	22.1	1.00	20.00	0	111	83.1	115				
Methylene chloride	21.0	1.00	20.00	0	105	79.5	116				
trans-1,2-Dichloroethene	22.1	1.00	20.00	0	110	85.4	114				
Methyl tert-butyl ether (MTBE)	20.6	1.00	20.00	0	103	76.9	123				
1,1-Dichloroethane	21.7	1.00	20.00	0	109	79.1	118				
cis-1,2-Dichloroethene	21.8	1.00	20.00	0	109	85.3	114				
Chloroform	21.6	1.00	20.00	0	108	85.4	114				
1,1,1-Trichloroethane (TCA)	22.1	1.00	20.00	0	110	87.1	114				
1,1-Dichloropropene	22.8	1.00	20.00	0	114	88.4	114				
Carbon tetrachloride	22.1	1.00	20.00	0	110	86.1	115				
1,2-Dichloroethane (EDC)	21.0	1.00	20.00	0	105	84.9	115				
Benzene	21.8	1.00	20.00	0	109	89	112				
Trichloroethene (TCE)	21.6	0.500	20.00	0	108	85.8	117				
1,2-Dichloropropane	21.4	1.00	20.00	0	107	84.6	116				
Bromodichloromethane	21.1	1.00	20.00	0	106	83.5	118				
Dibromomethane	20.7	1.00	20.00	0	103	83.9	114				
cis-1,3-Dichloropropene	21.4	1.00	20.00	0	107	83.1	120				
Toluene	21.9	1.00	20.00	0	110	86.7	115				
trans-1,3-Dichloropropylene	22.6	1.00	20.00	0	113	82	119				
1,1,2-Trichloroethane	21.2	1.00	20.00	0	106	84.1	117				
1,3-Dichloropropane	21.6	1.00	20.00	0	108	81	119				
Tetrachloroethene (PCE)	23.1	1.00	20.00	0	116	85.7	116				
Dibromochloromethane	19.5	1.00	20.00	0	97.4	81.1	118				
1,2-Dibromoethane (EDB)	20.5	0.250	20.00	0	102	80	119				
Chlorobenzene	22.0	1.00	20.00	0	110	88.2	110				

Work Order: 2006067
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28543** SampType: **LCS** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **LCSW** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192403**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	21.6	1.00	20.00	0	108	85.9	112				
Ethylbenzene	22.3	1.00	20.00	0	112	86.8	114				
m,p-Xylene	45.1	1.00	40.00	0	113	85.3	116				
o-Xylene	22.2	1.00	20.00	0	111	84.9	115				
Styrene	21.9	1.00	20.00	0	109	86.1	114				
Isopropylbenzene	22.7	1.00	20.00	0	113	85.6	117				
Bromoform	20.7	2.00	20.00	0	104	76.7	120				
1,1,2,2-Tetrachloroethane	21.0	1.00	20.00	0	105	68.1	128				
n-Propylbenzene	22.8	1.00	20.00	0	114	81.8	125				
Bromobenzene	21.5	1.00	20.00	0	108	80.8	119				
1,3,5-Trimethylbenzene	22.4	1.00	20.00	0	112	75.1	125				
2-Chlorotoluene	22.3	1.00	20.00	0	112	81.9	119				
4-Chlorotoluene	22.5	1.00	20.00	0	112	78.1	123				
tert-Butylbenzene	22.4	1.00	20.00	0	112	76	126				
1,2,3-Trichloropropane	19.9	1.00	20.00	0	99.6	70.7	127				
1,2,4-Trichlorobenzene	22.8	2.00	20.00	0	114	84.4	122				
sec-Butylbenzene	22.8	1.00	20.00	0	114	76.5	128				
4-Isopropyltoluene	22.7	1.00	20.00	0	113	76.8	125				
1,3-Dichlorobenzene	22.7	1.00	20.00	0	114	91.6	113				S
1,4-Dichlorobenzene	22.7	1.00	20.00	0	113	88.9	114				
n-Butylbenzene	23.7	1.00	20.00	0	118	88.3	122				
1,2-Dichlorobenzene	22.3	1.00	20.00	0	111	89	114				
1,2-Dibromo-3-chloropropane	19.6	1.00	20.00	0	98.1	61.5	137				
1,2,4-Trimethylbenzene	22.2	1.00	20.00	0	111	76.4	125				
Hexachloro-1,3-butadiene	24.0	4.00	20.00	0	120	87.3	119				S
Naphthalene	22.5	1.00	20.00	0	112	73.7	135				
1,2,3-Trichlorobenzene	23.6	4.00	20.00	0	118	81.2	124				
Surr: Dibromofluoromethane	25.0		25.00		99.8	83.7	117				
Surr: Toluene-d8	24.5		25.00		98.0	87.6	113				
Surr: 1-Bromo-4-fluorobenzene	25.6		25.00		102	81.2	113				

Work Order: 2006067
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-28543** SampType: **LCS** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **LCSW** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192403**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:
S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID: **MB-28543** SampType: **MBLK** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **MBLKW** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192391**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									
Chloromethane	ND	2.00									
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	1.00									
cis-1,2-Dichloroethene	ND	1.00									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									
Benzene	ND	1.00									
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									
Dibromomethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
Toluene	ND	1.00									

Work Order: 2006067
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28543** SampType: **MBLK** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **MBLKW** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192391**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.250									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	2.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									
4-Isopropyltoluene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2,4-Trimethylbenzene	ND	1.00									

Work Order: 2006067
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-28543** SampType: **MBLK** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **MBLKW** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192391**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloro-1,3-butadiene	ND	4.00									
Naphthalene	ND	1.00									
1,2,3-Trichlorobenzene	ND	4.00									
Surr: Dibromofluoromethane	24.6		25.00		98.5	83.7	117				
Surr: Toluene-d8	24.8		25.00		99.1	87.6	113				
Surr: 1-Bromo-4-fluorobenzene	24.1		25.00		96.3	81.2	113				

Sample ID: **2006017-003ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **BATCH** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192369**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	
Chloromethane	ND	2.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	

Work Order: 2006067
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006017-003ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **BATCH** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192369**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	2.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	

Work Order: 2006067
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006017-003ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **BATCH** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192369**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	4.00						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	25.0		25.00		99.8	83.7	117		0		
Surr: Toluene-d8	24.8		25.00		99.2	87.6	113		0		
Surr: 1-Bromo-4-fluorobenzene	24.0		25.00		96.0	81.2	113		0		

Sample ID: **2006049-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **BATCH** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192374**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	
Chloromethane	ND	2.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	

Work Order: 2006067
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006049-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **BATCH** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192374**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	2.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	

Work Order: 2006067
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006049-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **BATCH** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192374**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	4.00						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	24.2		25.00		97.0	83.7	117		0		
Surr: Toluene-d8	24.8		25.00		99.3	87.6	113		0		
Surr: 1-Bromo-4-fluorobenzene	24.7		25.00		98.7	81.2	113		0		

Sample ID: **2006067-002AMS** SampType: **MS** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **MW-17-060320** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192385**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	25.4	1.00	20.00	0	127	5.43	176				
Chloromethane	21.6	2.00	20.00	0	108	16.9	195				
Vinyl chloride	22.2	0.200	20.00	0	111	56.5	140				
Bromomethane	18.3	1.00	20.00	0	91.3	46.6	148				
Trichlorofluoromethane (CFC-11)	20.6	1.00	20.00	0	103	70.8	131				
Chloroethane	20.7	1.00	20.00	0	103	62.5	133				
1,1-Dichloroethene	20.7	1.00	20.00	0	104	73.1	133				
Methylene chloride	19.4	1.00	20.00	0	97.1	66.1	128				
trans-1,2-Dichloroethene	20.2	1.00	20.00	0	101	73.6	132				

Work Order: 2006067
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006067-002AMS** SampType: **MS** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **MW-17-060320** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192385**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	19.5	1.00	20.00	0	97.7	60.1	134				
1,1-Dichloroethane	19.8	1.00	20.00	0	99.2	67.5	136				
cis-1,2-Dichloroethene	19.9	1.00	20.00	0	99.5	73.1	130				
Chloroform	19.9	1.00	20.00	0.3886	97.8	72.7	131				
1,1,1-Trichloroethane (TCA)	20.3	1.00	20.00	0	101	70.8	138				
1,1-Dichloropropene	20.6	1.00	20.00	0	103	74.4	135				
Carbon tetrachloride	20.3	1.00	20.00	0	101	74.8	134				
1,2-Dichloroethane (EDC)	19.4	1.00	20.00	0	96.8	68.2	132				
Benzene	20.0	1.00	20.00	0	99.9	74.4	131				
Trichloroethene (TCE)	19.7	0.500	20.00	0	98.7	75.1	128				
1,2-Dichloropropane	19.7	1.00	20.00	0	98.3	72.1	131				
Bromodichloromethane	19.4	1.00	20.00	0	97.1	74.5	129				
Dibromomethane	19.4	1.00	20.00	0	96.8	70.3	128				
cis-1,3-Dichloropropene	18.9	1.00	20.00	0	94.4	66.8	127				
Toluene	20.0	1.00	20.00	0	100	71.3	132				
trans-1,3-Dichloropropylene	20.1	1.00	20.00	0	101	59.4	131				
1,1,2-Trichloroethane	19.8	1.00	20.00	0	98.9	68.7	132				
1,3-Dichloropropane	20.0	1.00	20.00	0	100	63.9	134				
Tetrachloroethene (PCE)	25.7	1.00	20.00	5.347	102	72.7	130				
Dibromochloromethane	18.5	1.00	20.00	0	92.3	67.8	130				
1,2-Dibromoethane (EDB)	20.0	0.250	20.00	0	100	63.7	132				
Chlorobenzene	19.3	1.00	20.00	0	96.7	73.8	125				
1,1,1,2-Tetrachloroethane	18.7	1.00	20.00	0	93.6	72.4	127				
Ethylbenzene	19.5	1.00	20.00	0	97.3	73	129				
m,p-Xylene	38.8	1.00	40.00	0	97.0	70.5	131				
o-Xylene	18.9	1.00	20.00	0	94.6	70.9	129				
Styrene	17.7	1.00	20.00	0	88.4	71.8	124				
Isopropylbenzene	19.4	1.00	20.00	0	97.0	68.4	137				
Bromoform	18.8	2.00	20.00	0	94.2	66.5	132				
1,1,2,2-Tetrachloroethane	19.6	1.00	20.00	0	98.2	61.3	146				
n-Propylbenzene	19.4	1.00	20.00	0	97.1	69.9	138				

Work Order: 2006067
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006067-002AMS** SampType: **MS** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **MW-17-060320** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192385**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	18.9	1.00	20.00	0	94.3	68.6	132				
1,3,5-Trimethylbenzene	19.0	1.00	20.00	0	95.1	61.4	142				
2-Chlorotoluene	19.1	1.00	20.00	0	95.6	68.9	135				
4-Chlorotoluene	19.2	1.00	20.00	0	95.8	68.1	136				
tert-Butylbenzene	19.4	1.00	20.00	0	97.0	67.3	137				
1,2,3-Trichloropropane	18.2	1.00	20.00	0	90.9	55	143				
1,2,4-Trichlorobenzene	20.3	2.00	20.00	0	102	72.1	129				
sec-Butylbenzene	19.6	1.00	20.00	0	97.8	65.1	143				
4-Isopropyltoluene	19.2	1.00	20.00	0	95.9	62.2	142				
1,3-Dichlorobenzene	20.0	1.00	20.00	0	99.8	77.6	123				
1,4-Dichlorobenzene	19.8	1.00	20.00	0	99.0	76.6	122				
n-Butylbenzene	20.1	1.00	20.00	0	101	75.2	133				
1,2-Dichlorobenzene	20.0	1.00	20.00	0	99.9	77	123				
1,2-Dibromo-3-chloropropane	19.3	1.00	20.00	0	96.6	56.8	145				
1,2,4-Trimethylbenzene	18.5	1.00	20.00	0	92.5	64.6	137				
Hexachloro-1,3-butadiene	19.5	4.00	20.00	0	97.7	71.9	131				
Naphthalene	22.8	1.00	20.00	0	114	64.1	144				
1,2,3-Trichlorobenzene	22.0	4.00	20.00	0	110	69	134				
Surr: Dibromofluoromethane	25.3		25.00		101	83.7	117				
Surr: Toluene-d8	24.9		25.00		99.5	87.6	113				
Surr: 1-Bromo-4-fluorobenzene	25.2		25.00		101	81.2	113				

Sample ID: **2006067-002AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **MW-17-060320** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192386**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	25.9	1.00	20.00	0	129	5.43	176	25.45	1.65	30	
Chloromethane	22.5	2.00	20.00	0	112	16.9	195	21.65	3.78	30	
Vinyl chloride	22.5	0.200	20.00	0	113	56.5	140	22.23	1.31	30	
Bromomethane	18.0	1.00	20.00	0	90.1	46.6	148	18.25	1.29	30	

Work Order: 2006067
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006067-002AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **MW-17-060320** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192386**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichlorofluoromethane (CFC-11)	20.8	1.00	20.00	0	104	70.8	131	20.57	1.04	30	
Chloroethane	21.3	1.00	20.00	0	106	62.5	133	20.65	3.01	30	
1,1-Dichloroethene	21.1	1.00	20.00	0	106	73.1	133	20.73	1.82	30	
Methylene chloride	20.1	1.00	20.00	0	100	66.1	128	19.42	3.24	30	
trans-1,2-Dichloroethene	20.8	1.00	20.00	0	104	73.6	132	20.18	3.02	30	
Methyl tert-butyl ether (MTBE)	19.9	1.00	20.00	0	99.4	60.1	134	19.54	1.73	30	
1,1-Dichloroethane	20.2	1.00	20.00	0	101	67.5	136	19.83	2.00	30	
cis-1,2-Dichloroethene	20.4	1.00	20.00	0	102	73.1	130	19.90	2.35	30	
Chloroform	20.5	1.00	20.00	0.3886	100	72.7	131	19.95	2.54	30	
1,1,1-Trichloroethane (TCA)	20.9	1.00	20.00	0	105	70.8	138	20.30	3.08	30	
1,1-Dichloropropene	21.1	1.00	20.00	0	106	74.4	135	20.65	2.39	30	
Carbon tetrachloride	21.0	1.00	20.00	0	105	74.8	134	20.29	3.29	30	
1,2-Dichloroethane (EDC)	19.7	1.00	20.00	0	98.5	68.2	132	19.36	1.77	30	
Benzene	20.4	1.00	20.00	0	102	74.4	131	19.99	2.12	30	
Trichloroethene (TCE)	20.1	0.500	20.00	0	100	75.1	128	19.74	1.70	30	
1,2-Dichloropropane	20.0	1.00	20.00	0	100	72.1	131	19.67	1.64	30	
Bromodichloromethane	19.9	1.00	20.00	0	99.3	74.5	129	19.42	2.28	30	
Dibromomethane	20.0	1.00	20.00	0	99.8	70.3	128	19.37	3.01	30	
cis-1,3-Dichloropropene	19.2	1.00	20.00	0	96.1	66.8	127	18.89	1.70	30	
Toluene	20.6	1.00	20.00	0	103	71.3	132	20.02	2.99	30	
trans-1,3-Dichloropropylene	20.5	1.00	20.00	0	102	59.4	131	20.14	1.64	30	
1,1,2-Trichloroethane	20.3	1.00	20.00	0	101	68.7	132	19.79	2.36	30	
1,3-Dichloropropane	20.5	1.00	20.00	0	102	63.9	134	20.03	2.13	30	
Tetrachloroethene (PCE)	26.1	1.00	20.00	5.347	104	72.7	130	25.72	1.38	30	
Dibromochloromethane	19.1	1.00	20.00	0	95.7	67.8	130	18.47	3.55	30	
1,2-Dibromoethane (EDB)	20.2	0.250	20.00	0	101	63.7	132	20.02	0.977	30	
Chlorobenzene	19.7	1.00	20.00	0	98.5	73.8	125	19.33	1.87	30	
1,1,1,2-Tetrachloroethane	19.2	1.00	20.00	0	96.0	72.4	127	18.73	2.52	30	
Ethylbenzene	20.0	1.00	20.00	0	99.9	73	129	19.46	2.66	30	
m,p-Xylene	39.9	1.00	40.00	0	99.8	70.5	131	38.80	2.88	30	
o-Xylene	19.6	1.00	20.00	0	97.8	70.9	129	18.92	3.30	30	

Work Order: 2006067
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2006067-002AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **6/4/2020** RunNo: **59617**
Client ID: **MW-17-060320** Batch ID: **28543** Analysis Date: **6/4/2020** SeqNo: **1192386**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	17.9	1.00	20.00	0	89.6	71.8	124	17.68	1.41	30	
Isopropylbenzene	20.1	1.00	20.00	0	101	68.4	137	19.40	3.60	30	
Bromoform	19.2	2.00	20.00	0	96.2	66.5	132	18.84	2.14	30	
1,1,2,2-Tetrachloroethane	20.1	1.00	20.00	0	101	61.3	146	19.65	2.37	30	
n-Propylbenzene	19.9	1.00	20.00	0	99.5	69.9	138	19.42	2.45	30	
Bromobenzene	19.4	1.00	20.00	0	96.8	68.6	132	18.87	2.57	30	
1,3,5-Trimethylbenzene	19.6	1.00	20.00	0	97.9	61.4	142	19.03	2.88	30	
2-Chlorotoluene	19.7	1.00	20.00	0	98.7	68.9	135	19.13	3.17	30	
4-Chlorotoluene	19.7	1.00	20.00	0	98.5	68.1	136	19.17	2.71	30	
tert-Butylbenzene	20.0	1.00	20.00	0	99.9	67.3	137	19.41	2.91	30	
1,2,3-Trichloropropane	18.6	1.00	20.00	0	92.8	55	143	18.18	2.05	30	
1,2,4-Trichlorobenzene	20.6	2.00	20.00	0	103	72.1	129	20.31	1.62	30	
sec-Butylbenzene	20.0	1.00	20.00	0	100	65.1	143	19.56	2.24	30	
4-Isopropyltoluene	19.6	1.00	20.00	0	97.8	62.2	142	19.17	2.03	30	
1,3-Dichlorobenzene	19.8	1.00	20.00	0	99.2	77.6	123	19.96	0.594	30	
1,4-Dichlorobenzene	20.0	1.00	20.00	0	99.9	76.6	122	19.80	0.893	30	
n-Butylbenzene	20.2	1.00	20.00	0	101	75.2	133	20.14	0.422	30	
1,2-Dichlorobenzene	19.8	1.00	20.00	0	99.0	77	123	19.97	0.865	30	
1,2-Dibromo-3-chloropropane	19.6	1.00	20.00	0	98.0	56.8	145	19.33	1.43	30	
1,2,4-Trimethylbenzene	18.7	1.00	20.00	0	93.7	64.6	137	18.50	1.28	30	
Hexachloro-1,3-butadiene	19.8	4.00	20.00	0	98.9	71.9	131	19.55	1.22	30	
Naphthalene	23.0	1.00	20.00	0	115	64.1	144	22.83	0.553	30	
1,2,3-Trichlorobenzene	22.4	4.00	20.00	0	112	69	134	22.00	1.77	30	
Surr: Dibromofluoromethane	25.5		25.00		102	83.7	117		0		
Surr: Toluene-d8	25.3		25.00		101	87.6	113		0		
Surr: 1-Bromo-4-fluorobenzene	25.5		25.00		102	81.2	113		0		

Sample Log-In Check List

Client Name:	**PES**	Work Order Number:	**2006067**
Logged by:	**Clare Griggs**	Date Received:	**6/3/2020 1:50:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present ☐
2.	How was the sample delivered?	Client				

Log In

3.	Coolers are present?	Yes	☑	No	☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes	☑	No	☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	☐	No	☐	Not Present ☑
6.	Was an attempt made to cool the samples?	Yes	☑	No	☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes	☑	No	☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes	☑	No	☐	
9.	Sufficient sample volume for indicated test(s)?	Yes	☑	No	☐	
10.	Are samples properly preserved?	Yes	☑	No	☐	
11.	Was preservative added to bottles?	Yes	☐	No	☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes	☐	No	☑	NA ☐
13.	Did all samples containers arrive in good condition(unbroken)?	Yes	☑	No	☐	
14.	Does paperwork match bottle labels?	Yes	☑	No	☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐	
16.	Is it clear what analyses were requested?	Yes	☑	No	☐	
17.	Were all holding times able to be met?	Yes	☑	No	☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes	☐	No	☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler	3.3
Sample	1.1

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 6/3/20 Page: 1 of: 1
Laboratory Project No (internal): 2006067
Special Remarks:

Client: PES Environmental
Address: On File
City, State, Zip:
Telephone:
Fax:

Project Name: MVSC - Harris
Project No: 1358.001.02.013
Collected by: Ben Hecht
Location: Normandy Park
Report To (PM): Matt Dahl
PM Email: MDAHL@PESENV.COM

Sample Disposal: ☐ Return to client ☑ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)				Comments
1	MW-20-060320	6/3/20	1040	GW	X																
2	MW-17-060320	↓	1200	GW	X																
3	TB-060320	↓	1330	AQ																	HOLD
4																					
5																					
6																					
7																					
8																					
9																					
10																					

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
- ☑ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x	6/3/20 @ 1345	x	6/3/20 @ 1350
x		x	

MEMORANDUM

TO: Project File **DATE:** June 17, 2020

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: Manhattan Village Shopping Center

PROJECT #: 1358.001.02.013

TASK: EIM Data Validation Level EPA2A – June 2020 Groundwater Samples

LAB: Fremont Work Order: 2006067

Two (2) groundwater samples and one trip blank were collected as part of an ongoing performance monitoring at the Manhattan Village Shopping Center site in Normandy Park, Washington on June 3, 2020. Laboratory analytical services were provided by Fremont Analytical of Seattle Washington. Samples were analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D.

The quality assurance review of the laboratory data for Work Order 2006067 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017).

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested. No concerns, issues, or anomalies were identified in the laboratory report.

Sample Collection and Preservation

The samples were stored on ice in coolers, shipped, and delivered in good condition to the laboratory. Sample temperatures at the time of receipt were slightly below EPA's recommended temperature preservation range of less than 6.0 °Centigrade. No data qualifications are warranted.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of 14 days for preserved water. All holding time criteria were met.

Initial and Continuing Calibration

Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Fremont did not indicate any issues with initial or continuing calibration verification (CCV) criteria.

Method Blank Results

USEPA Method 8260D:
Laboratory method blank was included with the analytical batch per method requirement. The target analytes (VOCs) were not detected in the method blank at a concentration at or above the reporting limits (RLs).

Trip Blank Results

A trip blank (TB-060320) was collected but not analyzed. No action is taken other than to note this.

Equipment Blank Results

An equipment blank was not collected.

Field Duplicate Analyses

Field duplicate samples were not collected. Refer to non-client laboratory duplicate results for precision data.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate analysis were performed on non-client samples. Laboratory criteria for relative percent differences (RPDs) were met.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate percent recovery (%R) results for the samples, method blanks, laboratory duplicates, matrix spike samples, and laboratory control samples are within the laboratory surrogate control limits. No data qualifications were warranted.

Laboratory Control Samples

USEPA Method 8260D:
The laboratory control sample and laboratory control sample duplicate (LCS/LCSD) %R's and RPDs are within the laboratory control limits with the following exceptions:

- LCS (analytical batch 28543) 1,3-dichlorobenzene and hexachloro-1,3-butadiene recoveries exceed criteria however no action is necessary since these compounds were not detected in the associated samples.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses was performed on a non-client sample. MS/MSD %R's and RPDs are within the laboratory control limits.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory reports with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered where needed.

Quantitation Limits

The RLs indicate the minimum quantity of a target analyte that can be confidently determined by the reference method. The RLs were acceptable for the project; therefore, no data qualifications were warranted.

Data Assessment

No data qualifiers are assigned. All data are judged to be acceptable for their intended use.

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

PES Environmental, Inc.
Matt Dahl
2101 Fourth Avenue, Suite 1310
Seattle, WA 98121

RE: MVSC
Work Order Number: 2105151

May 14, 2021

Attention Matt Dahl:

Fremont Analytical, Inc. received 2 sample(s) on 5/11/2021 for the analyses presented in the following report.

Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Date: *05/14/2021*

CLIENT: PES Environmental, Inc.
Project: MVSC
Work Order: 2105151

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2105151-001	DC-7-051121	05/11/2021 10:20 AM	05/11/2021 12:53 PM
2105151-002	TB-051121	05/07/2021 12:34 PM	05/11/2021 12:53 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Original

Case Narrative

WO#: **2105151**
Date: **5/14/2021**

CLIENT: PES Environmental, Inc.
Project: MVSC

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MCL - Maximum Contaminant Level
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: PES Environmental, Inc. **Collection Date:** 5/11/2021 10:20:00 AM
Project: MVSC
Lab ID: 2105151-001 **Matrix:** Groundwater
Client Sample ID: DC-7-051121

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 32280 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.25		µg/L	1	5/12/2021 9:51:43 PM
Chloromethane	ND	0.750		µg/L	1	5/12/2021 9:51:43 PM
Vinyl chloride	ND	0.350		µg/L	1	5/12/2021 9:51:43 PM
Bromomethane	ND	1.20		µg/L	1	5/12/2021 9:51:43 PM
Trichlorofluoromethane (CFC-11)	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
Chloroethane	ND	1.00		µg/L	1	5/12/2021 9:51:43 PM
1,1-Dichloroethene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
Acetone	ND	6.00		µg/L	1	5/12/2021 9:51:43 PM
Methylene chloride	ND	0.750		µg/L	1	5/12/2021 9:51:43 PM
trans-1,2-Dichloroethene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
Methyl tert-butyl ether (MTBE)	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
1,1-Dichloroethane	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
cis-1,2-Dichloroethene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
(MEK) 2-Butanone	ND	1.50		µg/L	1	5/12/2021 9:51:43 PM
Chloroform	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
1,1,1-Trichloroethane (TCA)	ND	0.400		µg/L	1	5/12/2021 9:51:43 PM
1,1-Dichloropropene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
Carbon tetrachloride	ND	0.750		µg/L	1	5/12/2021 9:51:43 PM
1,2-Dichloroethane (EDC)	ND	0.400		µg/L	1	5/12/2021 9:51:43 PM
Benzene	ND	0.440		µg/L	1	5/12/2021 9:51:43 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
1,2-Dichloropropane	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
Bromodichloromethane	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
Dibromomethane	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
Toluene	ND	0.750		µg/L	1	5/12/2021 9:51:43 PM
trans-1,3-Dichloropropylene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
Methyl Isobutyl Ketone (MIBK)	ND	1.25		µg/L	1	5/12/2021 9:51:43 PM
1,1,2-Trichloroethane	ND	0.350		µg/L	1	5/12/2021 9:51:43 PM
1,3-Dichloropropane	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
Tetrachloroethene (PCE)	8.35	0.400		µg/L	1	5/12/2021 9:51:43 PM
Dibromochloromethane	ND	1.00		µg/L	1	5/12/2021 9:51:43 PM
1,2-Dibromoethane (EDB)	ND	0.300		µg/L	1	5/12/2021 9:51:43 PM
2-Hexanone (MBK)	ND	1.00		µg/L	1	5/12/2021 9:51:43 PM
Chlorobenzene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
1,1,1,2-Tetrachloroethane	ND	0.300		µg/L	1	5/12/2021 9:51:43 PM
Ethylbenzene	ND	0.400		µg/L	1	5/12/2021 9:51:43 PM
m,p-Xylene	ND	1.00		µg/L	1	5/12/2021 9:51:43 PM
o-Xylene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM

Client: PES Environmental, Inc.
Collection Date: 5/11/2021 10:20:00 AM
Project: MVSC
Lab ID: 2105151-001
Matrix: Groundwater
Client Sample ID: **DC-7-051121**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 32280 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Styrene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
Isopropylbenzene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
Bromoform	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
1,1,2,2-Tetrachloroethane	ND	0.400		µg/L	1	5/12/2021 9:51:43 PM
n-Propylbenzene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
Bromobenzene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
1,3,5-Trimethylbenzene	ND	0.250		µg/L	1	5/12/2021 9:51:43 PM
2-Chlorotoluene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
4-Chlorotoluene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
tert-Butylbenzene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
1,2,3-Trichloropropane	ND	0.400		µg/L	1	5/12/2021 9:51:43 PM
1,2,4-Trichlorobenzene	ND	0.750		µg/L	1	5/12/2021 9:51:43 PM
sec-Butylbenzene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
4-Isopropyltoluene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
1,3-Dichlorobenzene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
1,4-Dichlorobenzene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
n-Butylbenzene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
1,2-Dichlorobenzene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	5/12/2021 9:51:43 PM
1,2,4-Trimethylbenzene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	5/12/2021 9:51:43 PM
Naphthalene	ND	1.25		µg/L	1	5/12/2021 9:51:43 PM
1,2,3-Trichlorobenzene	ND	0.700		µg/L	1	5/12/2021 9:51:43 PM
Surr: Dibromofluoromethane	102	80.7 - 121		%Rec	1	5/12/2021 9:51:43 PM
Surr: Toluene-d8	102	84.5 - 116		%Rec	1	5/12/2021 9:51:43 PM
Surr: 1-Bromo-4-fluorobenzene	100	86 - 108		%Rec	1	5/12/2021 9:51:43 PM

Work Order: 2105151
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-32280** SampType: **LCS** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **LCSW** Batch ID: **32280** Analysis Date: **5/12/2021** SeqNo: **1354901**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.0	1.25	20.00	0	80.0	80	120				
Chloromethane	20.0	0.750	20.00	0	100	80	120				
Vinyl chloride	22.8	0.350	20.00	0	114	80	120				
Bromomethane	29.8	1.20	20.00	0	149	80	120				S
Trichlorofluoromethane (CFC-11)	20.5	0.500	20.00	0	102	80	120				
Chloroethane	22.3	1.00	20.00	0	112	80	120				
1,1-Dichloroethene	21.6	0.500	20.00	0	108	80	120				
Acetone	56.1	6.00	50.00	0	112	80	120				
Methylene chloride	22.1	0.750	20.00	0	111	80	120				
trans-1,2-Dichloroethene	21.5	0.500	20.00	0	108	80	120				
Methyl tert-butyl ether (MTBE)	20.9	0.500	20.00	0	104	80	120				
1,1-Dichloroethane	22.2	0.500	20.00	0	111	80	120				
cis-1,2-Dichloroethene	21.4	0.500	20.00	0	107	80	120				
(MEK) 2-Butanone	52.2	1.50	50.00	0	104	80	120				
Chloroform	21.6	0.500	20.00	0	108	80	120				
1,1,1-Trichloroethane (TCA)	21.2	0.400	20.00	0	106	80	120				
1,1-Dichloropropene	21.7	0.500	20.00	0	109	80	120				
Carbon tetrachloride	21.5	0.750	20.00	0	107	80	120				
1,2-Dichloroethane (EDC)	20.7	0.400	20.00	0	104	80	120				
Benzene	22.1	0.440	20.00	0	111	80	120				
Trichloroethene (TCE)	21.5	0.500	20.00	0	107	80	120				
1,2-Dichloropropane	22.0	0.500	20.00	0	110	80	120				
Bromodichloromethane	22.0	0.500	20.00	0	110	80	120				
Dibromomethane	21.1	0.500	20.00	0	106	80	120				
cis-1,3-Dichloropropene	21.6	0.500	20.00	0	108	80	120				
Toluene	21.7	0.750	20.00	0	108	80	120				
trans-1,3-Dichloropropylene	21.3	0.500	20.00	0	106	80	120				
Methyl Isobutyl Ketone (MIBK)	52.2	1.25	50.00	0	104	80	120				
1,1,2-Trichloroethane	21.7	0.350	20.00	0	108	80	120				
1,3-Dichloropropane	21.6	0.500	20.00	0	108	80	120				

Work Order: 2105151
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-32280** SampType: **LCS** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **LCSW** Batch ID: **32280** Analysis Date: **5/12/2021** SeqNo: **1354901**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachloroethene (PCE)	20.7	0.400	20.00	0	104	80	120				
Dibromochloromethane	21.9	1.00	20.00	0	109	80	120				
1,2-Dibromoethane (EDB)	21.0	0.300	20.00	0	105	80	120				
2-Hexanone (MBK)	52.3	1.00	50.00	0	105	80	120				
Chlorobenzene	20.7	0.500	20.00	0	103	80	120				
1,1,1,2-Tetrachloroethane	20.7	0.300	20.00	0	104	80	120				
Ethylbenzene	21.1	0.400	20.00	0	105	80	120				
m,p-Xylene	41.7	1.00	40.00	0	104	80	120				
o-Xylene	20.8	0.500	20.00	0	104	80	120				
Styrene	21.0	0.500	20.00	0	105	80	120				
Isopropylbenzene	21.0	0.500	20.00	0	105	80	120				
Bromoform	22.2	0.500	20.00	0	111	80	120				
1,1,2,2-Tetrachloroethane	21.1	0.400	20.00	0	105	80	120				
n-Propylbenzene	20.8	0.500	20.00	0	104	80	120				
Bromobenzene	20.0	0.500	20.00	0	99.8	80	120				
1,3,5-Trimethylbenzene	20.7	0.250	20.00	0	104	80	120				
2-Chlorotoluene	21.2	0.500	20.00	0	106	80	120				
4-Chlorotoluene	20.8	0.500	20.00	0	104	80	120				
tert-Butylbenzene	20.7	0.500	20.00	0	103	80	120				
1,2,3-Trichloropropane	20.5	0.400	20.00	0	103	80	120				
1,2,4-Trichlorobenzene	20.0	0.750	20.00	0	100	80	120				
sec-Butylbenzene	20.8	0.500	20.00	0	104	80	120				
4-Isopropyltoluene	20.2	0.500	20.00	0	101	80	120				
1,3-Dichlorobenzene	20.9	0.500	20.00	0	105	80	120				
1,4-Dichlorobenzene	20.6	0.500	20.00	0	103	80	120				
n-Butylbenzene	21.4	0.500	20.00	0	107	80	120				
1,2-Dichlorobenzene	20.8	0.500	20.00	0	104	80	120				
1,2-Dibromo-3-chloropropane	21.8	1.00	20.00	0	109	80	120				
1,2,4-Trimethylbenzene	20.9	0.500	20.00	0	104	80	120				
Hexachloro-1,3-butadiene	20.4	0.500	20.00	0	102	80	120				

Work Order: 2105151
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-32280** SampType: **LCS** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **LCSW** Batch ID: **32280** Analysis Date: **5/12/2021** SeqNo: **1354901**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	21.4	1.25	20.00	0	107	80	120				
1,2,3-Trichlorobenzene	19.7	0.700	20.00	0	98.6	80	120				
Surr: Dibromofluoromethane	26.2		25.00		105	80	120				
Surr: Toluene-d8	26.6		25.00		106	80	120				
Surr: 1-Bromo-4-fluorobenzene	27.0		25.00		108	80	120				

NOTES:
S - Outlying spike recovery observed (high bias). Detections will be qualified with a Q.

Sample ID: **MB-32280** SampType: **MBLK** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **MBLKW** Batch ID: **32280** Analysis Date: **5/12/2021** SeqNo: **1354900**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.25									
Chloromethane	ND	0.750									
Vinyl chloride	ND	0.350									
Bromomethane	ND	1.20									
Trichlorofluoromethane (CFC-11)	ND	0.500									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	0.500									
Acetone	ND	6.00									
Methylene chloride	ND	0.750									
trans-1,2-Dichloroethene	ND	0.500									
Methyl tert-butyl ether (MTBE)	ND	0.500									
1,1-Dichloroethane	ND	0.500									
cis-1,2-Dichloroethene	ND	0.500									
(MEK) 2-Butanone	ND	1.50									
Chloroform	ND	0.500									
1,1,1-Trichloroethane (TCA)	ND	0.400									
1,1-Dichloropropene	ND	0.500									
Carbon tetrachloride	ND	0.750									
1,2-Dichloroethane (EDC)	ND	0.400									

Work Order: 2105151
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-32280** SampType: **MBLK** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **MBLKW** Batch ID: **32280** Analysis Date: **5/12/2021** SeqNo: **1354900**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.440									
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	0.500									
Bromodichloromethane	ND	0.500									
Dibromomethane	ND	0.500									
cis-1,3-Dichloropropene	ND	0.500									
Toluene	ND	0.750									
trans-1,3-Dichloropropylene	ND	0.500									
Methyl Isobutyl Ketone (MIBK)	ND	1.25									
1,1,2-Trichloroethane	ND	0.350									
1,3-Dichloropropane	ND	0.500									
Tetrachloroethene (PCE)	ND	0.400									
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.300									
2-Hexanone (MBK)	ND	1.00									
Chlorobenzene	ND	0.500									
1,1,1,2-Tetrachloroethane	ND	0.300									
Ethylbenzene	ND	0.400									
m,p-Xylene	ND	1.00									
o-Xylene	ND	0.500									
Styrene	ND	0.500									
Isopropylbenzene	ND	0.500									
Bromoform	ND	0.500									
1,1,2,2-Tetrachloroethane	ND	0.400									
n-Propylbenzene	ND	0.500									
Bromobenzene	ND	0.500									
1,3,5-Trimethylbenzene	ND	0.250									
2-Chlorotoluene	ND	0.500									
4-Chlorotoluene	ND	0.500									
tert-Butylbenzene	ND	0.500									

Work Order: 2105151
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-32280** SampType: **MBLK** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **MBLKW** Batch ID: **32280** Analysis Date: **5/12/2021** SeqNo: **1354900**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichloropropane	ND	0.400									
1,2,4-Trichlorobenzene	ND	0.750									
sec-Butylbenzene	ND	0.500									
4-Isopropyltoluene	ND	0.500									
1,3-Dichlorobenzene	ND	0.500									
1,4-Dichlorobenzene	ND	0.500									
n-Butylbenzene	ND	0.500									
1,2-Dichlorobenzene	ND	0.500									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2,4-Trimethylbenzene	ND	0.500									
Hexachloro-1,3-butadiene	ND	0.500									
Naphthalene	ND	1.25									
1,2,3-Trichlorobenzene	ND	0.700									
Surr: Dibromofluoromethane	25.4		25.00		102	80.7	121				
Surr: Toluene-d8	25.7		25.00		103	84.5	116				
Surr: 1-Bromo-4-fluorobenzene	24.9		25.00		99.4	86	108				

Sample ID: **2105130-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **BATCH** Batch ID: **32280** Analysis Date: **5/12/2021** SeqNo: **1354886**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.25						0		30	
Chloromethane	ND	0.750						0		30	
Vinyl chloride	ND	0.350						0		30	
Bromomethane	ND	1.20						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.500						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	0.500						0		30	
Acetone	ND	6.00						0		30	
Methylene chloride	ND	0.750						0		30	

Work Order: 2105151
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2105130-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **BATCH** Batch ID: **32280** Analysis Date: **5/12/2021** SeqNo: **1354886**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	ND	0.500						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.500						0		30	
1,1-Dichloroethane	ND	0.500						0		30	
cis-1,2-Dichloroethene	ND	0.500						0		30	
(MEK) 2-Butanone	ND	1.50						0		30	
Chloroform	ND	0.500						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.400						0		30	
1,1-Dichloropropene	ND	0.500						0		30	
Carbon tetrachloride	ND	0.750						0		30	
1,2-Dichloroethane (EDC)	ND	0.400						0		30	
Benzene	ND	0.440						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	0.500						0		30	
Bromodichloromethane	ND	0.500						0		30	
Dibromomethane	ND	0.500						0		30	
cis-1,3-Dichloropropene	ND	0.500						0		30	
Toluene	ND	0.750						0		30	
trans-1,3-Dichloropropylene	ND	0.500						0		30	
Methyl Isobutyl Ketone (MIBK)	ND	1.25						0		30	
1,1,2-Trichloroethane	ND	0.350						0		30	
1,3-Dichloropropane	ND	0.500						0		30	
Tetrachloroethene (PCE)	ND	0.400						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.300						0		30	
2-Hexanone (MBK)	ND	1.00						0		30	
Chlorobenzene	ND	0.500						0		30	
1,1,1,2-Tetrachloroethane	ND	0.300						0		30	
Ethylbenzene	ND	0.400						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	0.500						0		30	

Work Order: 2105151
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2105130-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **BATCH** Batch ID: **32280** Analysis Date: **5/12/2021** SeqNo: **1354886**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	ND	0.500						0		30	
Isopropylbenzene	ND	0.500						0		30	
Bromoform	ND	0.500						0		30	
1,1,2,2-Tetrachloroethane	ND	0.400						0		30	
n-Propylbenzene	ND	0.500						0		30	
Bromobenzene	ND	0.500						0		30	
1,3,5-Trimethylbenzene	ND	0.250						0		30	
2-Chlorotoluene	ND	0.500						0		30	
4-Chlorotoluene	ND	0.500						0		30	
tert-Butylbenzene	ND	0.500						0		30	
1,2,3-Trichloropropane	ND	0.400						0		30	
1,2,4-Trichlorobenzene	ND	0.750						0		30	
sec-Butylbenzene	ND	0.500						0		30	
4-Isopropyltoluene	ND	0.500						0		30	
1,3-Dichlorobenzene	ND	0.500						0		30	
1,4-Dichlorobenzene	ND	0.500						0		30	
n-Butylbenzene	ND	0.500						0		30	
1,2-Dichlorobenzene	ND	0.500						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	0.500						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
Naphthalene	ND	1.25						0		30	
1,2,3-Trichlorobenzene	ND	0.700						0		30	
Surr: Dibromofluoromethane	25.3		25.00		101	80.7	121		0		
Surr: Toluene-d8	25.3		25.00		101	84.5	116		0		
Surr: 1-Bromo-4-fluorobenzene	24.9		25.00		99.5	86	108		0		

Work Order: 2105151
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2105159-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **BATCH** Batch ID: **32280** Analysis Date: **5/12/2021** SeqNo: **1354891**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.25						0		30	
Chloromethane	ND	0.750						0		30	
Vinyl chloride	ND	0.350						0		30	
Bromomethane	ND	1.20						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.500						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	0.500						0		30	
Acetone	ND	6.00						0		30	
Methylene chloride	ND	0.750						0		30	
trans-1,2-Dichloroethene	ND	0.500						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.500						0		30	
1,1-Dichloroethane	ND	0.500						0		30	
cis-1,2-Dichloroethene	ND	0.500						0		30	
(MEK) 2-Butanone	ND	1.50						0		30	
Chloroform	1.06	0.500						1.035	2.23	30	
1,1,1-Trichloroethane (TCA)	ND	0.400						0		30	
1,1-Dichloropropene	ND	0.500						0		30	
Carbon tetrachloride	ND	0.750						0		30	
1,2-Dichloroethane (EDC)	ND	0.400						0		30	
Benzene	ND	0.440						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	0.500						0		30	
Bromodichloromethane	ND	0.500						0		30	
Dibromomethane	ND	0.500						0		30	
cis-1,3-Dichloropropene	ND	0.500						0		30	
Toluene	ND	0.750						0		30	
trans-1,3-Dichloropropylene	ND	0.500						0		30	
Methyl Isobutyl Ketone (MIBK)	ND	1.25						0		30	
1,1,2-Trichloroethane	ND	0.350						0		30	
1,3-Dichloropropane	ND	0.500						0		30	

Work Order: 2105151
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2105159-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **BATCH** Batch ID: **32280** Analysis Date: **5/12/2021** SeqNo: **1354891**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Tetrachloroethene (PCE)	ND	0.400						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.300						0		30	
2-Hexanone (MBK)	ND	1.00						0		30	
Chlorobenzene	ND	0.500						0		30	
1,1,1,2-Tetrachloroethane	ND	0.300						0		30	
Ethylbenzene	ND	0.400						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	0.500						0		30	
Styrene	ND	0.500						0		30	
Isopropylbenzene	ND	0.500						0		30	
Bromoform	ND	0.500						0		30	
1,1,2,2-Tetrachloroethane	ND	0.400						0		30	
n-Propylbenzene	ND	0.500						0		30	
Bromobenzene	ND	0.500						0		30	
1,3,5-Trimethylbenzene	ND	0.250						0		30	
2-Chlorotoluene	ND	0.500						0		30	
4-Chlorotoluene	ND	0.500						0		30	
tert-Butylbenzene	ND	0.500						0		30	
1,2,3-Trichloropropane	ND	0.400						0		30	
1,2,4-Trichlorobenzene	ND	0.750						0		30	
sec-Butylbenzene	ND	0.500						0		30	
4-Isopropyltoluene	ND	0.500						0		30	
1,3-Dichlorobenzene	ND	0.500						0		30	
1,4-Dichlorobenzene	ND	0.500						0		30	
n-Butylbenzene	ND	0.500						0		30	
1,2-Dichlorobenzene	ND	0.500						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	0.500						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	

Work Order: 2105151
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2105159-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **BATCH** Batch ID: **32280** Analysis Date: **5/12/2021** SeqNo: **1354891**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	1.25						0		30	
1,2,3-Trichlorobenzene	ND	0.700						0		30	
Surr: Dibromofluoromethane	25.6		25.00		103	80.7	121		0		
Surr: Toluene-d8	25.2		25.00		101	84.5	116		0		
Surr: 1-Bromo-4-fluorobenzene	24.8		25.00		99.1	86	108		0		

Sample ID: **2105151-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **DC-7-051121** Batch ID: **32280** Analysis Date: **5/13/2021** SeqNo: **1354888**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	7.55	1.25	20.00	0	37.8	8.59	168				
Chloromethane	16.6	0.750	20.00	0	83.2	31.6	166				
Vinyl chloride	17.9	0.350	20.00	0	89.4	57.3	148				
Bromomethane	23.2	1.20	20.00	0	116	36.5	177				
Trichlorofluoromethane (CFC-11)	18.6	0.500	20.00	0	92.9	80.9	136				
Chloroethane	19.8	1.00	20.00	0	98.9	73.2	140				
1,1-Dichloroethene	20.3	0.500	20.00	0	102	87.9	131				
Acetone	51.1	6.00	50.00	0	102	59.8	139				
Methylene chloride	21.0	0.750	20.00	0	105	85.1	127				
trans-1,2-Dichloroethene	20.9	0.500	20.00	0	105	87.7	128				
Methyl tert-butyl ether (MTBE)	20.6	0.500	20.00	0	103	63	141				
1,1-Dichloroethane	21.1	0.500	20.00	0	106	79.9	138				
cis-1,2-Dichloroethene	21.1	0.500	20.00	0	105	87.1	126				
(MEK) 2-Butanone	54.1	1.50	50.00	0	108	64.9	136				
Chloroform	21.3	0.500	20.00	0.2056	106	89.6	126				
1,1,1-Trichloroethane (TCA)	21.3	0.400	20.00	0	106	90.8	127				
1,1-Dichloropropene	21.9	0.500	20.00	0	109	90.7	129				
Carbon tetrachloride	21.5	0.750	20.00	0	108	90.1	129				
1,2-Dichloroethane (EDC)	20.4	0.400	20.00	0	102	80.7	131				
Benzene	21.8	0.440	20.00	0	109	86.9	130				

Work Order: 2105151
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2105151-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **DC-7-051121** Batch ID: **32280** Analysis Date: **5/13/2021** SeqNo: **1354888**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	20.7	0.500	20.00	0	103	83.2	130				
1,2-Dichloropropane	22.3	0.500	20.00	0	111	79.8	135				
Bromodichloromethane	21.9	0.500	20.00	0	109	78.1	133				
Dibromomethane	21.2	0.500	20.00	0	106	77.9	134				
cis-1,3-Dichloropropene	22.1	0.500	20.00	0	110	75.1	128				
Toluene	21.6	0.750	20.00	0	108	85	134				
trans-1,3-Dichloropropylene	22.1	0.500	20.00	0	111	69.7	135				
Methyl Isobutyl Ketone (MIBK)	53.7	1.25	50.00	0	107	58.7	148				
1,1,2-Trichloroethane	21.2	0.350	20.00	0	106	77.5	132				
1,3-Dichloropropane	21.5	0.500	20.00	0	107	77.4	133				
Tetrachloroethene (PCE)	28.8	0.400	20.00	8.347	102	84.6	133				
Dibromochloromethane	20.9	1.00	20.00	0	105	74.6	133				
1,2-Dibromoethane (EDB)	20.7	0.300	20.00	0	103	75.7	132				
2-Hexanone (MBK)	55.0	1.00	50.00	0	110	56	153				
Chlorobenzene	20.5	0.500	20.00	0	103	94.8	115				
1,1,1,2-Tetrachloroethane	20.3	0.300	20.00	0	102	87.1	119				
Ethylbenzene	21.3	0.400	20.00	0	106	89.5	129				
m,p-Xylene	42.2	1.00	40.00	0	106	88.2	127				
o-Xylene	20.9	0.500	20.00	0	104	89.6	120				
Styrene	20.7	0.500	20.00	0	104	89.6	117				
Isopropylbenzene	21.2	0.500	20.00	0	106	90.4	127				
Bromoform	21.7	0.500	20.00	0	108	70.3	133				
1,1,2,2-Tetrachloroethane	22.5	0.400	20.00	0	113	76.7	137				
n-Propylbenzene	21.2	0.500	20.00	0	106	87	133				
Bromobenzene	20.0	0.500	20.00	0	99.8	92.5	114				
1,3,5-Trimethylbenzene	20.9	0.250	20.00	0	104	89.4	125				
2-Chlorotoluene	21.3	0.500	20.00	0	106	89.2	126				
4-Chlorotoluene	20.9	0.500	20.00	0	104	90.5	123				
tert-Butylbenzene	21.1	0.500	20.00	0	105	90.2	125				
1,2,3-Trichloropropane	21.6	0.400	20.00	0	108	66.9	131				

Work Order: 2105151
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2105151-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **5/12/2021** RunNo: **67231**
Client ID: **DC-7-051121** Batch ID: **32280** Analysis Date: **5/13/2021** SeqNo: **1354888**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	19.7	0.750	20.00	0	98.3	70.1	130				
sec-Butylbenzene	21.1	0.500	20.00	0	106	85.8	134				
4-Isopropyltoluene	20.3	0.500	20.00	0	102	88	127				
1,3-Dichlorobenzene	20.6	0.500	20.00	0	103	93.4	118				
1,4-Dichlorobenzene	20.2	0.500	20.00	0	101	93.5	117				
n-Butylbenzene	21.1	0.500	20.00	0	105	79	138				
1,2-Dichlorobenzene	20.4	0.500	20.00	0	102	92.3	119				
1,2-Dibromo-3-chloropropane	22.0	1.00	20.00	0	110	59.6	144				
1,2,4-Trimethylbenzene	20.9	0.500	20.00	0.1532	104	89	126				
Hexachloro-1,3-butadiene	20.0	0.500	20.00	0	99.9	71.3	139				
Naphthalene	22.6	1.25	20.00	0	113	52.4	150				
1,2,3-Trichlorobenzene	20.4	0.700	20.00	0	102	66.9	136				
Surr: Dibromofluoromethane	26.4		25.00		106	80.7	121				
Surr: Toluene-d8	26.2		25.00		105	84.5	116				
Surr: 1-Bromo-4-fluorobenzene	27.3		25.00		109	86	108				S

NOTES:
S - Outlying surrogate recovery(ies) observed.

Sample Log-In Check List

Client Name:	**PES**	Work Order Number:	**2105151**
Logged by:	**Clare Griggs**	Date Received:	**5/11/2021 12:53:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present ☐
2.	How was the sample delivered?	Client				

Log In

3.	Coolers are present?	Yes	☑	No	☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes	☑	No	☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	☑	No	☐	Not Present ☐
6.	Was an attempt made to cool the samples?	Yes	☑	No	☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes	☑	No	☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes	☑	No	☐	
9.	Sufficient sample volume for indicated test(s)?	Yes	☑	No	☐	
10.	Are samples properly preserved?	Yes	☑	No	☐	
11.	Was preservative added to bottles?	Yes	☐	No	☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes	☐	No	☑	NA ☐
13.	Did all samples containers arrive in good condition(unbroken)?	Yes	☑	No	☐	
14.	Does paperwork match bottle labels?	Yes	☑	No	☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐	
16.	Is it clear what analyses were requested?	Yes	☑	No	☐	
17.	Were all holding times able to be met?	Yes	☑	No	☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes	☐	No	☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample	4.1

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 5/11/21 Page: 1 of: 1

Laboratory Project No (internal): 2105151

Special Remarks:

Project Name: MVSC

Project No: 1358.001.02.013

Client: PES ENVIRONMENTAL

Address: 2101 4TH AVE

City, State, Zip: SEATTLE, WA

Telephone: 206 529 3980

Fax: 206 529 3985

Collected by: S MCKERNAN

Location: NORMANDY PARK, WA

Report To (PM): M DAHL

PM Email: MDAHL@PESENV.COM

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	DC-7-051121	5/11/21	1020	GW	5	X												+2 VOA (LAB QC)
2	TB-051121	↓	—	W	1													HOLD
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☐ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x	S MCKERNAN	5/11/21 @ 1246	x	Oliver Khou	5/11/21 1253
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

MEMORANDUM

TO: Project File **DATE:** February 10, 2022

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: Manhattan Village Shopping Center

PROJECT #: 443019-1358001.02.013

TASK: EIM Data Validation Level EPA2A – May and December 2021, Groundwater Samples

LAB: Fremont Work Order Numbers: 2105151 and 2112190

One groundwater sample and a trip blank were collected on May 11th, 2021. Sixteen groundwater samples (including a field duplicate), one waste drum sample, one equipment blank, and a trip blank were collected December 7-10, 2021. Groundwater samples were collected as part of an ongoing Phase II Investigation at the Manhattan Village Shopping Centre site in Normandy Park, Washington. Laboratory analytical services were provided by Fremont Analytical of Seattle Washington. Samples were analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D.

The quality assurance review of the laboratory data for Work Orders 2105151 and 2112190 are summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2020).

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested. No concerns, issues, or anomalies were identified in the laboratory report.

Sample Collection and Preservation

The samples were stored on ice in coolers and delivered in good condition to the laboratory. Sample temperatures at the time of receipt were slightly below EPA's recommended temperature

preservation range of less than 6.0 °Centigrade. No data qualifications are warranted with the following discussion:

- Work Order 2112190: Review of Fremont's Sample Log-In Checklist indicates that headspace was present in both VOC vials for sample W-Drum-121021. No action is taken other than to note this.

Holding Times

USEPA Method 8260D:
All samples were analyzed for VOCs within the EPA recommended holding time of 14 days for preserved water. All holding time criteria were met.

Initial and Continuing Calibration

Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Fremont did not indicate any issues with initial or continuing calibration verification (CCV) criteria.

Method Blank Results

USEPA Method 8260D:
Laboratory method blank was included with the analytical batch per method requirement. The target analytes (VOCs) were not detected in the method blank at or above the reporting limits (RLs).

Trip Blank Results

Two trip blanks (TB-051121 and TB-121021) were collected and one trip blank (TB-051121) was placed on hold. The target analytes (VOCs) were not detected in the trip blank (TB-121021) at or above the RLs.

Equipment Blank Results

An equipment blank (EQ-120821) was collected. The target analytes (VOCs) were not detected in the equipment blank at or above the RLs.

Field Duplicate Analyses

One field duplicate pair (DC-7-120821 and MW-100-120821) was collected. Field duplicate results are comparable and relative percent differences (RPDs) for VOCs are within project requirements of 30% RPD.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate analysis were performed on a client sample and on non-client samples within the analytical batches. The RPDs for VOCs are within the laboratory control limit of 30% RPD.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate percent recovery (%R) results for the samples, method blanks, laboratory duplicates, matrix spike samples, and laboratory control samples are within the laboratory surrogate control limits with the following exception:

- Work Order 2105151: Matrix spike sample surrogate recovery is above control limit criteria. No action is taken since the surrogate recoveries are acceptable and within criteria for the parent sample (DC-7-051121).

Laboratory Control Samples

USEPA Method 8260D:
The laboratory control sample and laboratory control sample duplicate (LCS/LCSD) %R's and RPDs are within the laboratory control limits with the following exceptions:

- Work Order 2105151: LCS (analytical batch 32280) recovery for bromomethane exceeds criteria however no action is necessary since this compound is not detected in the associated sample.

- Work Order 2112190: LCS (analytical batch 34731) recoveries for multiple compounds exceed criteria however no action is necessary since these compounds are not detected in the associated samples.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on client samples. MS/MSD %R's and RPDs are within the laboratory control limits with the following exceptions:

- Work Order 2112190: Matrix spike analysis was performed on sample MW-100-120821. Multiple matrix spike recoveries are below the control limit criteria. **All VOC results for field duplicate sample MW-100-120821 and, by default, the parent sample, sample DC-7-120821, are estimated and qualified (UJ/J).**

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory reports with the following discussion:

- Electronic data deliverables (EDDs) for these Work Orders were provided by the laboratory and data validator qualifiers were entered where needed.

Quantitation Limits

The RLs indicate the minimum quantity of a target analyte that can be confidently determined by the reference method. The RLs were acceptable for the project; therefore, no data qualifications were warranted.

Data Assessment

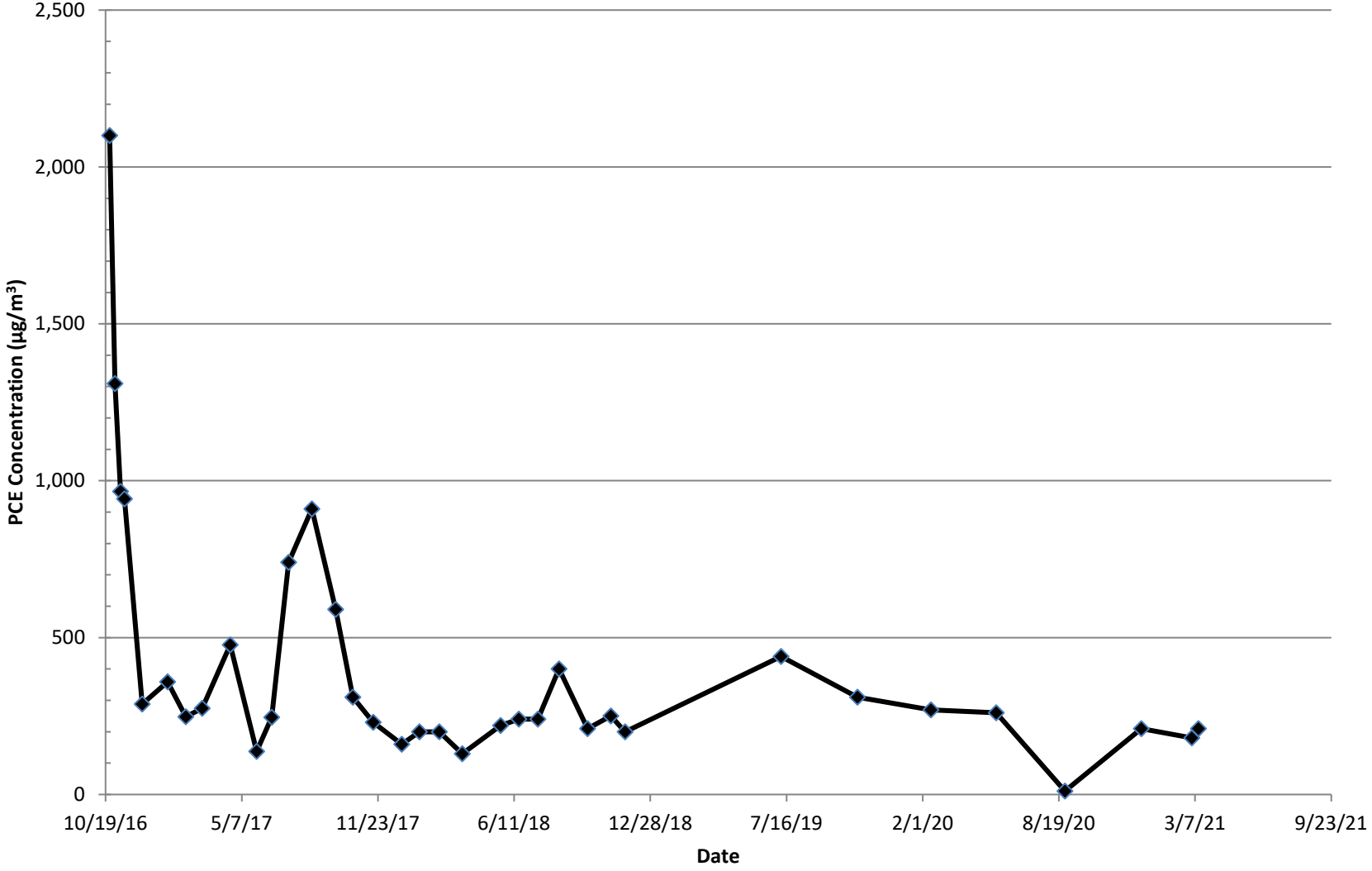
Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

ATTACHMENT E

O&M CHARTS AND SUMMARY TABLES

- Chart E1 – SVE Discharge PCE Concentrations
- Chart E2 – Cumulative PCE Removed
- Table E3 – Historical SVE Leg Analytical Results
- Table E4 - Soil Vapor Monitoring Probe Field Data

Attachment E1
SVE Discharge PCE Concentrations
Manhattan Village/Harris Properties



Attachment E2
Cumulative PCE Removed
Manhattan Village/Harris Properties

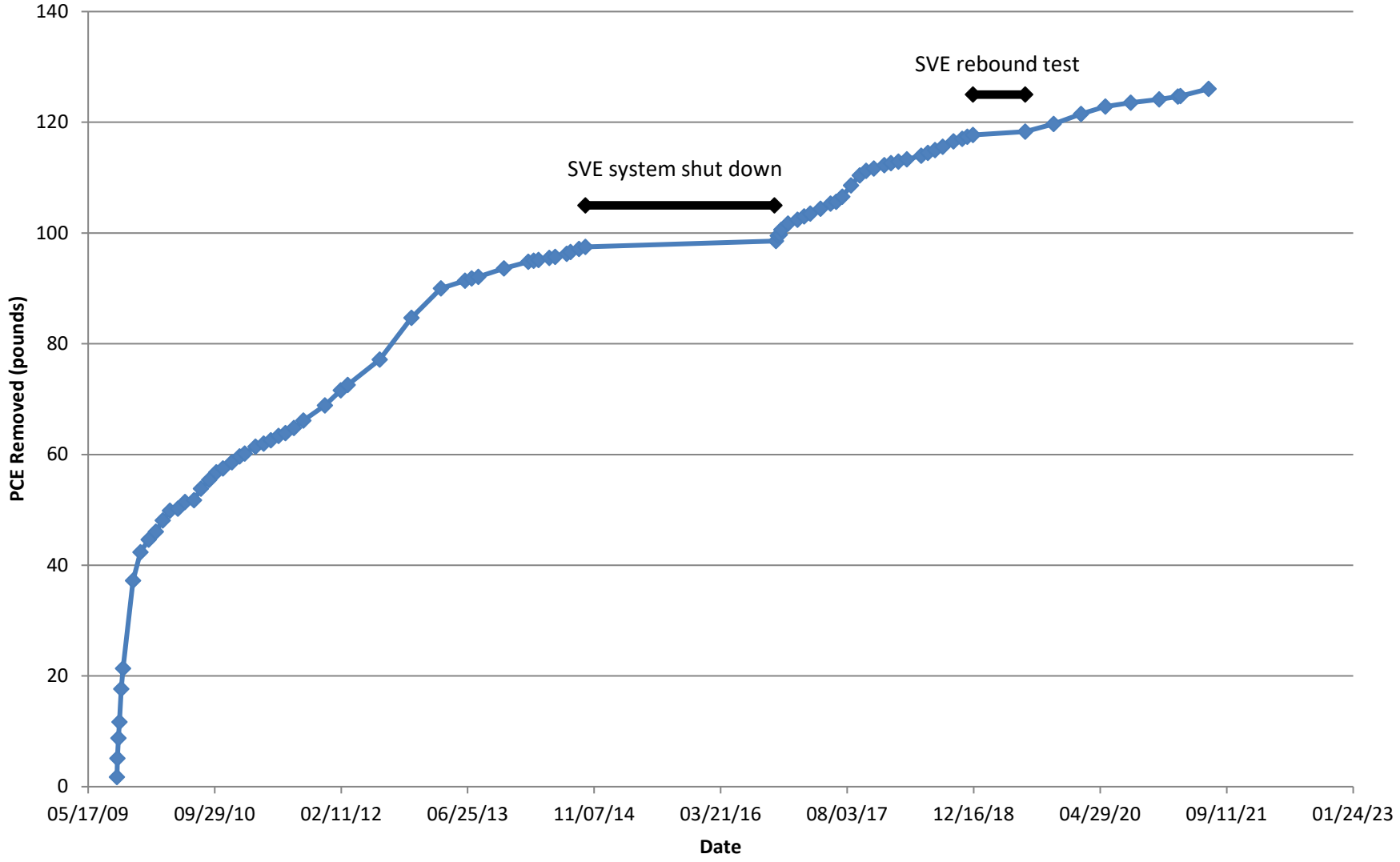


Table E3
Historical SVE Leg Analytical Results
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

SVE Well	Screen Depth (ft bgs)	06/04/10 (µg/m3)	01/26/11 (µg/m3)	12/09/11 (µg/m3)	11/05/13 (µg/m3)	12/12/16 (µg/m3)	12/12/16 (scfm)	12/28/17 (µg/m3)	12/28/17 (scfm)	09/27/18 (µg/m3)	09/27/18 (scfm)	03/02/21 (µg/m3)	03/02/21 (scfm)
SVE-1	10-35	3,900	1,300	1,600	1,010	499	46	120	44	160	48	--	--
SVE-2	10-35	740	1,600	1,300	977	374	47	210	39	240	43	--	--
SVE-3	10-30	7,100	2,900	2,500	1,920	338	44	50	38	750	47	--	--
SVE-4	10-30	330	870	910	412	332	32	59	26	130	41	--	--
SVE-5	10-30	5,100	2,500	1,200	499	716	31	170	20	270	53	--	45
SVE-6	5-10	17,000	4,400	2,900	827	1,490	30	150	47	950	39	--	38
SVE-7	10-30	3,300	1,700	1,400	723	1,130	31	350	32	400	30	--	45
SVE-8	10-30	590	800	6	448	703	30	320	18	210	51	--	47
SVE-9	10-30	880	740	750	325	379	36	170	17	170	23	--	--
SVE-10	10-30	1,300	1,100	1,300	709	398	49	290	42	270	48	--	45
SVE-11A	5.0-20.0	--	--	--	--	136	35	68	47	100	46	--	43
SVE-11B	20.0-35.0	--	--	--	--	149	47	24	37	68	41	--	--
SVE-12A	5.0-20.0	--	--	--	--	217	23	310	33	110	31	--	38
SVE-12B	20.0-35.0	--	--	--	--	295	48	54	35	160	37	--	--
SVE-13A	5.0-20.0	--	--	--	--	145	48	36	43	94	46	--	--
SVE-13B	20.0-35.0	--	--	--	--	241	47	180	47	96	41	--	--
SVE-14	19.6-34.6	--	--	--	--	144	37	120	38	110	44	--	--
SVE-15	20.6-35.0	--	--	--	--	373	35	190	30	170	39	--	--
SVE-16	20.5-34.8	--	--	--	--	587	35	310	44	330	36	--	--
SVE-17	19.9-29.9	--	--	--	--	65.1	43	5.9	35	3.3	11	--	--
SVE-18	19.8-29.8	--	--	--	--	380	42	59	48	110	40	--	--
SVE-19	20.0-30.0	--	--	--	--	147	44	39	49	71	45	--	--
SVE-20	10.3-25.4	--	--	--	--	--	--	--	--	--	--	170	46
SVE-21	25.7-37.7	--	--	--	--	--	--	--	--	--	--	310	44
SVE-22	20.6-35.6	--	--	--	--	--	--	--	--	--	--	230	45
SVE-23	20.3-35.3	--	--	--	--	--	--	--	--	--	--	170	46
SVE-24	10.3-22.6	--	--	--	--	--	--	--	--	--	--	69	46
SVE-25	22.8-35.7	--	--	--	--	--	--	--	--	--	--	7.4	57
Stack	--	3,000	2,050	1,300	730	280	860	160	160	210	879	180	585

Notes:

1. Tetrachloroethene (PCE) concentrations in micrograms per cubic meter (µg/m^3)
2. Flow rate in standard cubic feet per minute (scfm)
3. '-- = NA or NM
4. SVE-1 through SVE-10 have been operating since 2009. Flow rates for wells and stack are not readily available through 2013.
5. SVE-11A through SVE-19 have been operating since 2016
6. SVE-20 through SVE-25 have been operating since 2021

Table E4
Soil Vapor Monitoring Probe Field Data
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

	SVS-10		SVS-11		SVS-13		SVS-14		SVS-15		SVS-17	
Date	Vacuum (in. w.c.)	VOC[1] (ppm)	Vacuum (in. w.c.)	VOC[1] (ppm)	Vacuum (in. w.c.)	VOC[1] (ppm)	Vacuum (in. w.c.)	VOC[1] (ppm)	Vacuum (in. w.c.)	VOC (ppm)	Vacuum (in. w.c.)	VOC[1] (ppm)
4/20/21	0.1	0.5	0.2	0.4	0.7	0.3	0.2	0.3	0.2	0.3	2.8	0.5
5/27/21	-	-	-	-	-	-	-	-	-	-	3.2	0.1

Notes:

1. As measured with a photoionization detector (PID)
2. Unable to remove stainless steel cover to monitor VP-12 and VP-16
3. VP-10 may not have an air tight seal

in. w.c. = inches of water column

ppm = parts per million as measured with a photo-ionization detector (PID)

ATTACHMENT F

WASTE DISPOSAL INFORMATION

STRAIGHT BILL OF LADING

ORIGINAL — NOT NEGOTIABLE

Shipper No. 21267

Carrier No. 024

Page 1 of 4

Marine Vacuum Service Inc.

(Name of carrier) (SCAC)

Date 1-16-20

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

TO:

Consignee Marine Vacuum Service Inc.

Street 1516 South Graham Street

City Seattle State WA Zip Code 98108

FROM:

Shipper [illegible] Environmental

Street 17821 1st Ave S

City Burien State WA Zip Code

24 hr. Emergency Contact Tel. No. ChemTel 1-800-255-3924 Contract MIS3627926

Route

Vehicle Number 024

No. of Units & Container Type	HM	BASIC DESCRIPTION UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 TT	X	(DOT Spec Tank Required) UN1863 Fuel, Aviation, Turbin Engine, Class 3, PG I				
1 TT	X	(DOT Spec Tank Required) UN1203 Gasoline, Mixture Class 3, PG II				
1 TT	X	(DOT Spec Tank Required) UN1203 Gasoline, Class 3, PG II				
1 TT	X	NA1993 Diesel Mixture, Class 3, PG III				
1 TT	X	NA1993 Diesel, Class 3, PG III				
1 TT	X	NA1270 Petroleum Oil, Class 3, PG I				
1 TT	X	NA1270 Petroleum Oil, Mixture, Class 3, PG I				
1 TT		Oily Waste Water Non Reg by DOT				
1 TT		Waste Water Non Reg by DOT	1,300	gallons		
1 TT		Used Oil Non Reg by DOT				
1 TT		Used Coolant Non Reg by DOT				

PLACARDS TENDERED: YES ☐ NO ☐

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

_____ Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

_____ (Signature of Consignor)

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER

PER [illegible]

1-16-20

CARRIER Mgr Van

PER [illegible]

DATE 1-16-20

Permanent post-office address of shipper.

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

PES Environmental, Inc.
Matt Dahl
1215 Fourth Avenue, Suite 1350
Seattle, WA 98161

RE: MVSC - Harris
Work Order Number: 1912061

December 11, 2019

Attention Matt Dahl:

Fremont Analytical, Inc. received 1 sample(s) on 12/4/2019 for the analyses presented in the following report.

Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,



Brianna Barnes
Project Manager

Date: *12/11/2019*

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris
Work Order: 1912061

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1912061-001	W-COND-120419	12/04/2019 12:20 PM	12/04/2019 2:15 PM

Case Narrative

WO#: **1912061**
Date: **12/11/2019**

CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: PES Environmental, Inc. **Collection Date:** 12/4/2019 12:20:00 PM
Project: MVSC - Harris
Lab ID: 1912061-001 **Matrix:** Water
Client Sample ID: **W-COND-120419**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 26739 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Chloromethane	ND	2.00		µg/L	1	12/9/2019 3:47:48 PM
Vinyl chloride	ND	0.200		µg/L	1	12/9/2019 3:47:48 PM
Bromomethane	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Chloroethane	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Methylene chloride	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Chloroform	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Carbon tetrachloride	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Benzene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	12/9/2019 3:47:48 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Bromodichloromethane	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Dibromomethane	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Toluene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Dibromochloromethane	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	12/9/2019 3:47:48 PM
Chlorobenzene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Ethylbenzene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
m,p-Xylene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
o-Xylene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Styrene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Isopropylbenzene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Bromoform	ND	2.00		µg/L	1	12/9/2019 3:47:48 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM

Analytical Report

Work Order: **1912061**
Date Reported: **12/11/2019**

Client: PES Environmental, Inc.
Collection Date: 12/4/2019 12:20:00 PM
Project: MVSC - Harris
Lab ID: 1912061-001
Matrix: Water
Client Sample ID: **W-COND-120419**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 26739		Analyst: KT
n-Propylbenzene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Bromobenzene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
2-Chlorotoluene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
4-Chlorotoluene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
tert-Butylbenzene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	12/9/2019 3:47:48 PM
sec-Butylbenzene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
n-Butylbenzene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	12/9/2019 3:47:48 PM
Naphthalene	ND	1.00		µg/L	1	12/9/2019 3:47:48 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	12/9/2019 3:47:48 PM
Surr: Dibromofluoromethane	95.4	45.4 - 152		%Rec	1	12/9/2019 3:47:48 PM
Surr: Toluene-d8	96.1	40.1 - 139		%Rec	1	12/9/2019 3:47:48 PM
Surr: 1-Bromo-4-fluorobenzene	86.6	64.2 - 128		%Rec	1	12/9/2019 3:47:48 PM

Work Order: 1912061
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-26739** SampType: **LCS** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **LCSW** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111709**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	18.0	1.00	20.00	0	90.1	32.2	196				
Chloromethane	15.9	2.00	20.00	0	79.5	37.8	173				
Vinyl chloride	18.1	0.200	20.00	0	90.4	67.7	154				
Bromomethane	16.9	1.00	20.00	0	84.5	21.9	223				
Trichlorofluoromethane (CFC-11)	18.9	1.00	20.00	0	94.4	80.7	139				
Chloroethane	17.9	1.00	20.00	0	89.5	72.5	149				
1,1-Dichloroethene	18.9	1.00	20.00	0	94.5	82.5	140				
Acetone	43.7	5.00	50.00	0	87.4	62.8	147				
Methylene chloride	18.3	1.00	20.00	0	91.4	77.9	131				
trans-1,2-Dichloroethene	19.1	1.00	20.00	0	95.5	80.5	133				
Methyl tert-butyl ether (MTBE)	19.5	1.00	20.00	0	97.6	65	138				
1,1-Dichloroethane	18.2	1.00	20.00	0	90.8	77.8	135				
cis-1,2-Dichloroethene	19.2	1.00	20.00	0	95.9	82.1	130				
Chloroform	18.9	1.00	20.00	0	94.6	78.6	133				
1,1,1-Trichloroethane (TCA)	19.6	1.00	20.00	0	97.9	79.9	135				
1,1-Dichloropropene	19.2	1.00	20.00	0	96.0	83	134				
Carbon tetrachloride	20.1	1.00	20.00	0	101	79.3	137				
1,2-Dichloroethane (EDC)	19.1	1.00	20.00	0	95.7	71.1	134				
Benzene	19.0	1.00	20.00	0	94.8	82.4	131				
Trichloroethene (TCE)	19.1	0.500	20.00	0	95.6	80.9	133				
1,2-Dichloropropane	18.5	1.00	20.00	0	92.7	78.5	131				
Bromodichloromethane	19.2	1.00	20.00	0	95.9	75.9	132				
Dibromomethane	18.8	1.00	20.00	0	94.2	77.6	130				
cis-1,3-Dichloropropene	20.1	1.00	20.00	0	100	71.6	127				
Toluene	19.4	1.00	20.00	0	97.0	75.9	137				
trans-1,3-Dichloropropylene	20.1	1.00	20.00	0	101	65.2	126				
1,1,2-Trichloroethane	19.5	1.00	20.00	0	97.3	71.7	136				
1,3-Dichloropropane	18.9	1.00	20.00	0	94.4	72.7	132				
Tetrachloroethene (PCE)	20.6	1.00	20.00	0	103	81.5	132				
Dibromochloromethane	20.1	1.00	20.00	0	101	70.8	131				
1,2-Dibromoethane (EDB)	19.2	0.250	20.00	0	96.2	70.1	133				

Work Order: 1912061
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-26739** SampType: **LCS** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **LCSW** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111709**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	20.2	1.00	20.00	0	101	84.5	124				
1,1,1,2-Tetrachloroethane	20.7	1.00	20.00	0	104	81.4	124				
Ethylbenzene	20.0	1.00	20.00	0	100	82.8	132				
m,p-Xylene	41.3	1.00	40.00	0	103	80.7	130				
o-Xylene	20.6	1.00	20.00	0	103	82	126				
Styrene	20.5	1.00	20.00	0	103	80.7	123				
Isopropylbenzene	20.8	1.00	20.00	0	104	85.1	129				
Bromoform	21.8	2.00	20.00	0	109	70.6	122				
1,1,2,2-Tetrachloroethane	20.1	1.00	20.00	0	101	78.7	124				
n-Propylbenzene	20.6	1.00	20.00	0	103	83.6	132				
Bromobenzene	20.8	1.00	20.00	0	104	80.3	124				
1,3,5-Trimethylbenzene	20.7	1.00	20.00	0	104	81.6	128				
2-Chlorotoluene	20.0	1.00	20.00	0	100	81.6	136				
4-Chlorotoluene	19.7	1.00	20.00	0	98.7	81.7	127				
tert-Butylbenzene	21.2	1.00	20.00	0	106	79.9	133				
1,2,3-Trichloropropane	20.0	1.00	20.00	0	100	63.1	137				
1,2,4-Trichlorobenzene	21.2	2.00	20.00	0	106	80	130				
sec-Butylbenzene	20.8	1.00	20.00	0	104	85.2	131				
4-Isopropyltoluene	21.0	1.00	20.00	0	105	82.5	129				
1,3-Dichlorobenzene	20.7	1.00	20.00	0	103	89.8	122				
1,4-Dichlorobenzene	20.6	1.00	20.00	0	103	89	122				
n-Butylbenzene	20.9	1.00	20.00	0	105	81.5	141				
1,2-Dichlorobenzene	20.5	1.00	20.00	0	103	87.8	124				
1,2-Dibromo-3-chloropropane	21.0	1.00	20.00	0	105	62.9	142				
1,2,4-Trimethylbenzene	20.4	1.00	20.00	0	102	75.1	132				
Hexachloro-1,3-butadiene	23.3	4.00	20.00	0	117	85.3	130				
Naphthalene	20.8	1.00	20.00	0	104	55	158				
1,2,3-Trichlorobenzene	21.2	4.00	20.00	0	106	74	139				
Surr: Dibromofluoromethane	23.8		25.00		95.3	81.1	118				
Surr: Toluene-d8	23.9		25.00		95.5	85.7	113				
Surr: 1-Bromo-4-fluorobenzene	25.6		25.00		102	84.2	111				

Work Order: 1912061
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-26739** SampType: **LCS** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **LCSW** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111709**

Sample ID: **LCSD-26739** SampType: **LCSD** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **LCSW02** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111710**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.3	1.00	20.00	0	81.5	32.2	196	18.01	10.0	20	
Chloromethane	15.3	2.00	20.00	0	76.7	37.8	173	15.89	3.51	20	
Vinyl chloride	16.8	0.200	20.00	0	84.2	67.7	154	18.08	7.14	20	
Bromomethane	16.6	1.00	20.00	0	82.9	21.9	223	16.90	1.97	20	
Trichlorofluoromethane (CFC-11)	18.0	1.00	20.00	0	90.1	80.7	139	18.87	4.64	20	
Chloroethane	17.5	1.00	20.00	0	87.6	72.5	149	17.89	2.08	20	
1,1-Dichloroethene	18.1	1.00	20.00	0	90.3	82.5	140	18.89	4.52	20	
Acetone	47.8	5.00	50.00	0	95.6	62.8	147	43.70	8.95	20	
Methylene chloride	18.1	1.00	20.00	0	90.3	77.9	131	18.29	1.28	20	
trans-1,2-Dichloroethene	18.3	1.00	20.00	0	91.7	80.5	133	19.10	4.07	20	
Methyl tert-butyl ether (MTBE)	19.4	1.00	20.00	0	96.9	65	138	19.52	0.701	20	
1,1-Dichloroethane	17.8	1.00	20.00	0	89.0	77.8	135	18.15	1.97	20	
cis-1,2-Dichloroethene	18.7	1.00	20.00	0	93.5	82.1	130	19.19	2.52	20	
Chloroform	18.4	1.00	20.00	0	92.1	78.6	133	18.92	2.67	20	
1,1,1-Trichloroethane (TCA)	18.8	1.00	20.00	0	93.9	79.9	135	19.58	4.14	20	
1,1-Dichloropropene	18.4	1.00	20.00	0	92.1	83	134	19.19	4.10	20	
Carbon tetrachloride	19.3	1.00	20.00	0	96.3	79.3	137	20.12	4.33	20	
1,2-Dichloroethane (EDC)	18.8	1.00	20.00	0	93.9	71.1	134	19.13	1.90	20	
Benzene	18.3	1.00	20.00	0	91.7	82.4	131	18.96	3.33	20	
Trichloroethene (TCE)	18.6	0.500	20.00	0	93.0	80.9	133	19.12	2.71	20	
1,2-Dichloropropane	18.1	1.00	20.00	0	90.6	78.5	131	18.53	2.28	20	
Bromodichloromethane	18.8	1.00	20.00	0	94.0	75.9	132	19.19	2.02	20	
Dibromomethane	18.4	1.00	20.00	0	92.2	77.6	130	18.84	2.17	20	
cis-1,3-Dichloropropene	19.4	1.00	20.00	0	97.2	71.6	127	20.08	3.23	20	
Toluene	18.6	1.00	20.00	0	92.8	75.9	137	19.40	4.40	20	

Work Order: 1912061
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCSD-26739** SampType: **LCSD** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **LCSW02** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111710**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	19.9	1.00	20.00	0	99.5	65.2	126	20.13	1.17	20	
1,1,2-Trichloroethane	18.9	1.00	20.00	0	94.5	71.7	136	19.46	2.89	20	
1,3-Dichloropropane	18.8	1.00	20.00	0	94.1	72.7	132	18.88	0.330	20	
Tetrachloroethene (PCE)	19.6	1.00	20.00	0	98.2	81.5	132	20.60	4.79	20	
Dibromochloromethane	19.7	1.00	20.00	0	98.3	70.8	131	20.11	2.31	20	
1,2-Dibromoethane (EDB)	19.1	0.250	20.00	0	95.5	70.1	133	19.25	0.714	20	
Chlorobenzene	19.7	1.00	20.00	0	98.5	84.5	124	20.25	2.71	20	
1,1,1,2-Tetrachloroethane	20.1	1.00	20.00	0	101	81.4	124	20.72	2.97	20	
Ethylbenzene	19.4	1.00	20.00	0	97.1	82.8	132	20.04	3.14	20	
m,p-Xylene	39.9	1.00	40.00	0	99.7	80.7	130	41.27	3.38	20	
o-Xylene	19.9	1.00	20.00	0	99.3	82	126	20.59	3.62	20	
Styrene	20.1	1.00	20.00	0	100	80.7	123	20.53	2.33	20	
Isopropylbenzene	19.8	1.00	20.00	0	99.2	85.1	129	20.82	4.83	20	
Bromoform	21.4	2.00	20.00	0	107	70.6	122	21.75	1.62	20	
1,1,2,2-Tetrachloroethane	20.2	1.00	20.00	0	101	78.7	124	20.14	0.243	20	
n-Propylbenzene	19.8	1.00	20.00	0	99.1	83.6	132	20.59	3.79	20	
Bromobenzene	20.2	1.00	20.00	0	101	80.3	124	20.78	2.59	20	
1,3,5-Trimethylbenzene	20.0	1.00	20.00	0	99.9	81.6	128	20.73	3.72	20	
2-Chlorotoluene	19.3	1.00	20.00	0	96.4	81.6	136	20.05	3.92	20	
4-Chlorotoluene	19.8	1.00	20.00	0	98.9	81.7	127	19.73	0.286	20	
tert-Butylbenzene	20.2	1.00	20.00	0	101	79.9	133	21.20	5.00	20	
1,2,3-Trichloropropane	20.6	1.00	20.00	0	103	63.1	137	20.01	2.74	20	
1,2,4-Trichlorobenzene	21.3	2.00	20.00	0	107	80	130	21.17	0.728	20	
sec-Butylbenzene	19.6	1.00	20.00	0	98.1	85.2	131	20.80	5.79	20	
4-Isopropyltoluene	20.0	1.00	20.00	0	100	82.5	129	21.01	4.75	20	
1,3-Dichlorobenzene	20.2	1.00	20.00	0	101	89.8	122	20.68	2.32	20	
1,4-Dichlorobenzene	20.2	1.00	20.00	0	101	89	122	20.63	2.06	20	
n-Butylbenzene	20.2	1.00	20.00	0	101	81.5	141	20.93	3.65	20	
1,2-Dichlorobenzene	20.5	1.00	20.00	0	102	87.8	124	20.51	0.151	20	
1,2-Dibromo-3-chloropropane	21.4	1.00	20.00	0	107	62.9	142	20.97	2.23	20	
1,2,4-Trimethylbenzene	19.8	1.00	20.00	0	98.8	75.1	132	20.42	3.30	20	

Work Order: 1912061
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCSD-26739** SampType: **LCSD** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **LCSW02** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111710**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloro-1,3-butadiene	22.4	4.00	20.00	0	112	85.3	130	23.32	3.90	20	
Naphthalene	21.6	1.00	20.00	0	108	55	158	20.82	3.83	20	
1,2,3-Trichlorobenzene	21.2	4.00	20.00	0	106	74	139	21.15	0.269	20	
Surr: Dibromofluoromethane	23.8		25.00		95.2	81.1	118		0		
Surr: Toluene-d8	23.8		25.00		95.0	85.7	113		0		
Surr: 1-Bromo-4-fluorobenzene	25.5		25.00		102	84.2	111		0		

Sample ID: **MB-26739** SampType: **MBLK** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **MBLKW** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111711**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									
Chloromethane	ND	2.00									
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Acetone	ND	5.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	1.00									
cis-1,2-Dichloroethene	ND	1.00									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									
Benzene	ND	1.00									

Work Order: 1912061
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-26739** SampType: **MBLK** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **MBLKW** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111711**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									
Dibromomethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
Toluene	ND	1.00									
trans-1,3-Dichloropropylene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.250									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	2.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									
4-Isopropyltoluene	ND	1.00									

Work Order: 1912061
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-26739** SampType: **MBLK** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **MBLKW** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111711**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2,4-Trimethylbenzene	ND	1.00									
Hexachloro-1,3-butadiene	ND	4.00									
Naphthalene	ND	1.00									
1,2,3-Trichlorobenzene	ND	4.00									
Surr: Dibromofluoromethane	23.8		25.00		95.3	45.4	152				
Surr: Toluene-d8	24.1		25.00		96.3	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	24.2		25.00		96.6	64.2	128				

Sample ID: **1912034-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **BATCH** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111694**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	
Chloromethane	ND	2.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Acetone	ND	5.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	

Work Order: 1912061
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1912034-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **BATCH** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111694**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	2.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	

Work Order: 1912061
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1912034-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **BATCH** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111694**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	4.00						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	24.2		25.00		96.9	45.4	152		0		
Surr: Toluene-d8	24.1		25.00		96.2	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	22.2		25.00		89.0	64.2	128		0		

Sample ID: **1912068-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **BATCH** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111700**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	
Chloromethane	ND	2.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	

Work Order: 1912061
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1912068-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **BATCH** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111700**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acetone	ND	5.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	

Work Order: 1912061
CLIENT: PES Environmental, Inc.
Project: MVSC - Harris

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **1912068-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **12/9/2019** RunNo: **55841**
Client ID: **BATCH** Batch ID: **26739** Analysis Date: **12/9/2019** SeqNo: **1111700**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	ND	2.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	4.00						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	23.7		25.00		94.8	45.4	152		0		
Surr: Toluene-d8	23.8		25.00		95.1	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	23.2		25.00		92.8	64.2	128		0		

Sample Log-In Check List

Client Name:	**PES**	Work Order Number:	**1912061**
Logged by:	**Clare Griggs**	Date Received:	**12/4/2019 2:15:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Required ☑
6.	Was an attempt made to cool the samples?	Yes ☐	No ☑	NA ☐
	Samples received straight from field.			
7.	Were all items received at a temperature of >0°C to 10.0°C *	Yes ☐	No ☐	NA ☑
8.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
10.	Are samples properly preserved?	Yes ☑	No ☐	
11.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes ☐	No ☑	NA ☐
13.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
14.	Does paperwork match bottle labels?	Yes ☑	No ☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
16.	Is it clear what analyses were requested?	Yes ☑	No ☐	
17.	Were all holding times able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler	10.9
Sample	9.6

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 4 December 2019 Page: 1 of:

Project Name: MVSC - Home

Project No: 1358.001.02.013

Collected by: Ben Hecht

Location: Normandy Park, WA

Report To (PM): Matt Dahl

PM Email: On File

Laboratory Project No (internal): 191206l

Special Remarks:

Sample Disposal: ☐ Return to client ☑ Disposal by lab (after 30 days)

Client: PES Environmental

Address: On File

City, State, Zip:

Telephone:

Fax:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	W-COND-120419	12/4/19	1220	AQ	X													
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x [signature]	12/4/19 @ 1415	x [signature]	12/4/19 1415
Relinquished x	Date/Time	Received x	Date/Time

Turn-around Time:
- ☑ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

STRAIGHT BILL OF LADING
ORIGINAL — NOT NEGOTIABLE

Shipper No. 24960

Carrier No. 226

Page 1 of 4

Marine Vacuum Service Inc.
(Name of carrier) (SCAC)

Date 12-18-20

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

TO:
Consignee Marine Vacuum Service Inc.
Street 1516 South Graham Street
City Seattle State WA Zip Code 98108

FROM:
Shipper PES Environmental on behalf of Harris Family LTD
Street 17817 1st Ave S
City Normandy Park State WA Zip Code
24 hr. Emergency Contact Tel. No. ChemTel 1-800-255-3924 Contract MIS3627926

Route

Vehicle Number 226

No. of Units & Container Type	HM	BASIC DESCRIPTION UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 TT	X	(DOT Spec Tank Required) UN1863 Fuel Aviation, Turbin Engine, Class 3, PG I				
1 TT	X	(DOT Spec Tank Required) UN1863 Fuel Aviation, Mixture, Class 3, PG I				
1 TT	X	(DOT Spec Tank Required) UN1203 Gasoline, Mixture Class 3, PG II				
1 TT	X	(DOT Spec Tank Required) UN1203 Gasoline, Class 3, PG II				
1 TT	X	NA1993 Diesel Mixture, Class 3, PG III				
1 TT	X	NA1993 Diesel, Class 3, PG III				
1 TT	X	NA1270 Petroleum Oil, Class 3, PG I				
1 TT	X	NA1270 Petroleum Oil, Mixture, Class 3, PG I				
1 TT		Oily Waste Water Non Reg by DOT				
1 TT		Waste Water Non Reg by DOT	1,500	gallons		
1 TT		Used Oil Non Reg by DOT				
1 TT		Used Coolant Non Reg by DOT				

PLACARDS TENDERED: YES ☐ NO ☒

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER
PER [signature] on behalf of Harris Family LTD
12-18-20

CARRIER Mar Vac
PER [signature]
DATE 12-18-20

Permanent post-office address of shipper.

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

PES Environmental, Inc.
Matt Dahl
1215 Fourth Avenue, Suite 1350
Seattle, WA 98161

RE: MVSC
Work Order Number: 2011388

November 24, 2020

Attention Matt Dahl:

Fremont Analytical, Inc. received 1 sample(s) on 11/18/2020 for the analyses presented in the following report.

Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Date: *11/24/2020*

CLIENT: PES Environmental, Inc.
Project: MVSC
Work Order: 2011388

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2011388-001	Cond-111820	11/18/2020 2:43 PM	11/18/2020 4:26 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Original

Case Narrative

WO#: **2011388**
Date: **11/24/2020**

CLIENT: PES Environmental, Inc.
Project: MVSC

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: PES Environmental, Inc.
Collection Date: 11/18/2020 2:43:00 PM
Project: MVSC
Lab ID: 2011388-001
Matrix: Water
Client Sample ID: **Cond-111820**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30481 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Chloromethane	ND	2.00		µg/L	1	11/19/2020 5:45:12 PM
Vinyl chloride	ND	0.200		µg/L	1	11/19/2020 5:45:12 PM
Bromomethane	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Chloroethane	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Methylene chloride	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Chloroform	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Benzene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/19/2020 5:45:12 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Bromodichloromethane	ND	1.00	Q	µg/L	1	11/19/2020 5:45:12 PM
Dibromomethane	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
cis-1,3-Dichloropropene	ND	1.00	Q	µg/L	1	11/19/2020 5:45:12 PM
Toluene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	11/19/2020 5:45:12 PM
Chlorobenzene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Ethylbenzene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
m,p-Xylene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
o-Xylene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Styrene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Bromoform	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM

Client: PES Environmental, Inc. **Collection Date:** 11/18/2020 2:43:00 PM
Project: MVSC
Lab ID: 2011388-001 **Matrix:** Water
Client Sample ID: Cond-111820

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30481		Analyst: KT
n-Propylbenzene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Bromobenzene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	11/19/2020 5:45:12 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	11/19/2020 5:45:12 PM
Naphthalene	ND	1.00		µg/L	1	11/19/2020 5:45:12 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	11/19/2020 5:45:12 PM
Surr: Dibromofluoromethane	96.7	84.8 - 113		%Rec	1	11/19/2020 5:45:12 PM
Surr: Toluene-d8	97.2	88.5 - 110		%Rec	1	11/19/2020 5:45:12 PM
Surr: 1-Bromo-4-fluorobenzene	93.1	89.9 - 108		%Rec	1	11/19/2020 5:45:12 PM

Work Order: 2011388
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30481** SampType: **LCS** Units: **µg/L** Prep Date: **11/19/2020** RunNo: **63543**
Client ID: **LCSW** Batch ID: **30481** Analysis Date: **11/19/2020** SeqNo: **1275475**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	29.3	1.00	20.00	0	147	17.8	204				
Chloromethane	23.0	2.00	20.00	0	115	46.7	158				
Vinyl chloride	20.9	0.200	20.00	0	105	62.3	148				
Bromomethane	21.7	1.00	20.00	0	109	49.7	151				
Trichlorofluoromethane (CFC-11)	20.7	1.00	20.00	0	103	80.6	131				
Chloroethane	20.9	1.00	20.00	0	104	69.7	138				
1,1-Dichloroethene	19.9	1.00	20.00	0	99.7	77	134				
Methylene chloride	19.3	1.00	20.00	0	96.6	73.7	126				
trans-1,2-Dichloroethene	19.7	1.00	20.00	0	98.3	83	127				
Methyl tert-butyl ether (MTBE)	18.1	1.00	20.00	0	90.6	68.2	125				
1,1-Dichloroethane	19.5	1.00	20.00	0	97.4	70.3	133				
cis-1,2-Dichloroethene	18.4	1.00	20.00	0	92.1	83.7	122				
Chloroform	18.8	1.00	20.00	0	94.0	81.9	122				
1,1,1-Trichloroethane (TCA)	19.5	1.00	20.00	0	97.4	78.2	133				
1,1-Dichloropropene	20.1	1.00	20.00	0	100	84.1	127				
Carbon tetrachloride	20.7	1.00	20.00	0	103	81.8	129				
1,2-Dichloroethane (EDC)	22.7	1.00	20.00	0	113	73.3	123				
Benzene	21.6	1.00	20.00	0	108	80.5	126				
Trichloroethene (TCE)	23.0	0.500	20.00	0	115	75.5	132				
1,2-Dichloropropane	25.1	1.00	20.00	0	125	79.2	124				S
Bromodichloromethane	23.4	1.00	20.00	0	117	78.4	122				
Dibromomethane	23.0	1.00	20.00	0	115	78.3	122				
cis-1,3-Dichloropropene	22.2	1.00	20.00	0	111	77.6	117				
Toluene	22.3	1.00	20.00	0	111	82.9	124				
trans-1,3-Dichloropropylene	22.3	1.00	20.00	0	111	72.5	122				
1,1,2-Trichloroethane	21.9	1.00	20.00	0	109	78.2	125				
1,3-Dichloropropane	21.7	1.00	20.00	0	108	76.7	124				
Tetrachloroethene (PCE)	22.7	1.00	20.00	0	114	90.5	121				
Dibromochloromethane	21.8	1.00	20.00	0	109	77.1	122				
1,2-Dibromoethane (EDB)	21.6	0.250	20.00	0	108	77.9	122				

Work Order: 2011388
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30481** SampType: **LCS** Units: **µg/L** Prep Date: **11/19/2020** RunNo: **63543**
Client ID: **LCSW** Batch ID: **30481** Analysis Date: **11/19/2020** SeqNo: **1275475**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	19.7	1.00	20.00	0	98.6	84.3	121				
1,1,1,2-Tetrachloroethane	19.7	1.00	20.00	0	98.5	80.3	123				
Ethylbenzene	19.8	1.00	20.00	0	99.1	85.3	123				
m,p-Xylene	39.6	1.00	40.00	0	99.0	85.8	122				
o-Xylene	19.9	1.00	20.00	0	99.7	85.4	121				
Styrene	19.6	1.00	20.00	0	97.8	82	120				
Isopropylbenzene	19.9	1.00	20.00	0	99.7	87.7	123				
Bromoform	19.8	1.00	20.00	0	99.2	69.3	129				
1,1,2,2-Tetrachloroethane	18.8	1.00	20.00	0	94.2	74.4	133				
n-Propylbenzene	19.8	1.00	20.00	0	98.8	83.9	126				
Bromobenzene	19.5	1.00	20.00	0	97.5	85.1	120				
1,3,5-Trimethylbenzene	19.7	1.00	20.00	0	98.4	83.6	123				
2-Chlorotoluene	19.8	1.00	20.00	0	98.8	84.2	123				
4-Chlorotoluene	19.8	1.00	20.00	0	99.0	82.3	123				
tert-Butylbenzene	19.6	1.00	20.00	0	98.2	84.1	126				
1,2,3-Trichloropropane	19.7	1.00	20.00	0	98.7	73.6	118				
1,2,4-Trichlorobenzene	19.5	2.00	20.00	0	97.6	73.2	129				
sec-Butylbenzene	19.6	1.00	20.00	0	97.9	83.9	126				
4-Isopropyltoluene	19.6	1.00	20.00	0	98.2	83.3	124				
1,3-Dichlorobenzene	19.9	1.00	20.00	0	99.5	87.3	121				
1,4-Dichlorobenzene	20.0	1.00	20.00	0	99.8	87.4	119				
n-Butylbenzene	19.9	1.00	20.00	0	99.7	82.8	124				
1,2-Dichlorobenzene	19.8	1.00	20.00	0	99.2	87.8	119				
1,2-Dibromo-3-chloropropane	18.9	1.00	20.00	0	94.6	61.6	135				
1,2,4-Trimethylbenzene	19.7	1.00	20.00	0	98.3	82.1	124				
Hexachloro-1,3-butadiene	19.5	0.500	20.00	0	97.4	79.8	129				
Naphthalene	18.3	1.00	20.00	0	91.3	67	138				
1,2,3-Trichlorobenzene	19.5	4.00	20.00	0	97.4	72.3	131				
Surr: Dibromofluoromethane	24.5		25.00		98.1	84.8	113				
Surr: Toluene-d8	27.6		25.00		111	88.5	110				S

Work Order: 2011388
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30481**	SampType: **LCS**	Units: **µg/L**	Prep Date: **11/19/2020**	RunNo: **63543**	
Client ID: **LCSW**	Batch ID: **30481**		Analysis Date: **11/19/2020**	SeqNo: **1275475**	

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	25.9		25.00		104	89.9	108				

NOTES:
S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.
S - Outlying surrogate recovery(ies) observed.

Sample ID: **MB-30481**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **11/19/2020**	RunNo: **63543**	
Client ID: **MBLKW**	Batch ID: **30481**		Analysis Date: **11/19/2020**	SeqNo: **1275474**	

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									
Chloromethane	ND	2.00									
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	1.00									
cis-1,2-Dichloroethene	ND	1.00									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									
Benzene	ND	1.00									
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									Q
Dibromomethane	ND	1.00									

Work Order: 2011388
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30481** SampType: **MBLK** Units: **µg/L** Prep Date: **11/19/2020** RunNo: **63543**
Client ID: **MBLKW** Batch ID: **30481** Analysis Date: **11/19/2020** SeqNo: **1275474**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	1.00									Q
Toluene	ND	1.00									
trans-1,3-Dichloropropylene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.250									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									
4-Isopropyltoluene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									

Work Order: 2011388
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30481** SampType: **MBLK** Units: **µg/L** Prep Date: **11/19/2020** RunNo: **63543**
Client ID: **MBLKW** Batch ID: **30481** Analysis Date: **11/19/2020** SeqNo: **1275474**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2,4-Trimethylbenzene	ND	1.00									
Hexachloro-1,3-butadiene	ND	0.500									
Naphthalene	ND	1.00									
1,2,3-Trichlorobenzene	ND	4.00									
Surr: Dibromofluoromethane	22.2		25.00		88.8	84.8	113				
Surr: Toluene-d8	24.3		25.00		97.3	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	23.6		25.00		94.3	89.9	108				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011387-003ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/19/2020** RunNo: **63543**
Client ID: **BATCH** Batch ID: **30481** Analysis Date: **11/19/2020** SeqNo: **1275459**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	
Chloromethane	ND	2.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	

Work Order: 2011388
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011387-003ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/19/2020** RunNo: **63543**
Client ID: **BATCH** Batch ID: **30481** Analysis Date: **11/19/2020** SeqNo: **1275459**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	Q
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	Q
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	

Work Order: 2011388
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011387-003ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/19/2020** RunNo: **63543**
Client ID: **BATCH** Batch ID: **30481** Analysis Date: **11/19/2020** SeqNo: **1275459**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	24.0		25.00		96.1	84.8	113		0		
Surr: Toluene-d8	24.1		25.00		96.3	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	22.9		25.00		91.7	89.9	108		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011390-001BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/19/2020** RunNo: **63543**
Client ID: **BATCH** Batch ID: **30481** Analysis Date: **11/19/2020** SeqNo: **1275463**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	
Chloromethane	ND	2.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Methylene chloride	ND	1.00						0		30	

Work Order: 2011388
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011390-001BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/19/2020** RunNo: **63543**
Client ID: **BATCH** Batch ID: **30481** Analysis Date: **11/19/2020** SeqNo: **1275463**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	Q
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	Q
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	1.00						0		30	

Work Order: 2011388
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011390-001BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/19/2020** RunNo: **63543**
Client ID: **BATCH** Batch ID: **30481** Analysis Date: **11/19/2020** SeqNo: **1275463**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	24.1		25.00		96.3	84.8	113		0		
Surr: Toluene-d8	24.3		25.00		97.0	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	23.1		25.00		92.3	89.9	108		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011394-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/19/2020** RunNo: **63543**
Client ID: **BATCH** Batch ID: **30481** Analysis Date: **11/19/2020** SeqNo: **1275468**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	18.6	1.00	20.00	0	92.9	17.8	204				

Work Order: 2011388
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011394-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/19/2020** RunNo: **63543**
Client ID: **BATCH** Batch ID: **30481** Analysis Date: **11/19/2020** SeqNo: **1275468**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	14.0	2.00	20.00	0	69.8	46.7	158				
Vinyl chloride	15.5	0.200	20.00	0	77.6	62.3	148				
Bromomethane	17.0	1.00	20.00	0	84.9	49.7	151				
Trichlorofluoromethane (CFC-11)	18.6	1.00	20.00	0	92.8	80.6	131				
Chloroethane	17.5	1.00	20.00	0	87.4	69.7	138				
1,1-Dichloroethene	18.9	1.00	20.00	0	94.6	77	134				
Methylene chloride	16.9	1.00	20.00	0	84.6	73.7	126				
trans-1,2-Dichloroethene	17.8	1.00	20.00	0	88.9	83	127				
Methyl tert-butyl ether (MTBE)	15.6	1.00	20.00	0	77.8	68.2	125				
1,1-Dichloroethane	17.3	1.00	20.00	0	86.4	70.3	133				
cis-1,2-Dichloroethene	26.0	1.00	20.00	0	130	83.7	122				S
Chloroform	24.3	1.00	20.00	0	121	81.9	122				
1,1,1-Trichloroethane (TCA)	23.1	1.00	20.00	0	115	78.2	133				
1,1-Dichloropropene	23.1	1.00	20.00	0	115	84.1	127				
Carbon tetrachloride	22.5	1.00	20.00	0	112	81.8	129				
1,2-Dichloroethane (EDC)	20.7	1.00	20.00	0	104	73.3	123				
Benzene	22.8	1.00	20.00	0	114	80.5	126				
Trichloroethene (TCE)	15.9	0.500	20.00	0	79.7	75.5	132				
1,2-Dichloropropane	16.7	1.00	20.00	0	83.6	79.2	124				
Bromodichloromethane	15.5	1.00	20.00	0	77.3	78.4	122				S
Dibromomethane	15.7	1.00	20.00	0	78.3	78.3	122				
cis-1,3-Dichloropropene	14.2	1.00	20.00	0	71.1	77.6	117				S
Toluene	17.7	1.00	20.00	0	88.7	82.9	124				
trans-1,3-Dichloropropylene	16.8	1.00	20.00	0	83.8	72.5	122				
1,1,2-Trichloroethane	16.4	1.00	20.00	0	81.8	78.2	125				
1,3-Dichloropropane	16.1	1.00	20.00	0	80.3	76.7	124				
Tetrachloroethene (PCE)	18.0	1.00	20.00	0	89.8	90.5	121				S
Dibromochloromethane	16.6	1.00	20.00	0	83.2	77.1	122				
1,2-Dibromoethane (EDB)	16.5	0.250	20.00	0	82.5	77.9	122				
Chlorobenzene	21.0	1.00	20.00	0	105	84.3	121				

Work Order: 2011388
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011394-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/19/2020** RunNo: **63543**
Client ID: **BATCH** Batch ID: **30481** Analysis Date: **11/19/2020** SeqNo: **1275468**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	21.1	1.00	20.00	0	106	80.3	123				
Ethylbenzene	20.7	1.00	20.00	0	104	85.3	123				
m,p-Xylene	43.1	1.00	40.00	0	108	85.8	122				
o-Xylene	21.2	1.00	20.00	0	106	85.4	121				
Styrene	20.3	1.00	20.00	0	101	82	120				
Isopropylbenzene	20.6	1.00	20.00	0	103	87.7	123				
Bromoform	20.6	1.00	20.00	0	103	69.3	129				
1,1,2,2-Tetrachloroethane	20.1	1.00	20.00	0	101	74.4	133				
n-Propylbenzene	20.0	1.00	20.00	0	99.9	83.9	126				
Bromobenzene	20.8	1.00	20.00	0	104	85.1	120				
1,3,5-Trimethylbenzene	20.1	1.00	20.00	0	101	83.6	123				
2-Chlorotoluene	20.0	1.00	20.00	0	100	84.2	123				
4-Chlorotoluene	19.9	1.00	20.00	0	99.5	82.3	123				
tert-Butylbenzene	20.2	1.00	20.00	0	101	84.1	126				
1,2,3-Trichloropropane	18.5	1.00	20.00	0	92.5	73.6	118				
1,2,4-Trichlorobenzene	18.8	2.00	20.00	0	93.9	73.2	129				
sec-Butylbenzene	19.1	1.00	20.00	0	95.3	83.9	126				
4-Isopropyltoluene	19.3	1.00	20.00	0	96.4	83.3	124				
1,3-Dichlorobenzene	20.6	1.00	20.00	0	103	87.3	121				
1,4-Dichlorobenzene	20.5	1.00	20.00	0	103	87.4	119				
n-Butylbenzene	17.8	1.00	20.00	0	89.2	82.8	124				
1,2-Dichlorobenzene	20.4	1.00	20.00	0	102	87.8	119				
1,2-Dibromo-3-chloropropane	18.8	1.00	20.00	0	94.0	61.6	135				
1,2,4-Trimethylbenzene	20.1	1.00	20.00	0	101	82.1	124				
Hexachloro-1,3-butadiene	13.2	0.500	20.00	0	66.0	79.8	129				S
Naphthalene	19.3	1.00	20.00	0	96.6	67	138				
1,2,3-Trichlorobenzene	19.1	4.00	20.00	0	95.6	72.3	131				
Surr: Dibromofluoromethane	26.6		25.00		106	84.8	113				
Surr: Toluene-d8	20.2		25.00		80.7	88.5	110				S
Surr: 1-Bromo-4-fluorobenzene	25.2		25.00		101	89.9	108				

Work Order: 2011388
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011394-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/19/2020** RunNo: **63543**
Client ID: **BATCH** Batch ID: **30481** Analysis Date: **11/19/2020** SeqNo: **1275468**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:
S - Outlying spike recovery(ies) observed.
S - Outlying surrogate recovery(ies) observed.

Sample Log-In Check List

Client Name:	**PES**	Work Order Number:	**2011388**
Logged by:	**Carissa True**	Date Received:	**11/18/2020 4:26:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present ☐
2.	How was the sample delivered?	Client				

Log In

3.	Coolers are present?	Yes	☑	No	☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes	☑	No	☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	☐	No	☐	Not Present ☑
6.	Was an attempt made to cool the samples?	Yes	☑	No	☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes	☑	No	☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes	☑	No	☐	
9.	Sufficient sample volume for indicated test(s)?	Yes	☑	No	☐	
10.	Are samples properly preserved?	Yes	☑	No	☐	
11.	Was preservative added to bottles?	Yes	☐	No	☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes	☐	No	☑	NA ☐
13.	Did all samples containers arrive in good condition(unbroken)?	Yes	☑	No	☐	
14.	Does paperwork match bottle labels?	Yes	☑	No	☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐	
16.	Is it clear what analyses were requested?	Yes	☑	No	☐	
17.	Were all holding times able to be met?	Yes	☑	No	☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes	☐	No	☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample 1	3.1

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/18/2020 Page: 1 of: 1

Laboratory Project No (internal): 2011308

Special Remarks:

Project Name: MUSC

Project No: 1358.001.02.015

Client: PES Environmental

Address: 1215 4th Ave #1350

Collected by: Sean Kounasky

City, State, Zip: Seattle, WA, 98

Location: Normandy Park, WA

Telephone: 206-529-3980

Report To (PM): Matt Dahl

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax: 206-529-3985

PM Email: Mdahl@pesenv.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	~~Cond-111820~~	11/18/20	1443	W	X													
2	Cond-111820	11/18/20	1443	W	X													
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x	11/18/2020 @ 1600	x	11/18/20 @ 1626
x		x	

Turn-around Time:
- ☒ Standard
- ☐ 3 Day
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

STRAIGHT BILL OF LADING

ORIGINAL — NOT NEGOTIABLE

Shipper No. 24490

Carrier No. 36770

Page 1 of 4

Marine Vacuum Service Inc.
(Name of carrier) (SCAC)

Date 02/26/21

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec 3.

TO:
Consignee Marine Vacuum Service Inc.
Street 1516 South Graham Street
City Seattle State WA Zip Code 98108

FROM:
Shipper Pes Environmental for Harris Family LTD
Street 17817 1st Ave S
City Normandy park State Wa Zip Code
24 hr. Emergency Contact Tel. No. ChemTel 1-800-255-3924
Contract MIS3627926

Route

Vehicle Number 025

No. of Units & Container Type	HM	BASIC DESCRIPTION UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 TT	X	(DOT Spec Tank Required) UN1863 Fuel Aviation, Turbin Engine, Class 3, PG I				
1 TT	X	(DOT Spec Tank Required) UN1863 Fuel Aviation, Mixture, Class 3, PG I				
1 TT	X	(DOT Spec Tank Required) UN1203 Gasoline, Mixture Class 3, PG II				
1 TT	X	(DOT Spec Tank Required) UN1203 Gasoline, Class 3, PG II				
1 TT	X	NA1993 Diesel Mixture, Class 3, PG III				
1 TT	X	NA1993 Diesel, Class 3, PG III				
1 TT	X	NA1270 Petroleum Oil, Class 3, PG I				
1 TT	X	NA1270 Petroleum Oil, Mixture, Class 3, PG I				
1 TT		Oily Waste Water Non Reg by DOT				
1 TT		Waste Water Non Reg by DOT	600 gallons			
1 TT		Used Oil Non Reg by DOT				
1 TT		Used Coolant Non Reg by DOT				

PLACARDS TENDERED: YES ☐ NO ☒

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of Item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID (except when box at right is checked) ☐ Check box if charges are to be collect

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER Pes Environmental
PER on behalf of Harris Family LTD
DATE

CARRIER Mar Vac
PER Han Chy
DATE 02/26/21

Permanent post-office address of shipper.

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

PES Environmental, Inc.
Matt Dahl
2101 Fourth Avenue, Suite 1310
Seattle, WA 98121

RE: MVSC
Work Order Number: 2101475

February 03, 2021

Attention Matt Dahl:

Fremont Analytical, Inc. received 2 sample(s) on 1/29/2021 for the analyses presented in the following report.

Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Date: *02/03/2021*

CLIENT: PES Environmental, Inc.
Project: MVSC
Work Order: 2101475

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2101475-001	Cond-012921	01/29/2021 7:55 AM	01/29/2021 3:09 PM
2101475-002	Trip Blank	01/25/2021 4:30 PM	01/29/2021 3:09 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Original

Case Narrative

WO#: **2101475**
Date: **2/3/2021**

CLIENT: PES Environmental, Inc.
Project: MVSC

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: PES Environmental, Inc.
Collection Date: 1/29/2021 7:55:00 AM
Project: MVSC
Lab ID: 2101475-001
Matrix: Water
Client Sample ID: **Cond-012921**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 31230		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Chloromethane	ND	2.00		µg/L	1	2/2/2021 1:36:30 AM
Vinyl chloride	ND	0.200		µg/L	1	2/2/2021 1:36:30 AM
Bromomethane	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Chloroethane	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Methylene chloride	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Chloroform	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Carbon tetrachloride	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Benzene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	2/2/2021 1:36:30 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Bromodichloromethane	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Dibromomethane	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Toluene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Dibromochloromethane	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	2/2/2021 1:36:30 AM
Chlorobenzene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Ethylbenzene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
m,p-Xylene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
o-Xylene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Styrene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Isopropylbenzene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Bromoform	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM

Client: PES Environmental, Inc. **Collection Date:** 1/29/2021 7:55:00 AM
Project: MVSC
Lab ID: 2101475-001 **Matrix:** Water
Client Sample ID: Cond-012921

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 31230		Analyst: KT
n-Propylbenzene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Bromobenzene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
2-Chlorotoluene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
4-Chlorotoluene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
tert-Butylbenzene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	2/2/2021 1:36:30 AM
sec-Butylbenzene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
n-Butylbenzene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	2/2/2021 1:36:30 AM
Naphthalene	ND	1.00		µg/L	1	2/2/2021 1:36:30 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	2/2/2021 1:36:30 AM
Surr: Dibromofluoromethane	96.8	87.8 - 114		%Rec	1	2/2/2021 1:36:30 AM
Surr: Toluene-d8	93.9	90.6 - 109		%Rec	1	2/2/2021 1:36:30 AM
Surr: 1-Bromo-4-fluorobenzene	96.6	88.6 - 111		%Rec	1	2/2/2021 1:36:30 AM

Work Order: 2101475
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-31230** SampType: **LCS** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **LCSW** Batch ID: **31230** Analysis Date: **2/1/2021** SeqNo: **1308036**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	18.3	1.00	20.00	0	91.4	19.1	179				
Chloromethane	18.3	2.00	20.00	0	91.6	42.8	150				
Vinyl chloride	19.2	0.200	20.00	0	96.2	68.4	134				
Bromomethane	17.1	1.00	20.00	0	85.6	33.1	152				
Trichlorofluoromethane (CFC-11)	19.7	1.00	20.00	0	98.3	72.4	127				
Chloroethane	19.1	1.00	20.00	0	95.5	64.4	129				
1,1-Dichloroethene	19.2	1.00	20.00	0	95.9	79.2	118				
Acetone	52.7	5.00	50.00	0	105	58.9	135				
Methylene chloride	18.7	1.00	20.00	0	93.5	81.6	116				
trans-1,2-Dichloroethene	19.3	1.00	20.00	0	96.7	82	116				
Methyl tert-butyl ether (MTBE)	25.4	1.00	20.00	0	127	70.9	121				S
1,1-Dichloroethane	18.8	1.00	20.00	0	93.8	80.8	120				
cis-1,2-Dichloroethene	19.0	1.00	20.00	0	95.0	82.5	114				
(MEK) 2-Butanone	49.5	2.00	50.00	0	98.9	65.7	127				
Chloroform	18.8	1.00	20.00	0	94.2	81.8	115				
1,1,1-Trichloroethane (TCA)	19.1	1.00	20.00	0	95.3	81.2	117				
1,1-Dichloropropene	20.2	1.00	20.00	0	101	82.3	118				
Carbon tetrachloride	20.4	1.00	20.00	0	102	79.4	118				
1,2-Dichloroethane (EDC)	20.0	1.00	20.00	0	100	79.6	118				
Benzene	19.6	1.00	20.00	0	98.2	83.4	116				
Trichloroethene (TCE)	20.0	0.500	20.00	0	100	81.5	115				
1,2-Dichloropropane	19.5	1.00	20.00	0	97.5	83.3	118				
Bromodichloromethane	19.9	1.00	20.00	0	99.5	82.4	114				
Dibromomethane	20.6	1.00	20.00	0	103	78.6	115				
cis-1,3-Dichloropropene	21.4	1.00	20.00	0	107	85.3	115				
Toluene	20.1	1.00	20.00	0	100	83.6	117				
trans-1,3-Dichloropropylene	22.0	1.00	20.00	0	110	81.5	118				
1,1,2-Trichloroethane	20.4	1.00	20.00	0	102	79.2	115				
1,3-Dichloropropane	20.3	1.00	20.00	0	101	80.1	116				
Tetrachloroethene (PCE)	21.1	1.00	20.00	0	106	85.7	113				

Work Order: 2101475
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-31230** SampType: **LCS** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **LCSW** Batch ID: **31230** Analysis Date: **2/1/2021** SeqNo: **1308036**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	20.2	1.00	20.00	0	101	77.3	116				
1,2-Dibromoethane (EDB)	20.6	0.250	20.00	0	103	76.8	116				
Chlorobenzene	19.5	1.00	20.00	0	97.7	82.9	114				
1,1,1,2-Tetrachloroethane	19.7	1.00	20.00	0	98.7	82.2	113				
Ethylbenzene	19.7	1.00	20.00	0	98.4	82.8	117				
m,p-Xylene	39.6	1.00	40.00	0	99.0	81.6	116				
o-Xylene	19.9	1.00	20.00	0	99.6	82.4	115				
Styrene	19.7	1.00	20.00	0	98.5	81.7	114				
Isopropylbenzene	19.9	1.00	20.00	0	99.7	81.8	116				
Bromoform	20.9	1.00	20.00	0	104	77	116				
1,1,2,2-Tetrachloroethane	20.3	1.00	20.00	0	101	75.1	126				
n-Propylbenzene	19.8	1.00	20.00	0	99.2	85.3	118				
Bromobenzene	20.0	1.00	20.00	0	99.9	83.7	116				
1,3,5-Trimethylbenzene	19.9	1.00	20.00	0	99.7	84.8	116				
2-Chlorotoluene	19.9	1.00	20.00	0	99.7	83.9	121				
4-Chlorotoluene	19.8	1.00	20.00	0	99.2	84.7	116				
tert-Butylbenzene	19.8	1.00	20.00	0	99.2	86.4	115				
1,2,3-Trichloropropane	20.6	1.00	20.00	0	103	74.8	121				
1,2,4-Trichlorobenzene	21.7	2.00	20.00	0	109	71.4	130				
sec-Butylbenzene	20.1	1.00	20.00	0	100	87	117				
4-Isopropyltoluene	20.1	1.00	20.00	0	100	84.6	120				
1,3-Dichlorobenzene	20.4	1.00	20.00	0	102	87.9	115				
1,4-Dichlorobenzene	20.4	1.00	20.00	0	102	88.4	115				
n-Butylbenzene	20.7	1.00	20.00	0	104	91.1	126				
1,2-Dichlorobenzene	20.6	1.00	20.00	0	103	87	117				
1,2-Dibromo-3-chloropropane	21.4	1.00	20.00	0	107	64.5	130				
1,2,4-Trimethylbenzene	19.9	1.00	20.00	0	99.6	87.9	119				
Hexachloro-1,3-butadiene	22.5	0.500	20.00	0	112	85.2	123				
Naphthalene	22.1	1.00	20.00	0	110	65.2	134				
1,2,3-Trichlorobenzene	21.2	4.00	20.00	0	106	73.9	127				

Work Order: 2101475
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-31230** SampType: **LCS** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **LCSW** Batch ID: **31230** Analysis Date: **2/1/2021** SeqNo: **1308036**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	23.4		25.00		93.5	87.8	114				
Surr: Toluene-d8	25.6		25.00		102	90.6	109				
Surr: 1-Bromo-4-fluorobenzene	26.1		25.00		105	88.6	111				

NOTES:
S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID: **MB-31230** SampType: **MBLK** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **MBLKW** Batch ID: **31230** Analysis Date: **2/1/2021** SeqNo: **1308035**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									
Chloromethane	ND	2.00									
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Acetone	ND	5.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	1.00									
cis-1,2-Dichloroethene	ND	1.00									
(MEK) 2-Butanone	ND	2.00									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									
Benzene	ND	1.00									
Trichloroethene (TCE)	ND	0.500									

Work Order: 2101475
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-31230** SampType: **MBLK** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **MBLKW** Batch ID: **31230** Analysis Date: **2/1/2021** SeqNo: **1308035**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									
Dibromomethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
Toluene	ND	1.00									
trans-1,3-Dichloropropylene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.250									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									
4-Isopropyltoluene	ND	1.00									

Work Order: 2101475
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-31230** SampType: **MBLK** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **MBLKW** Batch ID: **31230** Analysis Date: **2/1/2021** SeqNo: **1308035**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2,4-Trimethylbenzene	ND	1.00									
Hexachloro-1,3-butadiene	ND	0.500									
Naphthalene	ND	1.00									
1,2,3-Trichlorobenzene	ND	4.00									
Surr: Dibromofluoromethane	22.9		25.00		91.8	87.8	114				
Surr: Toluene-d8	22.9		25.00		91.7	90.6	109				
Surr: 1-Bromo-4-fluorobenzene	24.2		25.00		97.0	88.6	111				

Sample ID: **2101479-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **BATCH** Batch ID: **31230** Analysis Date: **2/1/2021** SeqNo: **1308023**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	
Chloromethane	ND	2.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Acetone	ND	5.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	

Work Order: 2101475
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2101479-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **BATCH** Batch ID: **31230** Analysis Date: **2/1/2021** SeqNo: **1308023**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
(MEK) 2-Butanone	ND	2.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	

Work Order: 2101475
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2101479-002ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **BATCH** Batch ID: **31230** Analysis Date: **2/1/2021** SeqNo: **1308023**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	23.7		25.00		94.9	87.8	114		0		
Surr: Toluene-d8	22.9		25.00		91.6	90.6	109		0		
Surr: 1-Bromo-4-fluorobenzene	24.3		25.00		97.3	88.6	111		0		

Sample ID: **2101469-007ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **BATCH** Batch ID: **31230** Analysis Date: **2/2/2021** SeqNo: **1308019**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	
Chloromethane	ND	2.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	

Work Order: 2101475
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2101469-007ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **BATCH** Batch ID: **31230** Analysis Date: **2/2/2021** SeqNo: **1308019**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Acetone	ND	5.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
(MEK) 2-Butanone	ND	2.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	

Work Order: 2101475
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2101469-007ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **BATCH** Batch ID: **31230** Analysis Date: **2/2/2021** SeqNo: **1308019**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	24.4		25.00		97.4	87.8	114		0		
Surr: Toluene-d8	23.2		25.00		93.0	90.6	109		0		
Surr: 1-Bromo-4-fluorobenzene	24.1		25.00		96.5	88.6	111		0		

Work Order: 2101475
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2101468-006AMS** SampType: **MS** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **BATCH** Batch ID: **31230** Analysis Date: **2/2/2021** SeqNo: **1308011**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	17.8	1.00	20.00	0	88.9	20.5	173				
Chloromethane	19.2	2.00	20.00	0	96.1	25.1	166				
Vinyl chloride	20.2	0.200	20.00	0	101	64.1	148				
Bromomethane	20.5	1.00	20.00	0	102	20.3	157				
Trichlorofluoromethane (CFC-11)	20.8	1.00	20.00	0	104	73.4	136				
Chloroethane	19.7	1.00	20.00	0	98.4	70.2	133				
1,1-Dichloroethene	20.6	1.00	20.00	0.2015	102	81.7	131				
Acetone	53.9	5.00	50.00	0	108	52.2	152				
Methylene chloride	19.3	1.00	20.00	0	96.3	82.3	125				
trans-1,2-Dichloroethene	20.0	1.00	20.00	0.2549	98.7	87.2	125				
Methyl tert-butyl ether (MTBE)	22.3	1.00	20.00	0	111	72.3	131				
1,1-Dichloroethane	19.2	1.00	20.00	0	96.2	81.1	135				
cis-1,2-Dichloroethene	44.4	1.00	20.00	25.42	95.0	85.1	123				
(MEK) 2-Butanone	50.7	2.00	50.00	0	101	64	141				
Chloroform	21.6	1.00	20.00	0	108	84.4	126				
1,1,1-Trichloroethane (TCA)	21.7	1.00	20.00	0	109	88.4	126				
1,1-Dichloropropene	21.8	1.00	20.00	0	109	87.3	130				
Carbon tetrachloride	22.2	1.00	20.00	0	111	86.1	128				
1,2-Dichloroethane (EDC)	21.4	1.00	20.00	0.5869	104	79.1	132				
Benzene	20.9	1.00	20.00	0.1178	104	85.3	129				
Trichloroethene (TCE)	216	0.500	20.00	192.3	118	80.5	124				
1,2-Dichloropropane	20.6	1.00	20.00	0	103	83.1	130				
Bromodichloromethane	20.9	1.00	20.00	0	104	84.2	122				
Dibromomethane	21.6	1.00	20.00	0	108	81.5	124				
cis-1,3-Dichloropropene	19.9	1.00	20.00	0	99.5	81.3	122				
Toluene	21.1	1.00	20.00	0	105	87.3	124				
trans-1,3-Dichloropropylene	19.7	1.00	20.00	0	98.7	76.5	128				
1,1,2-Trichloroethane	21.2	1.00	20.00	0.1515	105	80.6	125				
1,3-Dichloropropane	20.9	1.00	20.00	0	104	79.8	128				
Tetrachloroethene (PCE)	22.3	1.00	20.00	0.6422	108	91.5	120				

Work Order: 2101475
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2101468-006AMS** SampType: **MS** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **BATCH** Batch ID: **31230** Analysis Date: **2/2/2021** SeqNo: **1308011**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	20.9	1.00	20.00	0	104	80.1	125				
1,2-Dibromoethane (EDB)	21.1	0.250	20.00	0	106	78.7	125				
Chlorobenzene	21.0	1.00	20.00	0	105	92.3	115				
1,1,1,2-Tetrachloroethane	21.1	1.00	20.00	0	106	89.8	116				
Ethylbenzene	21.3	1.00	20.00	0	107	92.7	120				
m,p-Xylene	42.3	1.00	40.00	0	106	89.7	118				
o-Xylene	21.4	1.00	20.00	0	107	90.3	117				
Styrene	20.4	1.00	20.00	0	102	85.4	116				
Isopropylbenzene	21.6	1.00	20.00	0	108	91.6	120				
Bromoform	22.3	1.00	20.00	0	112	80.7	127				
1,1,2,2-Tetrachloroethane	22.1	1.00	20.00	0	111	81.7	146				
n-Propylbenzene	21.3	1.00	20.00	0	106	97.1	122				
Bromobenzene	21.1	1.00	20.00	0	106	94.4	117				
1,3,5-Trimethylbenzene	21.3	1.00	20.00	0	107	94.9	119				
2-Chlorotoluene	21.3	1.00	20.00	0	106	94.1	124				
4-Chlorotoluene	21.0	1.00	20.00	0	105	94.9	119				
tert-Butylbenzene	21.5	1.00	20.00	0	108	97	121				
1,2,3-Trichloropropane	20.3	1.00	20.00	0	102	73.7	139				
1,2,4-Trichlorobenzene	20.7	2.00	20.00	0	104	77	132				
sec-Butylbenzene	21.5	1.00	20.00	0	108	95	124				
4-Isopropyltoluene	21.1	1.00	20.00	0	106	93.3	124				
1,3-Dichlorobenzene	21.4	1.00	20.00	0	107	93.6	116				
1,4-Dichlorobenzene	21.1	1.00	20.00	0	106	94.1	115				
n-Butylbenzene	21.2	1.00	20.00	0	106	95.2	131				
1,2-Dichlorobenzene	21.6	1.00	20.00	0	108	95.3	117				
1,2-Dibromo-3-chloropropane	22.4	1.00	20.00	0	112	67.8	140				
1,2,4-Trimethylbenzene	20.9	1.00	20.00	0	105	93.2	126				
Hexachloro-1,3-butadiene	22.1	0.500	20.00	0	110	82.1	133				
Naphthalene	21.2	1.00	20.00	0	106	62.9	151				
1,2,3-Trichlorobenzene	21.4	4.00	20.00	0	107	72.2	142				

Work Order: 2101475
CLIENT: PES Environmental, Inc.
Project: MVSC

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2101468-006AMS** SampType: **MS** Units: **µg/L** Prep Date: **2/1/2021** RunNo: **65031**
Client ID: **BATCH** Batch ID: **31230** Analysis Date: **2/2/2021** SeqNo: **1308011**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	25.0		25.00		100	89.1	116				
Surr: Toluene-d8	24.7		25.00		98.6	90.5	111				
Surr: 1-Bromo-4-fluorobenzene	26.3		25.00		105	97.8	110				

Sample Log-In Check List

Client Name:	**PES**	Work Order Number:	**2101475**
Logged by:	**Clare Griggs**	Date Received:	**1/29/2021 3:09:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present ☐
2.	How was the sample delivered?	Client				

Log In

3.	Coolers are present?	Yes	☑	No	☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes	☑	No	☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	☑	No	☐	Not Present ☐
6.	Was an attempt made to cool the samples?	Yes	☑	No	☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes	☑	No	☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes	☑	No	☐	
9.	Sufficient sample volume for indicated test(s)?	Yes	☑	No	☐	
10.	Are samples properly preserved?	Yes	☑	No	☐	
11.	Was preservative added to bottles?	Yes	☐	No	☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes	☐	No	☑	NA ☐
13.	Did all samples containers arrive in good condition(unbroken)?	Yes	☑	No	☐	
14.	Does paperwork match bottle labels?	Yes	☑	No	☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐	
16.	Is it clear what analyses were requested?	Yes	☑	No	☐	
17.	Were all holding times able to be met?	Yes	☑	No	☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes	☐	No	☐	NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample	0.2

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 1/29/2021 Page: 1 of: 1

Laboratory Project No (internal): 2101475

Special Remarks:

Project Name: MVSC

Project No: 1358.001.02.014

Client: PES Environmental

Address: 2101 4th Ave #1310

City, State, Zip: Seattle, WA, 98121

Telephone: 206-529-3980

Fax: 206-529-3985

Collected by: Sean Kouroussky

Location: Normandy Park, WA

Report To (PM): Matt Dahl

PM Email: mdahl@pesenv.com

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	VOCs (EPA 8260 / 624)	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	Cond-012921	1/29/21	0755	W	3	X												
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☒ Standard ☐ Next Day
☐ 3 Day ☐ Same Day
☐ 2 Day ☐ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x	Sean Kouroussky	1/29/21 @1700	x	Carter Johnson	1/29/21 @ 1509
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

From: Matt Dahl
To: Colouzis, Christa (ECY)
Cc: Collins, Mindy (ECY); Stan and Linda Harris
Subject: RE: Ecology contained-in approval letter, Normandy Park CID 11-5-2020
Date: Tuesday, March 2, 2021 4:35:00 PM
Attachments: Weight Certs.pdf
Ecology Contained In Approval Letter Normandy Park CID with Enclosures 11-5-2020.pdf

---

Hi Christa,
In accordance the attached CID approval letter dated November 5, 2020, I am forwarding signed copies of the landfill receipts for the contaminated soil disposed at Roosevelt Landfill in WA. There are three disposal tickets, one for each lined container shipped to the facility.

- 17.10 tons
- 24.21 tons
- 29.00 tons

The total tonnage is below the 105 tons that were approved in your November 5, 2020 letter.

All three of the containers were received by the landfill for tipping by February 5, 2021 as required by the CID approval letter. One container was tipped on February 4. High winds caused shutdown of the disposal facility on February 5 and so the other two containers were not tipped until February 9. Teresa Dillashaw at Republic Services mentioned to our subcontractor, Wyser Construction Co., that Ecology may contact her directly if there are questions regarding the disposal. Her email is tdillashaw@republicservices.com and cell is 206.391.1386.

I believe that this e-mail fulfils the reporting requirements specified in the CID approval letter. If you require a paper copies of the disposal receipts, please let me know (and provide the mailing address), and I will put these in the mail to you.

Sincerely,
-Matt
Please note that our mailing address has changed

Matt Dahl, P.E.
PES Environmental , Inc.
p: (206) 529-3980 ext. 103
m: (425) 922-0872
2101 Fourth Avenue, Suite 1310, Seattle, WA 98121

From: Collins, Mindy (ECY) <MINC461@ECY.WA.GOV>
Sent: Thursday, November 5, 2020 10:56 AM
To: Matt Dahl <mdahl@pesenv.com>
Cc: stanlindaharris@hotmail.com
Subject: FW: Ecology contained-in approval letter, Normandy Park CID 11-5-2020

Good Morning Matt –

Sending this again just to you because it bounced back the first time (notice your email address was

incorrect).

Thanks,
Mindy

From: Collins, Mindy (ECY)
Sent: Thursday, November 5, 2020 10:53 AM
To: 'stanlindaharris@hotmail.com' <stanlindaharris@hotmail.com>
Cc: 'mailto:mdahl@pesenv.com' <mailto:mdahl@pesenv.com>; Bianco, Paul (ECY) <PBIA461@ECY.WA.GOV>; Wood, Karen K. (ECY) <KWOO461@ECY.WA.GOV>; Hoffman, Charles (ECY) <chof461@ECY.WA.GOV>; Maurer, Christopher (ECY) <cmau461@ECY.WA.GOV>; Musa, Donna K. (ECY) <DMUS461@ECY.WA.GOV>; Caron, Greg (ECY) <GRCA461@ECY.WA.GOV>
Subject: Ecology contained-in approval letter, Normandy Park CID 11-5-2020

Stanley Harris,

Attached is the Ecology approval letter for your contained in determination proposal for F002 listed DW soil cuttings and soils to be excavated at the Manhattan Village Shopping Center and Harris Village Properties, "Normandy Park PCE," in Normandy Park, Washington. The certified letter will be sent via the US postal service today. Please pay special attention to the requirement on page 2:

- *Provide copies of all signed solid waste landfill receipts or a certificate of disposal issued by the receiving landfill for these contaminated soils to Ecology, attention of Christa Colouzis, by March 5, 2021.*

This is an important verification step for you and your consultant to follow in order for this Ecology decision to be valid.

Sincerely,

Mindy Collins
Hazardous Waste Compliance Inspector
Hazardous Waste and Toxics Reduction
WA Department of Ecology, Bellingham Field Office
(360) 255-4383

SITE **Seattle 20 - 48 Ft --**
SEATTLE ROOSEVELT-, WA

CUSTOMER 012878
Wyser Construction
19015 109th Ave S E
Snohomish, WA 98296
Contract:TB-21213 PO:PSE-20-1608

SITE BA | TICKET # 5304353 | CELL 300172

WEIGHMASTER Tiffany O.

DATE/TIME IN 2/4/21 11:09 am | DATE/TIME OUT 2/4/21 11:30 am

VEHICLE 5223 | CONTAINER TOLU475351

REFERENCE

BILL OF LADING BN64261

SCALE IN GROSS WEIGHT 83,180 NET TONS 17.10
SCALE OUT TARE WEIGHT 48,980 NET WEIGHT 34,200

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.00	YD	Tracking QTY				
17.10	tn	Contained in Contaminated Soil Origin:Normandy Park 100%				

NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE TH

RS-F042UPR (04/19)

SITE **Black River Transfer Station - Renton --**
WA ROOSEVELT-, WA

CUSTOMER 012878
Wyser Construction
19015 109th Ave S E
Snohomish, WA 98296
Contract:TB-21213 PO:PSE-20-1608

SITE 6A	TICKET # 7028467
CELL 300169A	
WEIGHMASTER	Tiffany O.
DATE/TIME IN 2/9/21 7:38 am	DATE/TIME OUT 2/9/21 7:57 am
VEHICLE 7748	CONTAINER GCEU425412
REFERENCE	
BILL OF LADING DTTX432113	

SCALE IN GROSS WEIGHT 104,820 NET TONS 29.00
SCALE OUT TARE WEIGHT 46,820 NET WEIGHT 58,000

INBOUND
INVOICE

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.00	YD	Tracking QTY				
29.00	tn	Contained in Contaminated Soil Origin:Normandy Park 100%				

THINK CHOOSE SAFETY LIVE It's the Right Thing!

NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE TLH

RS-F042UPR (04/19)

SITE **Black River Transfer Station - Renton --**
WA ROOSEVELT-, WA

CUSTOMER 012878
Wyser Construction
19015 109th Ave S E
Snohomish, WA 98296
Contract:TB-21213 PO:PSE-20-1608

SITE	6A
TICKET #	7028465
CELL	300168A
WEIGHMASTER	Tiffany O.
DATE/TIME IN	2/9/21 7:36 am
DATE/TIME OUT	2/9/21 7:56 am
VEHICLE	5223
CONTAINER	TOLU422285
REFERENCE	
BILL OF LADING	DTTX432113

SCALE IN GROSS WEIGHT 96,500 NET TONS 24.21
SCALE OUT TARE WEIGHT 48,080 NET WEIGHT 48,420

INBOUND
INVOICE

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
28.00	YD	Tracking QTY				
24.21	tn	Contained in Contaminated Soil Origin:Normandy Park 100%				

THINK. CHOOSE. SAFETY LIVE. It's the Right Thing!

NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE TCH

RS-F042UPR (04/19)

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000
711 for Washington Relay Service • Persons with a speech disability can call (877) 833-6341

November 5, 2020

Stanley Harris
711 S 234th Place
Des Moines, WA 98198

Re: Contained-In Determination for F002 Contaminated Soils at Manhattan Village Shopping Center and Harris Village Properties "Normandy Park PCE," in Normandy Park, Washington

Reference: 1. Electronic mail from Matt Dahl (PES Environmental, Inc.) to D. Yasuda (Ecology) dated August 14, 2020.
2. Letter report from Matt Dahl (PES Environmental, Inc.) to D. Yasuda (Ecology) dated August 14, 2020 (received August 20, 2020).
3. Electronic mail and attachments from Matt Dahl (PES Environmental, Inc.) to D. Yasuda (Ecology), dated September 24, 2020.

Dear Stanley Harris:

The Washington State Department of Ecology (Ecology) received a contained-in determination request from your environmental consultant, PES Environmental, Inc. for specific F002 listed waste perchloroethylene (PCE) contaminated soil cuttings and soils to be excavated during expansion of the soil vapor extraction (SVE) system and other limited excavation at the Normandy Park PCE property in Normandy Park, Washington (Facility Site/ID No. 4181060 and Voluntary Cleanup Project No. NW1873).

Analytical data were submitted to Ecology to determine if these soils contaminated with F002 listed dangerous waste constituents may be exempt from management as dangerous wastes per the "Contained-In Policy"[1]. Ecology understands that these contaminated soils do not designate under federal characteristics (WAC 173-303-090) or State-only criteria (WAC 173-303-100).

Based on the information received and reviewed, Ecology has determined that the **approximately six tons (16 x 55-gallon drums)** of soil cuttings **and up to 99 tons** of PCE contaminated soils to be excavated (**attached Figures C-2A, C-2B and C-3)** are contaminated with F002 listed dangerous waste constituents (PCE) at concentrations that do not warrant

[1] Washington State Department of Ecology Contained-in Policy, dated February 19, 1993

management as dangerous wastes. Ecology will not require disposal of these **105 tons** of PCE contaminated soils as F002 listed dangerous wastes at a RCRA permitted dangerous waste treatment, storage and disposal (TSD) facility, provided that all of the following conditions are implemented. This contained-in determination applies only to the contaminated soils, and does not pertain to contaminated water or any mixture of contaminated soils and fluid.

You or your environmental consultant, PES Environmental, Inc. shall:

- Ensure that no standing water is present within the containers or trucks holding the contaminated soils. All water must be removed to the maximum extent possible from each container or truck and managed as F002 dangerous wastes or as otherwise allowed under Chapter 173-303 WAC. Adding bentonite or similar materials to absorb standing F002 listed waste contaminated water in the containers is not allowed. Mixtures of bentonite or similar materials and the listed waste contaminated water must be managed as F002 listed dangerous wastes;

- Directly deliver the soils to a solid waste landfill or transfer station permitted under Chapter 173-351 WAC and/or Chapter 173-350 WAC inside Washington State. If taken directly to the solid waste landfill, no off-loading of the contaminated soils is allowed between the cleanup site and the permitted solid waste landfill; If taken to the transfer station, the intermodal containers from the cleanup site will be loaded on to rail cars, removal of the contaminated soils from the intermodal container at the transfer station is not allowed;

- If you plan to deliver the contaminated soils to a landfill outside Washington State, you must FIRST submit to Ecology written approval for the contaminated soil disposal from the State hazardous waste program and the out of state landfill, **before** the soils are delivered to the out of state landfill.

- If you load the contaminated soils directly onto the truck bed or the contaminated soils are transported in roll-off bins, the truck or the roll-off bins must be lined with plastic and properly covered to prevent leaks, spills or dispersion due to wind.

- Dispose of the contaminated soils at the permitted solid waste landfill by February 5, 2021. This contained-in determination letter is no longer valid after February 5, 2021 and the contaminated soils shall be managed as dangerous wastes after this date;

- Provide copies of all signed solid waste landfill receipts or a certificate of disposal issued by the receiving landfill for these contaminated soils to Ecology, attention of Christa Colouzis, by March 5, 2021. This is an important verification step for you and your consultant to follow in order for this Ecology decision to be valid;

- Do not consolidate these contaminated soils with other soils that do not pertain to this contained-in determination;

- Notify Ecology before disposal of the contaminated soil if the amount exceeds the approved amount in this letter. Ecology needs to make sure that the additional soil qualifies for this contained-in determination;

- Ensure that the transporter is properly trained to handle hazardous waste so that the transporter manages the contained-in determination soils during transport in a manner that is protective of human health and the environment;

- Take measures to prevent unauthorized contact with these contaminated soils at all times;

- Provide instructions to the landfill operator that these soils are **not** to be used for daily, intermediate, or final cover;

- Provide copies of all soil analytical data to the landfill operator, upon request; and

- Do not send these contaminated soils to any incinerator, thermal desorption unit or recycling facility unless that facility is a RCRA Subtitle C permitted dangerous waste TSD facility.

Ecology issued this determination based on the information provided and reviewed to date. This Ecology determination will be rescinded if Ecology finds that the information submitted by the property owner or its environmental consultant is materially false, misleading, otherwise does not accurately represent the site conditions, or if the Ecology requirements listed above are not followed.

This written decision only applies to the **105 tons** (16 drums and 99 tons) of specified PCE contaminated soils that will be generated during excavation activities from the area described in your request (reference 3). It does not apply to any other media. Any data used for this contained-in determination is intended for use in determining the proper disposal of the above stated PCE contaminated soil according to the Washington State Dangerous Waste Regulations (Chapter 173-303 WAC) and Ecology Contained-in Policy. This letter is not an Ecology approval for dangerous waste designation or disposal of contaminated soils that may be generated or already excavated from other areas in this property.

This letter is not a No Further Action (NFA) letter and not written approval for any cleanup action plan you may have submitted. Instead, this letter only addresses the procedures for disposal of the contaminated soils according to the Washington State Dangerous Waste Regulations (Chapter 173-303 WAC). Regulatory decisions regarding the cleanup action, applicable soil and groundwater cleanup levels and any other cleanup issues must comply with the requirements under Ecology Model Toxics Control Act (Chapter 173-340 WAC). Local agencies may have the authority to impose additional requirements on this waste stream.

If you fail to comply with the terms of this letter, Ecology may issue an administrative order and/or penalty as provided by the Revised Code of Washington, Sections 70A.300.090 and/or .120 (Hazardous Waste Management Act).

If you have any questions concerning this letter, please contact at (425) 649-7181 or cboe461@ecy.wa.gov.

Sincerely,



Christa Colouzis, PE
Corrective Action Unit Supervisor
Hazardous Waste and Toxics Reduction Program

Enclosures

Sent by Certified Mail: 9171 9690 0935 0214 2489 05

ecc: Stan and Linda Harris, stanlindaharris@hotmail.com
Matt Dahl, mdahl@pesenv.com
Paul Bianco, Ecology
Greg Caron, Ecology
Mindy Collins, Ecology
Chuck Hoffman, Ecology
Christopher Mauer, Ecology
Donna Musa, Ecology
Karen Wood, Ecology

Notes:
1. Twenty discrete soil samples were collected during drilling of six new SVE wells on August 31 through September 2, 2020.

2. Approximately 6.5 tons of soil cuttings were generated during the drilling. The soil is stored within 16 steel DOT rated drums.

SVE-23	09/01/20
2 ft	0.0270 U
19 ft	**0.0252**
25 ft	**0.0489**

SVE-24	09/01/20
3 ft	0.0315 U
8 ft	0.0215 U
13.5 ft	0.0245 U

SVE-22	09/01/20
2 ft	**0.032**
26 ft	**0.102**
36 ft	**0.105**

SVE-25	09/02/20
2 ft	0.0269 U
11.5 ft	**0.0373**
43.5 ft	**0.0632**
49 ft	**0.0422**

SVE-21	08/31/20
2 ft	**0.254**
12 ft	**0.0381**
25 ft	**0.0558**
35 ft	**0.135**

SVE-20	08/31/20
2 ft	**0.0907**
8.5 ft	**1.54**
11 ft	**1.30**

Detail 1 (C-3)

Detail 2 (C-3)

Parcel# 312304-9229

Parcel# 312304-9325

Parcel# 312304-9091

Remediation Equipment Enclosure

Well House

Former Septic Tank

Former Manhattan Cleaners And Coin-op Laundry

Former Dairy Queen

Four Star Dry Cleaners

Second Building (various Shops)

Retaining Wall

Shed

Patio

Gravel

Vegetated

Asphalt

Explanation

PCE not detected above MRL

PCE detected above MRL

N

0 40

SCALE IN FEET

Soil sample data from borings for SVE-20 through SVE-25
08/31 - 09/02/2020
Tetrachloroethene Concentrations (mg/kg)

NOTES:
1. REPLACE 4-INCH HEADER PIPE WITH 6-INCH HEADER AT THE 8-INCH TEE. SECURE THE NEW HEADER PIPE TO THE RETAINING WALL. TIE-IN LATERALS FOR SVE-4 THROUGH SVE-10 AND SVE-20 THROUGH SVE-25.
2. INSTALL NEW ABOVE GROUND LATERAL TO SVE-22 AND REPLACE THE EXISTING 2-INCH ABOVE GROUND LATERALS TO SVE-4 THROUGH SVE-8. SLOPE LATERALS AT 1% TOWARDS THE WELLS. SECURE LATERALS TO UNISTRUT PIPE SUPPORTS AS NEEDED TO MAINTAIN SLOPE.
3. DECOMMISSION ABOVE GROUND AND BURIED LATERAL TO SVE-10. REPLACE WITH NEW LATERAL IN COMMON TRENCH WITH SVE-23, SVE-24, AND SVE-25.
4. CONSTRUCT NEW LATERAL TRENCH FOR SVE-10, SVE-23, SVE-24, AND SVE-25. FIELD LOCATE TO AVOID CONFLICT WITH TREES.
5. MANAGE EXCAVATED SOIL WITHIN APPROXIMATELY 20 FT OF THE BUILDINGS AS ECOLOGY APPROVED CONTAINED-IN WASTE. ASSUME SPOILS GENERATED FROM OUTSIDE OF THESE AREAS IS CLEAN FILL AND MAY BE THIN SPREAD ON THE GROUND INSIDE THE FENCED AREA PENDING SAMPLE CONFIRMATION. ENGINEER APPROVAL REQUIRED FOR USE AS TRENCH BACKFILL.
6. SHALLOW SOIL EXCAVATION AREA. EXCAVATE AND SAMPLE 4 TEST PITS TO DETERMINE THE EXCAVATION DIMENSIONS. ASSUME 300 SQUARE FT BY 4-FT DEEP.

No.	Date	Revisions	By

Checked by: BLO

Approved by: MD

MATTHEW V. DAHL
STATE OF WASHINGTON
50366
REGISTERED
PROFESSIONAL ENGINEER

PES Environmental, Inc.
Engineering & Environmental Services

SVE Expansion and Excavation Layout
Manhattan Village/Harris Properties
17817, 17825, and 17835 1st Avenue South
Normandy Park, Washington

Sheet C-2A

1358.001.01.011	135800101011_SVEed_C1-C6	BLO	10/19
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

Notes:
1. Six pre-trench samples were collected using a hand auger from the borings when drilling SVE-20 through SVE-25 on 8/31 - 9/2/2020

2. Nineteen pre-excavation and pre-trench samples were collected using direct push technique auger from borings EX-1 through EX-15 on 9/17/2020

3. Borings EX-1 through EX-5 represent conditions within the excavation prism. Discrete sample data from SB-26 and SB-27 (from 4/2018) are included for reference. See Sheet C-3 for data boxes.

4. Borings EX-6 through EX-15 represent conditions within the 2 to 3 ft deep trench prism.

EX-8	09/17/20	
1.5 ft	0.00632	U
EX-9	09/17/20	
3 ft	0.00666	U
EX-10	09/17/20	
3 ft	0.00588	U
EX-11	09/17/20	
2 ft	0.00642	U
EX-12	09/17/20	
2 ft	0.00606	U
EX-13	09/17/20	
2 ft	0.00642	U
EX-14	09/17/20	
2 ft	0.00608	U
EX-15	09/17/20	
2 ft	0.00576	U
EX-7	09/17/20	
2 ft	0.00620	U
SVE-23	09/01/20	
2 ft	0.0270	U
EX-6	09/17/20	
3 ft	0.00565	U

Detail 1 (C-3)

SVE-22	09/01/20	
2 ft	0.032	
SVE-20	08/31/20	
2 ft	0.0907	
SVE-21	08/31/20	
2 ft	0.254	

Detail 2 (C-3)

See Sheet C-3 for samples collected in the excavation prism

Above ground piping to EX-15

Explanation

PCE not detected above MRL

PCE detected above MRL

Soil sample data from Pre-trench and Pre-Excavation samples
08/31 - 09/02/2020 and 09/17/2020
Tetrachloroethene Concentrations (mg/kg)

NOTES:
1. REPLACE 4-INCH HEADER PIPE WITH 6-INCH HEADER AT THE 8-INCH TEE. SECURE THE NEW HEADER PIPE TO THE RETAINING WALL. TIE-IN LATERALS FOR SVE-4 THROUGH SVE-10 AND SVE-20 THROUGH SVE-25.
2. INSTALL NEW ABOVE GROUND LATERAL TO SVE-22 AND REPLACE THE EXISTING 2-INCH ABOVE GROUND LATERALS TO SVE-4 THROUGH SVE-8. SLOPE LATERALS AT 1% TOWARDS THE WELLS. SECURE LATERALS TO UNISTRUT PIPE SUPPORTS AS NEEDED TO MAINTAIN SLOPE.
3. DECOMMISSION ABOVE GROUND AND BURIED LATERAL TO SVE-10. REPLACE WITH NEW LATERAL IN COMMON TRENCH WITH SVE-23, SVE-24, AND SVE-25.
4. CONSTRUCT NEW LATERAL TRENCH FOR SVE-10, SVE-23, SVE-24, AND SVE-25. FIELD LOCATE TO AVOID CONFLICT WITH TREES.
5. MANAGE EXCAVATED SOIL WITHIN APPROXIMATELY 20 FT OF THE BUILDINGS AS ECOLOGY APPROVED CONTAINED-IN WASTE. ASSUME SPOILS GENERATED FROM OUTSIDE OF THESE AREAS IS CLEAN FILL AND MAY BE THIN SPREAD ON THE GROUND INSIDE THE FENCED AREA PENDING SAMPLE CONFIRMATION. ENGINEER APPROVAL REQUIRED FOR USE AS TRENCH BACKFILL.
6. SHALLOW SOIL EXCAVATION AREA. EXCAVATE AND SAMPLE 4 TEST PITS TO DETERMINE THE EXCAVATION DIMENSIONS. ASSUME 300 SQUARE FT BY 4-FT DEEP.

No.	Date	Revisions	By
			MD

Drawn by: BP
Checked by: BLO
Approved by: MD

MATTHEW V. DAHL
STATE OF WASHINGTON
50366
REGISTERED
PROFESSIONAL ENGINEER

PES Environmental, Inc.
Engineering & Environmental Services

SVE Expansion and Excavation Layout
Manhattan Village/Harris Properties
17817, 17825, and 17835 1st Avenue South
Normandy Park, Washington

Sheet
C-2B

1358.001.01.011	135800101011_SVEed_C1-C6	BLO	10/19
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

DETAIL 1

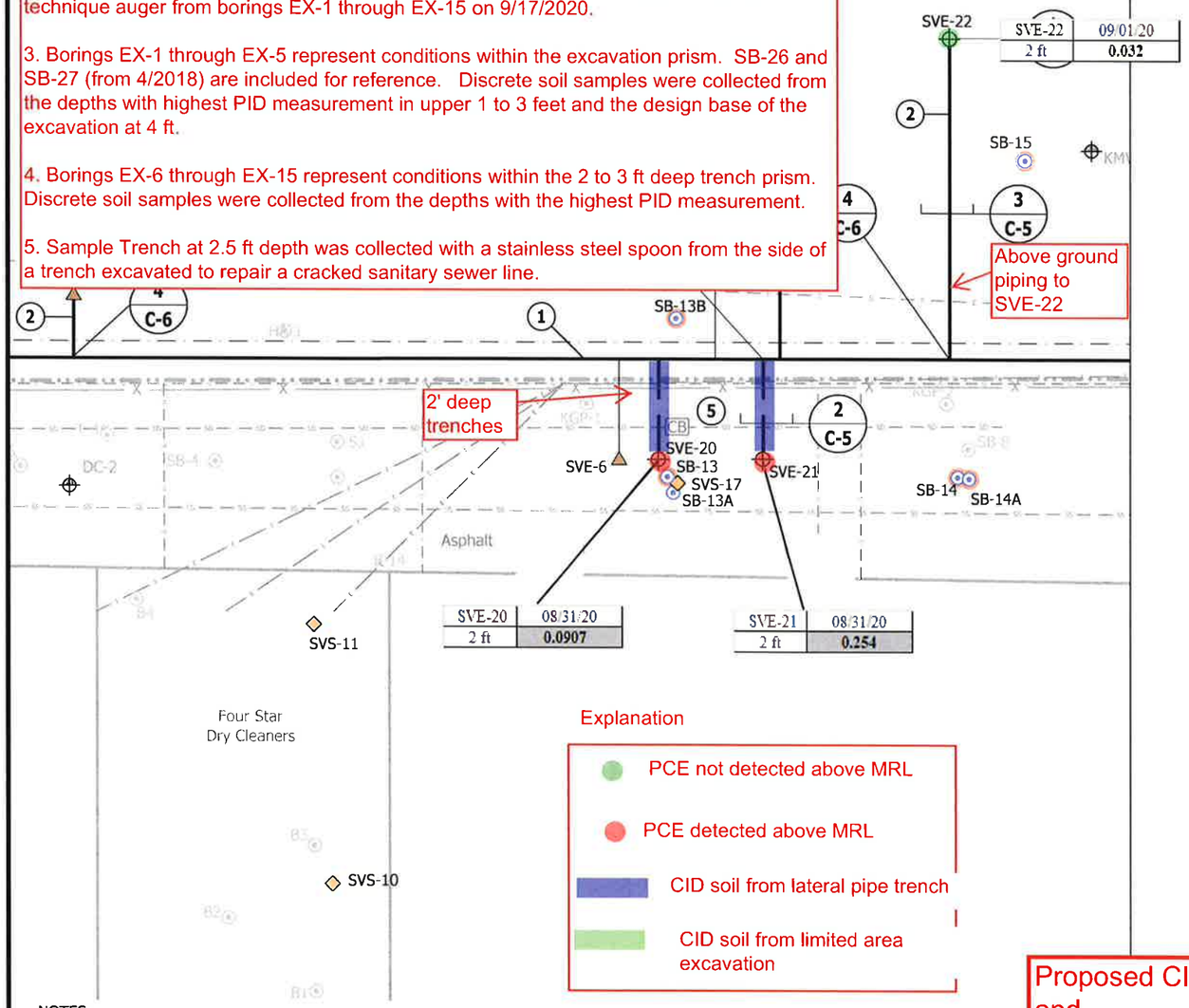
Notes:
1. Six discrete soil samples were collected using a hand auger from the borings for SVE-20 through SVE-25 at 2 to 3 ft depth on 8/31 - 9/2/2020.

2. Nineteen pre-excavation and pre-trench samples were collected using direct push technique auger from borings EX-1 through EX-15 on 9/17/2020.

3. Borings EX-1 through EX-5 represent conditions within the excavation prism. SB-26 and SB-27 (from 4/2018) are included for reference. Discrete soil samples were collected from the depths with highest PID measurement in upper 1 to 3 feet and the design base of the excavation at 4 ft.

4. Borings EX-6 through EX-15 represent conditions within the 2 to 3 ft deep trench prism. Discrete soil samples were collected from the depths with the highest PID measurement.

5. Sample Trench at 2.5 ft depth was collected with a stainless steel spoon from the side of a trench excavated to repair a cracked sanitary sewer line.

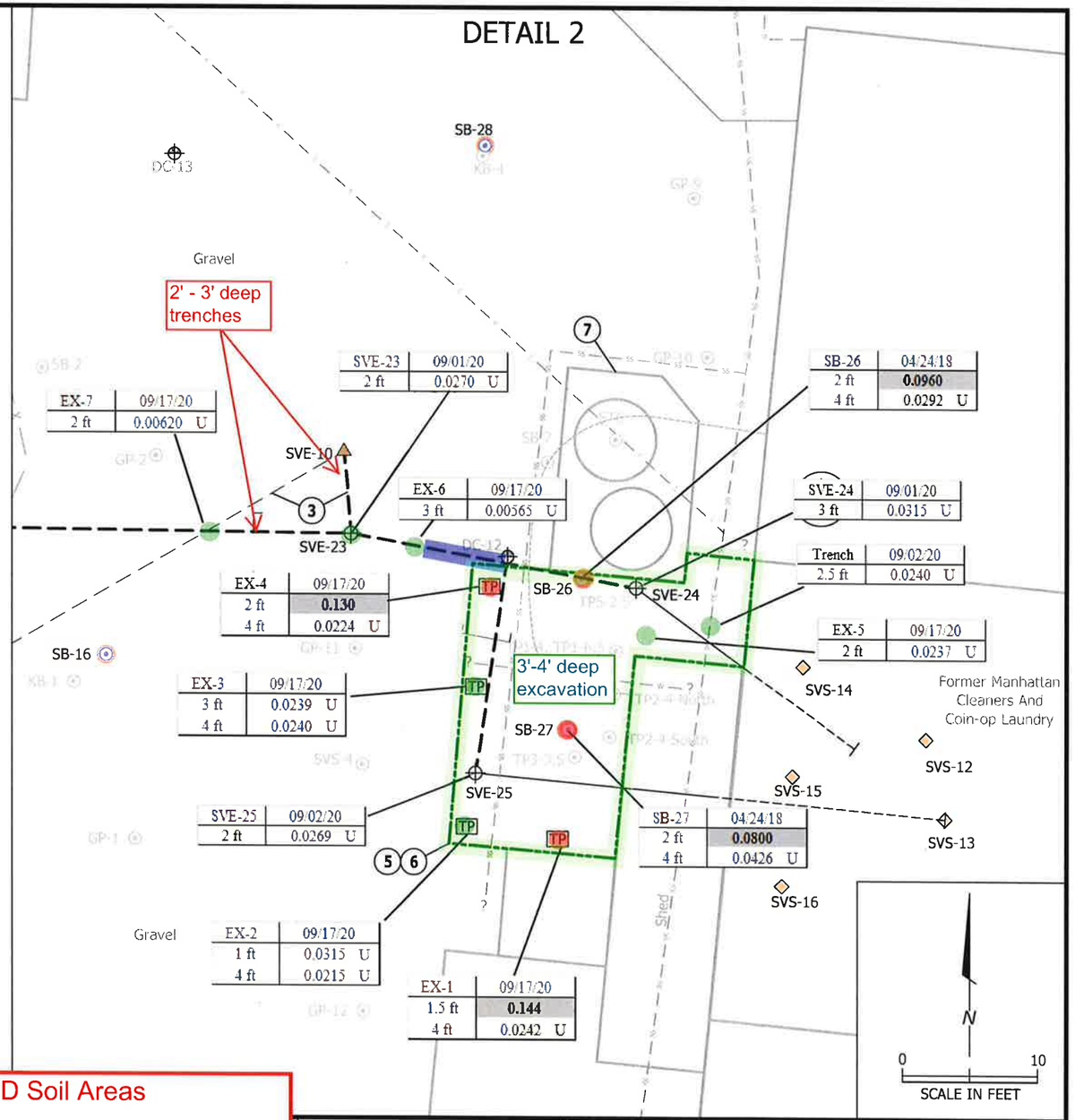


Explanation

- PCE not detected above MRL
- PCE detected above MRL
- CID soil from lateral pipe trench
- CID soil from limited area excavation

NOTES:
1. REPLACE 4-INCH HEADER PIPE WITH 6-INCH HEADER AT THE 8-INCH TEE. SECURE THE NEW HEADER PIPE TO THE RETAINING WALL. TIE-IN LATERALS FOR SVE-4 THROUGH SVE-10 AND SVE-20 THROUGH SVE-25.
2. INSTALL NEW ABOVE GROUND LATERAL TO SVE-22 AND REPLACE THE EXISTING 2-INCH ABOVE GROUND LATERALS TO SVE-4 THROUGH SVE-8. SLOPE LATERALS AT 1% TOWARDS THE WELLS. SECURE LATERALS TO UNISTRUT PIPE SUPPORTS AS NEEDED TO MAINTAIN SLOPE.
3. DECOMMISSION ABOVE GROUND AND BURIED LATERAL TO SVE-10. REPLACE WITH NEW LATERAL IN COMMON TRENCH WITH SVE-23, SVE-24, AND SVE-25.
4. CONSTRUCT NEW LATERAL TRENCH FOR SVE-10, SVE-23, SVE-24, AND SVE-25. FIELD LOCATE TO AVOID CONFLICTS WITH TREES.
5. MANAGE EXCAVATED SOIL WITHIN APPROXIMATELY 20 FT OF THE BUILDINGS AS ECOLOGY APPROVED CONTAINED-IN WASTE. ASSUME SPOILS GENERATED FROM OUTSIDE OF THESE AREAS IS CLEAN FILL AND MAY BE THIN SPREAD ON THE GROUND INSIDE THE FENCED AREA PENDING SAMPLE CONFIRMATION. ENGINEER APPROVAL REQUIRED FOR USE AS TRENCH BACKFILL.
6. SHALLOW SOIL EXCAVATION AREA. EXCAVATE AND SAMPLE 4 TEST PITS TO DETERMINE THE EXCAVATION DIMENSIONS. ASSUME 300 SQUARE FT BY 4-FT DEEP.
7. FORMER SEPTIC TANKS AND 2004 APPROXIMATE EXCAVATION LIMITS.
8. APPROXIMATE LOCATION OF CONCRETE AND ASPHALT PATCH IN GRAVEL PARKING AREA.

DETAIL 2



Proposed CID Soil Areas
and
Pre-trench and Pre-Excavation Data
08/31 - 09/02/2020 and 09/17/2020
Tetrachloroethene Concentrations
(mg/kg)

No.	Date	Revisions	By

Checked by: BLO

Approved by: MD

MATTHEW V. DAHL STATE OF WASHINGTON 50366 REGISTERED PROFESSIONAL ENGINEER

PES Environmental, Inc.
Engineering & Environmental Services

SVE Expansion and Excavation Details
Manhattan Village/Harris Properties
17817, 17825, and 17835 1st Avenue South
Normandy Park, Washington

Sheet C-3

1358.001.01.011	135800101011_SVEed_C1-C6	BLO	10/19
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

Matt Dahl

From: Matt Dahl
Sent: Thursday, September 24, 2020 3:38 PM
To: Yasuda, Dean (ECY); stanlindaharris@hotmail.com
Cc: Bianco, Paul (ECY); Collins, Mindy (ECY); Colouzis, Christa (ECY); Maurer, Christopher (ECY)
Subject: RE: Ecology Response - Request for Contained-In Policy Determination - Normandy Park PCE site , VCP NW 1873
Attachments: Figures_C2A_C2B_C3_SVEwell_&_Pre-excavation_trench_data.pdf; Table 1 - Soil Data.pdf; Rpt_2009053_MVSC_-_Harris_Final_v1.pdf; Rpt_2009260_MVSC_Final_v1.pdf; Table 2 - ECC.pdf

Dean,
This e-mail provides additional information in response to your comments below on the contained-in-determination (CID) request for the following soil:

1. Approximately 6 tons of soil cuttings generated from installing 6 soil vapor extraction wells on August 31 – September 2, 2020 (16 drums).
2. Up to 99 tons of soil to be excavated for an SVE system expansion and limited area excavation as described below and shown on the attached Figures C2A, C2B, and C3. This soil is planned to be excavated in October pending approval of this request.
    a. Lateral trench from above-ground header pipe to SVE well SVE-20. Approximately 8 ft long x 2 ft deep.
    b. Lateral trench from above-ground header pipe to SVE well SVE-21. Approximately 8 ft long x 2 ft deep.
    c. Limited area excavation west of the former Manhattan Cleaners and Coin-Op Laundry. Approximately 300 square feet by up to 4 ft deep.
    d. Lateral pipes from SVE-24 and SVE-25 will be routed in the excavation and extend west in a 2 to 3 ft deep trench. Soil in the approximately 6 foot long trench between the impacted excavation sample EX-4 and ND sample EX-6 will be managed as CID waste pending approval.

Additional soil samples were collected in August and September, 2020 to supplement the data submitted in the original request. As expected, the current results are consistent with the older data and in some cases lower concentration due to ongoing operation of the SVE system. A total of 40 soil samples were collected from SVE well borings, within the excavation prism, and within the lateral pipe trench alignment. The data is summarized in the attached Table 1 and copies of validated laboratory reports are attached.

3. Rpt_2009053_MVSC_-_Harris_Final_v1.pdf - 20 discrete samples collected from SVE well borings and one sample (Trench 2.5) collected from the side of a trench excavated to repair a cracked utility line encountered during well installation.
    a. Samples were collected at 2 or 3 ft in each boring to help characterize the conditions in shallow soil for lateral pipe trenches and excavation (in case of SVE-24 and SVE-25).
    b. The remaining boring samples (2 or 3 per boring) were collected at depths with the highest PID concentrations.
    c. Sample Trench-2.5 was collected to represent conditions in the excavation area.
4. Rpt_2009260_MVSC_Final_v1.pdf – 19 discrete samples collected with a direct push drilling techniques within the excavation area and along the piping trench alignment. The borings along the trench alignment were collected as close as possible to the centerline of the trench.
    a. Samples from EX-1 through EX-5 were collected at the depth with highest PID measurement (encountered between 1 to 3 ft deep) and at 4 ft deep, which is the maximum depth of excavation.
    b. Samples EX-6 through EX-15 were collected to confirm a section of the lateral pipe trench that has not been impacted with PCE or daughter products. One sample was collected at the depth of the highest PID measurement for the 2 to 3 ft deep trench. Please note that the trench soil between the non-detect results from EX-6 through EX-15 are not included in this request and the data is provided for reference

only. The location of EX-6 will be used to delineate the western extent of the pending CID soil from the excavation and lateral trench to the east.

The shallow soil data from borings SB-26 and SB-27 (collected in April 2018 with the excavation prism) is also shown on Figure C3 for reference as the detected PCE concentrations in the 2 ft deep sample are very similar to the data collected within the last several weeks. The 4 ft deep samples (maximum extend of excavation) collected at these two locations were non-detect consistent with all of the other 4 ft deep samples. I would be happy to email a copy of the validated laboratory report if you wish to consider this data as part of the request.

We revised the Equivalent Concentration (EC) calculation to include only the recently collected data. PCE daughter products, TCE and cis-1,2-DCE, were measured in one sample at concentrations below their respective MTCA Method A or B cleanup levels. The recalculated EC's ae shown in the attached Table 2, and the total EC is 0.00000002018% and is well below the criteria of 0.001%. Based on this analysis, the soil will not designate as a toxic dangerous waste.

In closing, the additional data and other information in this e-mail is intended to support the conclusion that the 6 tons (16 drums) of soil generated during SVE well installation and up to 99 tons of soil planned to be excavated during the proposed SVE system expansion and limited area excavation will meet the CID criteria. The excavation and trenching will be performed in October pending approval of the CID request. We are planning to begin the work approximately 3 weeks after receiving approval pending the contractors availability. The excavation and renching work is expected to be completed within an approximate 2 week period.

We appreciate your willingness to consider this additional information. If you have any questions, please do not hesitate to contact me.

Regards,
-Matt

Matt Dahl, P.E.
PES Environmental , Inc.
p: (206) 529-3980 ext. 103
m: (425) 922-0872
f: (206) 529-3985

1215 Fourth Ave, Suite 1350
Seattle, WA 98161

From: Matt Dahl
Sent: Thursday, September 10, 2020 6:41 PM
To: Yasuda, Dean (ECY) <DYAS461@ECY.WA.GOV>; stanlindaharris@hotmail.com
Cc: Bianco, Paul (ECY) <PBIA461@ECY.WA.GOV>; Collins, Mindy (ECY) <MINC461@ECY.WA.GOV>; Colouzis, Christa (ECY) <cboe461@ECY.WA.GOV>; Maurer, Christopher (ECY) <cmau461@ECY.WA.GOV>
Subject: RE: Ecology Response - Request for Contained-In Policy Determination - Normandy Park PCE site , VCP NW 1873

Dean,
Thank you for this email. A few minutes ago, I had just forwarded recent soil results from drilling the SVE wells last week. We received the data this afternoon and so we have not yet validated it. We will do so and we will collect samples along the within the planned trench footprint and planned excavation footprint per your request. Regarding the asphalt paving, this material is not contaminated with PCE. We will submit a revised CID proposal with new data following the conditions that you laid out below.

Thank you again for this e-mail.

Sincerely,
-Matt

Matt Dahl, P.E.
PES Environmental , Inc.
p: (206) 529-3980 ext. 103
m: (425) 922-0872
f: (206) 529-3985

From: Yasuda, Dean (ECY) <DYAS461@ECY.WA.GOV>
Sent: Thursday, September 10, 2020 6:28 PM
To: stanlindaharris@hotmail.com
Cc: Bianco, Paul (ECY) <PBIA461@ECY.WA.GOV>; Collins, Mindy (ECY) <MINC461@ECY.WA.GOV>; Colouzis, Christa (ECY) <cboe461@ECY.WA.GOV>; Maurer, Christopher (ECY) <cmau461@ECY.WA.GOV>; Matt Dahl <mdahl@pesenv.com>
Subject: Ecology Response - Request for Contained-In Policy Determination - Normandy Park PCE site , VCP NW 1873

Dr. Stanley Harris
711 S 234th Place
Des Moines, WA 98198

Dr. Stanley Harris,

The Washington State Department of Ecology (Ecology) is sending this email communication to you because we understand you are the property owner or legally represent the property owner of the Manhattan Village/Harris Properties located at 17817, 17825 and 17835 1st Avenue South, Normandy Park, Washington (the Site).

Ecology prefers to communicate directly with the owner (or legal representative) and at the same time cc the environmental consultant on these regulatory matters. As the property owner or entity legally representing this property, Ecology considers you (not the environmental consultant) to be regulatorily responsible for compliance with the Washington State Dangerous Waste Regulations (Chapter 173-303 WAC).

Recently, Ecology received a contained in determination proposal dated August 14, 2020 from your environmental consultant, PES Environmental, Inc. This proposal pertained to future excavation and disposal of perchloroethlyene contaminated soils to be generated at the Site.

In order for Ecology to complete its review of your proposal, please provide the following additional information:

1. The soil analytical data is too old (2005-2018) to be used for any 2020 contained in determination proposal. Most of the soil samples were collected outside the planned trench footprint and planned excavation footprint. Additional soil sampling and analytical results are required in the planned trench footprint and planned excavation footprint.

2. Data validation reports are required for all analytical data submitted for any contained in determination proposal.

3. Ecology requires submittal of all soil analytical data used to support any contained in determination decision before any Ecology final decision is made (approval or denial).

4. Soils where soil samples were collected and found to have non-detections (ND) of PCE or daughter products are not considered to be part of any contained in determination (CID) proposal. Instead soils with ND PCE and daughter product concentrations are considered to 'not contain' PCE and daughter

products and not part of the CID proposal. Your CID proposal mentioned 40 cubic yards of soils with ND concentrations of PCE and daughter products.

5. Field screening with PID meters is not an acceptable method for determining if soils are contaminated with PCE and daughter products. Soils must be analyzed by Method 8260 by an Ecology accredited laboratory in order to determine if contaminated with PCE and daughter products.

6. Asphalt contaminated with PCE and daughter products is not considered in a CID proposal and instead must be managed as F002 listed waste dangerous wastes per Chapter 173-303 WAC. Your CID proposal mentioned 4 cubic yards of PCE contaminated asphalt.

7. Revised anticipated timeline to complete excavation of all perchloroethylene contaminated soils in under the proposal.

Sincerely,

Dean Yasuda, P.E.
Environmental Engineer
Washington State Department of Ecology
Northwest Regional Office
425.649.7264

From: Matt Dahl <mdahl@pesenv.com>
Sent: Thursday, August 27, 2020 5:08 PM
To: Yasuda, Dean (ECY) <DYAS461@ECY.WA.GOV>
Cc: Maurer, Christopher (ECY) <cmau461@ECY.WA.GOV>; Bianco, Paul (ECY) <PBIA461@ECY.WA.GOV>; Collins, Mindy (ECY) <MINC461@ECY.WA.GOV>
Subject: RE: Ecology Response - Request for Contained-In Policy Determination - Normandy Park PCE site , VCP NW 1873

THIS EMAIL ORIGINATED FROM OUTSIDE THE WASHINGTON STATE EMAIL SYSTEM - Take caution not to open attachments or links unless you know the sender AND were expecting the attachment or the link

Hi Dean,
I am just checking in to make sure that you received our CID request last week and wondering if we are still in the queue or if you've had a chance to start looking at our request? We received the grading permit from the City today and we're hoping to perform construction in September if possible.

Regards,
-Matt

Matt Dahl, P.E.
PES Environmental , Inc.
p: (206) 529-3980 ext. 103
m: (425) 922-0872
f: (206) 529-3985

From: Matt Dahl
Sent: Monday, August 17, 2020 11:44 AM
To: Yasuda, Dean (ECY) <DYAS461@ECY.WA.GOV>
Cc: Maurer, Christopher (ECY) <cmau461@ECY.WA.GOV>; Bianco, Paul (ECY) <PBIA461@ECY.WA.GOV>; Collins, Mindy (ECY) <MINC461@ECY.WA.GOV>
Subject: RE: Ecology Response - Request for Contained-In Policy Determination - Normandy Park PCE site , VCP NW 1873

Hi Dean,
Thanks for letting me know. We'll put the two paper copies and DVD with full electronic copy in the mail today to the NWRO. We didn't have any CDs on hand so hopefully a DVD will be ok.

Sincerely,
-Matt

Matt Dahl, P.E.
PES Environmental , Inc.
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f: (206) 529-3985

From: Yasuda, Dean (ECY) <DYAS461@ECY.WA.GOV>
Sent: Friday, August 14, 2020 7:51 PM
To: Matt Dahl <mdahl@pesenv.com>
Cc: Maurer, Christopher (ECY) <cmau461@ECY.WA.GOV>; Bianco, Paul (ECY) <PBIA461@ECY.WA.GOV>; Collins, Mindy (ECY) <MINC461@ECY.WA.GOV>
Subject: Ecology Response - Request for Contained-In Policy Determination - Normandy Park PCE site , VCP NW 1873

Hi Matt,

Ecology is unable to access third party servers to download files. Malware and virus have recently infected our servers and work stations. Please send 2 full paper copies and 1 CD (with full electronic copy) of all deliverables to the Ecology Northwest Regional Office. There are a few staff present at the NWRO to receive mail during normal business hours. Ecology needs 1 full paper copy and the electronic copy for our public disclosure central records.

Thank you

Sincerely,

Dean Yasuda, P.E.
Environmental Engineer
Washington State Department of Ecology
Northwest Regional Office
425.649.7264

From: Matt Dahl <mdahl@pesenv.com>
Sent: Friday, August 14, 2020 4:24 PM
To: Yasuda, Dean (ECY) <DYAS461@ECY.WA.GOV>
Cc: Maurer, Christopher (ECY) <cmau461@ECY.WA.GOV>; 'Stan and Linda Harris (stanlindaharris@hotmail.com)' <stanlindaharris@hotmail.com>
Subject: Request for Contained-In Policy Determination - Normandy Park PCE site , VCP NW 1873

THIS EMAIL ORIGINATED FROM OUTSIDE THE WASHINGTON STATE EMAIL SYSTEM - Take caution not to open attachments or links unless you know the sender AND were expecting the attachment or the link

Mr. Yasuda,
On behalf of the Harris Family Ltd and Manhattan Tenants in Common, PES is submitting a request for Contained-In Policy Determination for soils being generated during expansion of an existing SVE system and a small excavation at the Normandy Park PCE site located at 17817, 17825, and 17835 First Avenue South in Normandy Park, Washington. The

work is being conducted as part the ongoing cleanup action being implemented under the Voluntary Cleanup Program (VCP NW 1873). The VCP project manager for this project is Mr. Christopher Maurer. Mr. Maurer is aware that this project is being completed.

Here is a link to a PDF of the request on our FTP site.
1. **S135800102L_2857.pdf** (14.74 MB) https://pesenvironmental.filegenius.com/downloadPublic/qn46ckfucl75nxv

The linked document includes the request letter, table and figure showing existing data, a copy of the remedial design plans, copies of historical data from prior consultants, and laboratory reports. The SVE well installation is scheduled to begin the week of August 31 and the trenching and excavation work is tentatively scheduled to being in mid-September. Please let me know if there is anything that we can do to assist you with your review.

Thank you for your consideration of this request.

Sincerely,
-Matt

Matt Dahl, P.E.
PES Environmental , Inc.
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m: (425) 922-0872
f: (206) 529-3985

Table 1

Tetrachloroethene in Soil
SVE Well Installation and Pre-Excavation Sample Data
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Sample Location ID	Depth (ft bgs)	Date Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
MTCA Method A Cleanup Level			0.050		
SVE-20	2	08/31/20	**0.0907**		
SVE-20	8.5	08/31/20	**1.54**		
SVE-20	11	08/31/20	**1.30**	Cis-1,2-dichloroethene = 0.0455; Trichloroethene = 0.0226	
SVE-21	2	08/31/20	**0.254**		
SVE-21	12	08/31/20	**0.0381**		
SVE-21	25	08/31/20	**0.0558**		
SVE-21	35	08/31/20	**0.135**		
SVE-22	2	09/01/20	**0.0320**		
SVE-22	26	09/01/20	**0.102**		
SVE-22	32	09/01/20	**0.105**		
SVE-23	2	09/01/20	0.0270 U		
SVE-23	19	09/01/20	**0.0252**	1,2,3-Trichlorobenzene = 0.0254; Hexachlorobutadiene = 0.0313	
SVE-23	25	09/01/20	**0.0489**		
SVE-24	3	08/31/20	0.0315 U		
SVE-24	8	09/01/20	0.0215 U		Vert depth = 5.7 ft
SVE-24	13.5	09/01/20	0.0245 U		Vert depth = 9.6 ft
SVE-25	2	09/01/20	0.0269 U		
SVE-25	11.5	09/02/20	**0.0373**		Vert depth = 8.2 ft
SVE-25	43.5	09/02/20	**0.0632**		Vert depth = 30.9 ft
SVE-25	49	09/02/20	**0.0422**		Vert depth = 34.8 ft
Trench	2.5	09/02/20	0.0240 U		Adj. to sanitary line
EX-1	1.5	09/17/20	**0.144**		
EX-1	4	09/17/20	0.0242 U		
EX-2	1	09/17/20	0.0233 U		
EX-2	4	09/17/20	0.0260 U		
EX-3	3	09/17/20	0.0239 U		
EX-3	4	09/17/20	0.0240 U		
EX-4	2	09/17/20	**0.130**		
EX-4	4	09/17/20	0.0224 U		
EX-5	2	09/17/20	0.0237 U		
EX-6	3	09/17/20	0.00565 U		

Table 1

Tetrachloroethene in Soil
SVE Well Installation and Pre-Excavation Sample Data
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Sample Location ID	Depth (ft bgs)	Date Date	PCE (mg/kg)	Other VOCs detected (mg/kg)	Comments
MTCA Method A Cleanup Level			0.050		
EX-7	2	09/17/20	0.00620 U		
EX-8	1.5	09/17/20	0.00632 U		
EX-9	3	09/17/20	0.00666 U		
EX-10	3	09/17/20	0.00588 U		
EX-11	2	09/17/20	0.00642 U		
EX-12	2	09/17/20	0.00606 U		
EX-13	2	09/17/20	0.00642 U		
EX-14	2	09/17/20	0.00608 U		
EX-15	2	09/17/20	0.00576 U		

NOTES:

1. Tetrachloroethene (PCE) concentrations in milligrams per kilogram (mg/kg).
2. Samples analyzed using USEPA Methods 8260. Samples EX-6 through EX-15 analyzed by EPA Method 8260-SIM
3. ND and U = concentration not detected at or above the laboratory practical quantitation limit (PQL).
4. Detected concentrations are shown in **bold.**
5. Concentrations exceeding the PCE MTCA Method A cleanup level of 0.050 mg/kg are **bold and shaded**.
6. Other detected VOCs - only those which are above their respective cleanup level are listed.
7. SVE-24 and SVE-25 were installed at a 45 degree angle and sample depths indicate length along boring. Vertical depths are included in the comments.

Table 2
Revised Equivalent Concentration Calculation
Contained-In Request for SVE Well Drill Cuttings, Trench Soil, and Excavation Soil
Manhattan Village Shopping Center and Harris Properties
Normandy Park, Washington

Chemical	Maximum Concentration		Highest Toxicity Category	Equivalent Concentration Factor	Equivalent Concentration (Percent)
	mg/kg	Percent			
Cis-1,2-dichloroethene	0.0455	0.00000455	C	1,000	4.55E-09
Trichloroethene	0.0226	0.00000226	D	10,000	2.26E-10
Tetrachloroethene	1.54	0.000154	D	10,000	1.54E-08
Total Equivalent Waste Concentration					0.00000002018
Toxic Waste Criteria					0.001